Visual Pedagogies

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Visual Pedagogies

Concepts, Cases and Practices

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Visual Pedagogy in the Shadow of the Anthropocene

jan jagