
Something that Disturbs

Encounters between Animals and Optical Machines

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»The speed of a movie is 25 frames per second. God knows how many frames per second flicker past in our daily perceptions. But it is as if, at the brief moments I'm talking about, suddenly and disconcertingly we see *between* two frames. We come upon a part of the visible which wasn't destined for us. Perhaps it was destined for night-birds, reindeer, ferrets, eels, whales... Our customary visible order is not the only one: it coexists with other orders. Stories of fairies, sprites, ogres were a human attempt to come to terms with this coexistence. Hunters are continually aware of it and so can read signs that we do not see. Children feel it intuitively, because they have the habit of hiding behind things. There they discover the interstices between different sets of the visible.«¹

In this passage of the book *The Shape of a Pocket*, John Berger opens the possibility of considering another space of the visible that is mostly beyond the reach of humans. A space between the images that would potentially be destined for other species, thus posing the hypothesis of a fundamental coexistence with other sensitive orders. When considering his proposal, it would be a question of trying to appreciate interstices, behind, intermediate states of the sensitive world. Since the nineteen-thirties, theories in natural and human sciences have insisted on the idea of coexistence between humans and other orders of the sensitive. Images of encounters between animals and optical technologies are often seen and described as unusual, yet they could be seen from the perspective of otherness and strangeness, in a manner dissimilar to normative practice. In doing so, one could try to think of an inclusive ecology of optical technological artifacts.

The last decade has witnessed what researchers in visual studies have deemed a »sensory turn«, going hand in hand with a general movement in the human sciences consisting of rethinking the visual through the prism of multi-sensoriality and intertextuality. As Uricchio summarizes in his article *The algorithmic turn: photosynth, augmented reality and the changing implications of the image*,² researchers like

¹ John Berger: *The Shape of a Pocket*, New York 2001, p. 5.

² William Uricchio: *The Algorithmic Turn: Photosynth, Augmented Reality and the Changing Implications of the Image*, in: *Visual Studies* 26/1 (2011), pp. 25–35: 28.

Tim Ingold and Sarah Pink are concerned about taking multisensory parameters into account – the movement and the position – maintaining the idea that there is something which overflows from the meeting of the image with the eye. Thus, according to Sarah Pink,³ a theory of multisensoriality challenges the supposed dominance of the visual in culture. But it also implies taking into account the contexts in which images make sense in the continuity of everyday life and the culture from which they emerge. Contrary to a fixed vision of the image, Pink considers photographic images as produced and consumed in a dynamic environment, which implies to understand the sensoriality of images as »something that is generated through their interrelatedness with both the persons they move with and the environments they move through and are part of.«⁴

In this article I will focus on the different regimes of animacy and conflicts of affects in two types of media: Google Street View images and drone videos on YouTube. These cases enlighten specific relations between natural things and optical technologies, between the observer and their environment, and challenge us to explore the interwoven processes between the act of recording and its surroundings. Therefore, I am questioning web-based optical devices in the presence of animals as a way to experience the presence and materiality of the machine, and I am observing animal presence throughout media configurations and media discourses representing encounters with technical artifacts. How to identify and interpret moments of otherness that would manifest in images or sequences of images? What does animal presence in Google Street View images or drone videos on YouTube tell us about contemporary optical technologies?

1. Fortuitous Encounters

Capturing images in Northern Ostrobothnia in Finland in October 2009, a vehicle of the Google Street View fleet met a horse and rider on its way. As he approached, the animal suddenly became frightened and fled across the fields. During the wild dash, the rider was thrown to the ground. He appears a few shots later, lying in the meadow, his mount far off. It seems that the driver of the pursuing vehicle stopped.

The images of the available sequence in succession show a shot of the rider lying on the floor and another one of him reunited with his horse, far away. On the ground, wheel tracks on the muddy road also indicate a precipitous stop of the

³ Sarah Pink: *Sensory Digital Photography: Re-Thinking Moving and the Image*, in: *Visual Studies* 26/1 (2011) pp. 4–13: 4.

⁴ *Ibid.*, p.4.



Fig. 1: Screenshots of the sequence of the encounter between a horse and a Google Street View car in Finland, 2009

vehicle at the edge of the field, thus assuming assistance to the unhorsed rider by the driver before he hit the road again. Between that, there are missing shots. Something important took place and we only see the ends of it. What happens in these missing images is a stop, a breach, in the protocol of recording. The event bursts and diverts the spectator from his hypnotic navigation through images, but above all, it diverts the protagonists from their initial situation: the horse from its supposed serenity, the rider from his accustomed ballad, the driver from his programmed mission.

This case was first reported to Imgur⁵ on April 19, 2016, then to Reddit⁶ the next day, finding its way onto other websites such as the British tabloid press, and finally on French websites. The various media reporting the case alternate between hyperbolic figures and euphemistic judgments: »the incredible moment«,⁷

⁵ Ttra: When Google Street View car meets a horse, under: <https://imgur.com/gallery/xNk16> (18 December 2019).

⁶ Abaosle: When Google Street View car Meets a Horse, under: https://www.reddit.com/r/google/comments/4fn9vy/when_google_street_view_car_meets_a_horse/ (18 December 2019).

⁷ Lila Randall: The incredible moment Google Street View cameras capture rider being

»a SHOCKING accident«, ⁸ »a very awkward encounter«, ⁹ »hilarious moment.«¹⁰ Only one of the articles normalizes the animal's attitude, calling it »perfectly natural.«¹¹ Another article even named the horse as »the horse that didn't want to be on Google.«¹² If we consider the few extracts mentioned, the emphasis is placed on the extraordinary aspect of the encounter, with emotions sometimes positive, sometimes negative, sometimes humorous, sometimes frightening: an encounter, an accident. This shows differences in the understanding of the event. The Sun's report emphasizes the cowardliness of the horse which reduces the animal's attitude to a behaviour that is easily evaluable and interpretable for humans, describing the horse as »an easily frightened pony.«¹³ The animal's emotions are suddenly revealed and evaluated under an anthropomorphic prism, which is in line with Jennie Coy's observation that humans generally tend to underestimate the complexity of animal behaviour.¹⁴

Conversely, others normalize the attitude adopted by the creature, others concede »but to be fair to this frightened horse, the Google Street View car is a little strange.«¹⁵ For the majority, strangeness would be on the animal's side, normality on machine's side.

On the Reddit thread from 2016, users wonder about the reaction of the horse:

thrown off a horse, under: <https://www.thesun.co.uk/archives/news/1138973/the-incredible-moment-google-street-view-cameras-capture-rider-being-thrown-off-a-horse/> (18 December 2019).

⁸ Aaron Brown: Google's Street View van just caused a SHOCKING accident for this unlucky horse rider, under: <https://www.express.co.uk/life-style/science-technology/663114/Google-Street-View-Accident-Horse-Finland>, (18 December 2019).

⁹ Brian Koerber, Google Street View had a very awkward encounter with a horse, under: <https://mashable.com/2016/04/20/google-street-view-horse/?euope=true#ZTqQoFr3yEqG> (18 December 2019).

¹⁰ Corey Charlton: And she's off!, under: <https://www.dailymail.co.uk/news/article-3558028/And-s-Hilarious-moment-rider-thrown-saddle-Google-Street-View-car-causes-animal-bolt-Finland.html> (18 December 2019).

¹¹ Jay Hathaway: Horse has perfectly natural response to Google Street View camera car, under: <https://www.dailydot.com/unclick/horse-runs-from-google-street-view-car/> (17 January 2020).

¹² Nicolas: Le cheval qui ne voulait pas être sur Google, under: <https://www.echeval.com/news/14-cheval-google-street-view> (17 January 2020).

¹³ Randall: The incredible moment Google Street View cameras capture rider being thrown off a horse (as note 7).

¹⁴ Jennie Coy: Animals' Attitude to People, in Tim Ingold (ed.): *What Is an Animal?*, London 1994, pp. 77–83: 83.

¹⁵ Koerber: Google Street View had a very awkward encounter with a horse (as note 9).

»*Realtrain*: I wonder if the horse was specifically scared of the street view cameras? It can't be like this with all cars.

Calicoan: Horses think differently – for them, an alteration of a familiar thing turns it into a completely different thing, instead of a familiar thing that's a little different. This is pretty adaptive when the creatures that want to eat are prone to sneaking up on you all camouflaged!

Neebat: 20 years ago, I would have freaked out if I saw a streetview car. That horse has less experience with cars than I did then, so I can sympathize.

NeoZero: What kind of horse are you?

Neebat: Apparently a really, really old workhorse.

[deleted]: One who can write.«¹⁶

This conversation emphasizes both the specific aesthetic of the Google Street View car as a possible stressor for the horse and the progressive irruption and integration of these devices in the common and shared environment. Sign of a problematic presence, of an accidental encounter, the frightened horse gradually becomes an allegory on privacy rights and data policies in the context of algorithmic rulling by such tech companies.

According to Anna Tsing, disturbance is a key concept for ecologists, which emerged at the same time scholars in the humanities and social sciences began to worry about instability and change.¹⁷ Humanists connect disturbance with damage, but as used by ecologists, disturbance is not always bad none only caused by humans. The question of disturbance opens the discussion to what follows: »the reformation of assemblages.«¹⁸ Used as an analytical tool, disturbance

»requires awareness of the observer's perspective—just as with the best tools in social theory. Deciding what counts as disturbance is always a matter of point of view. From a human's vantage, the disturbance that destroys an anthill is vastly different from that obliterating a human city. From an ant's perspective, the stakes are different. Points of view also vary *within* species. [...] No single standard for assessing disturbance is possible; disturbance matters in relation to how we live. This means we need to pay attention to the assessments through which we know disturbance.«¹⁹

¹⁶ Abaosle: When Google Street View car Meets a Horse (as note 6).

¹⁷ Anna Lowenhaupt Tsing: *The Mushroom at the End of the World. On the Possibility of Life in Capitalist Ruins*, Princeton 2015, p. 160.

¹⁸ *Ibid.*, p. 160.

¹⁹ *Ibid.*, p. 161.

Disturbance opens the terrain for transformative encounters and brings us into the heterogeneity of situations.

This presence of another kind questions the relationship we have with those technologies. The recorded scene is generated by the vehicle passing, they are ontologically related, making visible the mediation operated by the device in the spaces it travels through.²⁰ These encounters visualise two ghostly or minored figures of global archiving infrastructures: the animal and the Google Street View car (and its recording machine). In the end, looking at these pictures, we face the moment when the protocol goes off the rails, affects its environment and is affected by it.

2. The Machine in Hot Pursuit

On April 3rd, 2017, a YouTube user, Nate Holman, published on his account a video named »Drone Chasing Pronghorn Antelope.«²¹ In this video, we can see a herd of antelope, a drone in pursuit, scrambling through steppes, staying on the lookout and without respite, resuming their course each time the flying vehicle approaches. Accompanying these images, the lyrics of a Creedence Clearwater Revival's song, *Bad Moon Rising*, hover like a bad omen:

I hope you got your things together
 I hope you are quite prepared to die
 Look's like we're in for nasty weather
 One eye is taken for an eye
 Oh don't go 'round tonight
 It's bound to take your life
 There's a bad moon on the rise
 There's a bad moon on the rise²²

In the description section on the YouTube page, the producer and owner of the video expressed his eagerness to launch his drone from his Jeep when he saw the herd from the top of a hill in the Nebraska forest. »Well done, man, you're disturbing the wildlife«²³ comments the user Miguel Silva, while the author of the video assumes his jeep, his drone, and his rifle in another comment. Silva's comment was

²⁰ Pauline Chasseray-Peraldi: Processing the Territory: From Taking a Picture to Online Archiving, in: Questions de communication 37/1 (2020).

²¹ DRONE CHASING PRONGHORN ANTELOPE (USA 2017, Nate Holman).

²² BAD MOON RISING (USA 1969, John Cameron Fogerty).

²³ Miguel Silva, under: <https://youtu.be/op-Y2VtYrPM> (18 December 2019).

published in November 2018, as were most of the comments found below this video, blaming the producer's irresponsible behavior towards wildlife.

This peak in video activity is related to the online publication of an article by The National Geographic, November 7th 2018, entitled *Viral bear video shows dark side of filming animals with drones*²⁴ in which the antelope video is mentioned as one of the examples where the presence of machines actually influenced animal behaviour in a negative way. This article, which is not the first published by National Geographic on this subject (one was already published in 2015),²⁵ echoes a viral video from the fall of 2018 on ViralHog YouTube channel entitled *Fallen Bear Cub Climbs Back To Mama*.²⁶ In this video, we can see a bear and her cub trying to climb a snowy cliff with dramatic bounces, the cub not being able to reach the top. Hands are sweaty, heart is tight, until the happy ending when the cub reaches their mother and then both flee from their pursuer.

The media coverage of this video often describes the event from a dramatic and moral perspective. This is how National Geographic's article begins, by reminding us that most media coverage has decided to retain the angle of the British proverb »If at first you don't succeed, Try, try, try, try again«, attributed to William Edward Hickson, a british educational writer and editor of the Westminster Review²⁷ during the nineteenth century. Human moral qualities are attributed to the cub — which becomes the symbol of the deserving child—to the bear—described as a devoted and desperate mother—ultimately making this wild scene an allegory of tenacity and individual responsibility for completion and success. The article reminds us that bad uses of technology are mostly due to a misunderstanding of a possible different perception, to the necessity to adapt to different animals as they don't react the same way to the same signs, and to the lack of knowledge about the artifacts we use in the environments we inhabit.

Animals do react in various ways to technical artifacts and human presence, depending on their proximity to humans and their own sensitivity. For some animals, what will matter will be the angle of approach, for others it will be the speed, the colour, or the noise.²⁸ For others, these elements do not matter, they are

²⁴ Jason Bittel: *Viral Bear Video Shows Dark Side of Filming Animals with Drones*, under: <https://www.nationalgeographic.com/animals/2018/11/drone-brown-bear-video-russia-wildlife-harrassment-news/> (15 December 2019).

²⁵ Jennifer S. Holland: *How Drones Are Affecting Wildlife in Suprising Ways*, under: <https://www.nationalgeographic.com/news/2015/08/150825-drones-animals-wildlife-bears-science-technology/> (15 December 2019).

²⁶ *Спасение медвежонка на скальном обрыве. FALLEN BEAR CUB CLIMBS BACK TO MAMA* (RU 2018, MrDKedrov).

²⁷ British liberal journal founded by Jeremy Bentham in 1823, official organ of the Philosophical Radicals.

²⁸ Jarrod Hodgson and Lian Pin Koh: *A Guide to Using Drones to Study Wildlife: First,*

used to drones, as they can be to cars, airplanes, city noises or any other human manifestation. Some animals will have a visible reaction (agitation, unusual behavior in a common situation), for others, there will be an indiscernible change for the observer like a rise of the heart rate. Drones can act as stressors, arousing awareness and anxiety if not used with proper regard to wildlife. The technical name of a drone is UAV for Unmanned Aerial Vehicle. For the mother bear, and according to the ecological wildlife biologist Sophie Gilbert, the UAV becomes an UFO (Unidentified Flying Object). As drones are still pretty unusual, most people do not know what it is like to be in their presence, which is what Gilbert underlines: »I don't know how much time you've spent around drones being flown, but they're really loud.«²⁹

Many videos recorded with drones have no sound or have a post production soundtrack (peaceful or emotionnal) that's stereotypical for wildlife documentaries. Drones are actually very loud and disturbing, with a range of tones depending on their rotors and propellers. The drone's noise generally ranges from 75dB to 80dB,³⁰ and this aspect is usually not the main concerns of the drone test online which focuses mostly on flight range, flight time or image quality. Considering the videos captured by drones, the machine appears to be silent most of the time, and even though they are noisy in reality, they often do not record themselves, and we rarely do hear the sound they make in the videos published online. According to Grégoire Chamayou, the distance of the crew piloting the drones contributes to a disempowerment of the pilots and tends to charge the object as an entity separated from human choices which is why it is considered as ethical by its supporters and nonethical by its detractors.³¹

In 1983 Holmes Rolston III pointed out the fact that »animals take an interest in affairs which affects them. They hunt and flee, grow tired, thirsty, and hot. They seek shelter, play, wag tails, scratch, suffer injury, and lick their wounds.«³² The mistake would be to think that animals feel as we do, or to think there can be no such qualities as those of human beings in nature, qualities which we are used to value. For Edward S. Reed, we live in a lively environment shared with other beings: objects, events and places have potentialities and meanings both for

do no Harm, under: <https://theconversation.com/a-guide-to-using-drones-to-study-wildlife-first-do-no-harm-57069> (18 December 2019).

²⁹ Ibid.

³⁰ Tim Levin: How Loud Is Your Drone? The Drone Noise Test Of P2, P3P, P4P, I2..., under: <https://www.wetalkuav.com/dji-drone-noise-test/> (19 December 2019).

³¹ Grégoire Chamayou: *Théorie du drone*, Paris 2013, p. 30.

³² Holmes Rolston III: *Terre objective, essais d'éthique environnementale* (1983), Bellevaux 2017, p. 100.

others and for us.³³ Sometimes it's the same, sometimes it's different. The reaction of the animals unfolds a form of mediation from the technical object, a form of animation of the optical machine which eludes us.

3. Zone to Defend

In 1988, in *The affordances of the animate environment: social science from the ecological point of view*, Edward S. Reed precised animals relationship to their environment:

»Because animals are aware of their environment (including us) and because they *act* in those surroundings (including us), we perceive them and act with regard to them in ways very different from our perceptions of and actions towards inanimate objects: When touched [animals] touch back, when they are struck they strike back; in short, they *inter-act with the observer and each other*.«³⁴

In this excerpt, the author insists on the ontological dimension of animal behavior. The idea of the subjective animal already appears in Jakob von Uexküll's theories in 1934: »We no longer regard animals as mere objects, but as subjects whose essential activity consists of perceiving and acting. We thus unlock the gates that lead to other realms, for all that a subject perceives becomes his perceptual world [*Merkwelt*] and all that he does, his active world [*Wirkwelt*]. Perceptual and active worlds together form a closed unit, the *Umwelt*.«³⁵ For Uexküll, as explained by Bret Buchanan in *Onto-Ethologies*: »The being of animals—how they reveal themselves as intertwined with the environments they in turn create—is expressed through their behavior. To understand what it means to be an animal therefore requires that we understand its relation to an environment.«³⁶

If animals are aware of their surroundings, they also express their ways of being through their reactions, and reveal specific kinds of relations and affects towards their environment and to an extent to what constitutes their territory.³⁷

³³ Edward S. Reed: *The Affordances of the Animate Environment: Social Science from the Ecological Point of View*, in: Tim Ingold (ed.): *What Is an Animal?*, London 1994, p. 116.

³⁴ *Ibid.*, p. 116.

³⁵ Jakob von Uexküll: *A Stroll Through the Worlds of Animals and Men. Instinctive Behavior: The Development of a Modern Concept (1934)*, edited by Claire Schiller, New York 1957, p. 5.

³⁶ Bret Buchanan: *Onto-Ethologies. The animal Environment of Uexküll*, Heidegger, Merleau-Ponty, and Deleuze, Albany, New York 2008, p. 188.

³⁷ On affect and encounter see Maan Barua: *Encounter*, in: *Environmental Humanities* 7/1 (2016), pp. 265–270 .



Fig. 2: Screenshots from Google Street View of a Shiba Inu Chasing a Car in Japan, 2014

There are many revenge stories of animals fighting back undesired machines in their surrounding that circulate on the internet. Images of a Shiba Inu chasing a Google Street View Car in Japan, district of Kumage, in Kagoshima Prefecture, went viral in April 2018. In this sequence from Google Street View, we first see the pup beside his owner repairing a boat, then attacking and pursuing joyously the unwelcomed visitor until the car reaches a dead-end. There is an intruder in his territory, he won't let that go unnoticed. Whether it is a game or a defensive act, the dog's reactions signal the passage of the car, and the act of recording. It also reveals his *Umwelt*, his own territory shared with his human that he has to defend.

In 1987, Donna Haraway analysed National Geographic covers about primates.³⁸ This work questioned modern culture and the part of its ideology that resides in the stories we tell about gorillas in mass media: »What has to count as nature, for whom and when? And how much it costs to produce nature, at a particular moment of history, for a particular group of people?«³⁹ The Royal Burger's Zoo in Arnhem, the Netherlands, published a video on their YouTube account on April 10th 2015 in which a chimpanzee defeats a drone using a branch to observe it with curiosity.⁴⁰ This case has been reported on National Geographic, April 13th, 2015

³⁸ DONNA HARAWAY READS THE NATIONAL GEOGRAPHIC ON PRIMATES (USA 1987, Donna Haraway).

³⁹ Ibid.

⁴⁰ CHIMPANSEES HALEN DRONE NAAR BENEDEN EN FILMEN ELKAAR! (NL 2015, Burger's Zoo).



Fig. 3: Screenshot of the video *Chimpanzee Takes Down Drone*, 2015

by Ralph Martins. Once again the sound of the video is probably a post production: we can hear animals (as a choir of animals from the zoo), and drone manipulation (we can hear the crash, and the chimp breathing while manipulating the object, but not the drone flying) mixed with the opening of *Also Sprach Zarathustra* from Richard Strauss. The opening piece called *Sunrise* is supposed to depict the mountaintop sunrise that opens Nietzsche's book. The motif of the trumpets has been called the ›nature‹ or ›world riddle‹ motif, as a symbol of nature's mystery.⁴¹ The music related to the gesture of the chimp, glorify the use of the tool by the animal as a symbol of the genesis and meaning of life. This video functions as a mirror where two forms of curiosity—human and animal—confront each other through the use of tools—the drone and the branch.

⁴¹ Houston Symphony: That Existential Feeling: Strauss' Thus Spake Zarathustra, under: <https://houstonsymphony.org/strauss-zarathustra/> (19 December 2019).

On YouTube, videos of >drone vs. something< are very popular, and after planes, cops, hornets, animals are found in the 4th line of the search bar, shortly after: birds, eagles. Many videos show the efficiency of birds' claws, taking down drones. Most of the time, the fight takes place in the air, a space that we colonized and which we experience in different ways, from goose collisions with airplanes in North America, airport bird control methods, to other bird attacks.

In 2016, Dutch police started to train eagles to defeat dangerous drones. »A low-tech solution to high-tech problem«⁴² that they abandoned one year after for two reasons: firstly, the cost; and secondly, because the birds would not always do what they were trained for, and might be a trouble outside the controlled training due to frustration if they don't catch the drone prey.⁴³ Falconers of the French army also started to train golden eagles for combat against drones in 2016, but on April 17th 2018 an eagle of the French army attacked a five year old girl in the Atlantic Pyrenees. The justification the army gave was that the eagle might have confused the girl with a rabbit, or confused the colour of her white tee-shirt with the drone they use to train it.⁴⁴

In his film *Aquila non capit muscas* the artist Mircea Cantor depicts the eagle's victorious battle with the drone fly. His series of drawings, exposed in the exhibition *Vânătorul de imagini*,⁴⁵ insist on the interaction between the machine and the animal, and the process and steps throughout which he progressively perceives the drone as a prey. This series emphasizes the plasticity and the sensitivity engaged in such encounters. The difference between animated and inanimate objects lies in the fundamental difference of the ability to move autonomously, which can sometimes be simulated by optical objects. These same simulations can be perceived as being alive.⁴⁶ Some animals perceive them as threats, others as a discomfort, others ignore them. Whatever the nature of the reaction is, it exists and it can mean and act on other beings, other contexts. Some drones are equipped with sensors to detect the presence of a lifeform, which blurs some of these distinctions. But these sensors can be activated or deactivated by the pilot and are still ruled by

⁴² Eagles vs. drones: Dutch police to take on rogue aircraft with flying squad, under: <https://www.theguardian.com/world/2016/sep/12/eagles-v-drones-dutch-police-take-on-rogue-aircraft-flying-squad> (19 December 2019).

⁴³ Janene Pieters: Dutch Police Drops Drone Hunting Eagles Project, under: <https://nl-times.nl/2017/12/07/dutch-police-drops-drone-hunting-eagles-project> (19 December 2019).

⁴⁴ Bixente Vrignon and Iban Etxezaharreta: Un Aigle de l'Armée Attaque une Fillette de 5 ans au Pays Basque, under: <https://www.francebleu.fr/infos/faits-divers-justice/un-aigle-de-l-armee-attaque-une-fillette-de-5-ans-1528352617> (19 December 2019).

⁴⁵ *Vânătorul de imagini*, Mircea Cantor, Musée de la chasse et de la nature, Paris, 15 January 2019 to 31 March 2019.

⁴⁶ Reed: *The Affordances of the Animate Environment* (as note 33), p. 116.

calculation. Drones represent danger for many reasons: accidents, intentional violent attack, infringing on privacy and freedom rights, environmental disturbances, security concerns.

Drone use is subject to legal restrictions. In French legislation⁴⁷ on personal drones, three kinds of spaces are considered as unauthorized by the law: public space in urban areas, airports, and sensitive areas or protected areas (nuclear sites, military zones, natural reserves in that order). This typology excludes other spaces, less determined or regulated, which have their own fragility. Since June 2019, media outlets have reported cases of seagulls and other birds threatening French police surveillance drones, especially during protests. The first spectacular case occurred during the *Act 32* of the ›Gilets Jaunes‹ protest in Paris on June 22nd 2019, the second one during the strike in Paris on December 10th 2019. For Frédéric Malher, regional delegate for the Bird Protection League in Île-de-France, birds attack to protect their territory and clutch of eggs.⁴⁸ Considering the political context, they are often acclaimed on the web as fighters for freedom and privacy rights. The press has reported the blurry regulation of drone use by the French police. In fact, drones are not supposed to fly over crowds which is not respected in these cases, and bird attacks underline the potential risk of accident. Their encounters suggest that a danger is coming from the sky. Birds and drones stories intertwine around discourses on disturbance and the variability of its perception.

For Rolston III, we need to re-think the system of values we live by:

»This sort of experience moves value outside of ourselves. It forces a redistribution and redefinition of value. Value is not just a human product. We realize this by learning how we humans, including much that we value in ourselves, are natural products, and are thereby alerted to look for other natural productions of value. Such nonhuman values, as we track them here, are first discovered in these roots, but the path does not end there. It leads secondly to wild neighbors and on beyond to paths more foreign and difficultly explored.«⁴⁹

As for disturbance, our systems of value require a change of point of view on the way we look at nature and otherness to try to experience what exceeds us.

⁴⁷ Ministère de la Transition écologique et solidaire: Modèles réduites et drones de loisir, under: <https://www.ecologique-solidaire.gouv.fr/modeles-reduits-et-drones-loisir> (19 December 2019).

⁴⁸ Jean-Michel Décugis: Paris: les goélands attaquent les drones de la police, under: <http://www.leparisien.fr/faits-divers/les-goelands-attaquent-les-drones-de-la-prefecture-de-police-de-paris-25-06-2019-8102361.php> (19 December 2019).

⁴⁹ Rolston III: *Terre objective, essais d'éthique environnementale* (as note 32), p.99.

4. When Bugs Meet Bugs

For me, the numerous pictures of herds of sheep blocking the roads on Google Street View have a certain poetic, aesthetic, and political value. Forced wait, occupation of the territory, the masses formed by sheep, are »slow down« operations forcing the Street View Car to wait. These herds reveal a time frame during which the protocol of recording has been disrupted. These moments are often considered as rare and unusual on compilations on the web. The way these encounters are qualified to keep a distance between these encounters and the technology we use, as if these reactions couldn't be considered anything else but funny.

Another thing that also occurs on Google Street View are accidents, even if they are rare, or simply unseen or untold. One has been reported and acknowledged by the company on January 29th, 2009, leading an online testimonial untitled »Oh, deer: Street View and road safety reminders.«⁵⁰ This text brings back the part of banality of this huge archive project lead by the Silicon Valley player in which drivers are involved and face the same situations as local drivers. Sometimes a driver hits a deer, has to call the police, and follow common instructions for safety reasons. This collision reveals the embodied side of the process of recording. In that testimonial, the driver remains anonymous, Google Street View drivers are one of these ghostly figures of optical machine and enginery, and it is pretty



Fig. 4: Screenshot of a herd of sheep from Google Street View, 2010

⁵⁰ Wendy Wang: Oh, deer: Street View and road safety reminders, under: <https://maps.googleblog.com/2009/01/oh-deer-street-view-and-road-safety.html> (19 December 2019).



Fig. 5: Screenshot of a Google Street View driver cleaning the camera, 2017

rare to meet them, because they are behind the lense for confidential reason. But insects allow to encounter some of them.

When the bug hits the lense, the drivers are forced to stop and to clean the camera, or the next series of pictures would be compromised. An amateur footage of a Google Street View Car and its driver is available on YouTube⁵¹ in which we can meet the driver and discover the inside of the vehicle. In this rare footage, the driver is hiding her face for confidentiality reasons. She explains that she had to stop to clean a bug from one of the lenses of the camera. Most of the pictures we can find of Google Street View Cars are due to bugs on lenses. Sometimes they forget to switch off the cameras while cleaning them, which gives partial alien portraits of these invisible workers of the web.

These situations underline the necessity to think new media and technical devices as interrelated to biological and environmental concerns. The multiplication and democratization of optical technologies requires not only technical knowledge, economical, political and ethical considerations, but also an ecological reflection on coexisting with others. This is a meeting point where we confront otherness, which requires thinking about how we use the device and its system of sensoriality. What do we delegate to the machine when we face what we do not understand?

⁵¹ GOOGLE STREET VIEW CAR (USA 2012, SteamUP).

The legacy of positivism and Cartesianism have constituted a subordinate place for animals, perceived as machines and then with the rise of capitalism as resources. If there is an *animal turn* today in science and in society, there are still many concerns about how we negotiate territory occupation with this radical otherness, and by extension how we could develop a new approach of the unknown. What has to count as insignificant, for whom and when? And how much does it cost to value progress at a particular moment of history for a particular group of beings?

What I notice when observing these images, is that nature and territory are seen and treated as resources in such devices, from the ideal of commensurability to processes of archival valorisation. In that context, the animal helps us to see in a spontaneous affective way that optical technologies are artifacts that operate mediations, they are therefore not neutral and do not guarantee objectivity. They shape the spaces in which they circulate and are ontologically related to the recorded phenomenon. They guide the images and scenes of nature of which we become spectators. But the environment also shapes what we do see in this online service of imagery, showing breaches in the protocol.

The same presence of animals makes us realize that the way in which we generally consider what optical technologies do is very limited because it is only considered from our own environment. When we build and use our artifacts, we could start to think about how to open optical technologies and ways to co-habitate common spaces we already share. In *The Mushroom at the End of the World*, Anna Tsing proposes the idea of *latent commons* as sites where unpredictable collaborative futures might emerge, or »sites in which to seek allies« that remain undeveloped and difficult to notice.⁵² She invites us to move beyond progress, »to focus attention instead on polyphonic assemblages of various rhythms, directions, and species«.⁵³ We might »listen politically« in order to »detect the traces of not-yet articulated common agendas«. Because for her, »the latent commons is here and now, amidst the trouble«⁵⁴ and we could reveal them only by »practicing the art of noticing«.⁵⁵ We could start by being aware of the materiality and sensoriality of the technology we produce.

These encounters also underline the critical and political value of the unknown and multiple, of undefined spaces and polyrhythms we can find in such devices, if we follow the suggestion of Anna Tsing. It shows the profound and human materiality of such gigantic technological infrastructures, and the regular friction be-

⁵² Lowenhaupt Tsing: *The Mushroom at the End of the World* (as note 17), p. 255.

⁵³ Katherine Sacco: *Latent Commons in the City*, under: <https://culanth.org/fieldsights/latent-commons-in-the-city> (19 December 2019).

⁵⁴ Lowenhaupt Tsing: *The Mushroom at the End of the World* (as note 17), p. 255.

⁵⁵ *Ibid.*, p. 255.

tween high-tech and surroundings. What we consider as freaky and unusual is mostly due to a series of decision to define what is valuable and what is not. The encounters with the recording machine in concrete reality occur when there is a bug, but on the lens.

Picture credits:

Fig. 1: Google Street View, 353 18131, North Ostrobothnia, 2009.

Fig. 2: Google Street View, Minamitane, Préfecture de. Kagoshima, 2014.

Fig. 3: GoPro: CHIMP VS. DRONE AT THE ZOO, USA 2015, GoPro.

Fig. 4: Google Street View, 2013, image date: January 2010.

Fig. 5: TOP 10 CREEPY DRIVERS OF GOOGLE STREET VIEW CARS, 2017, StreetViewFun.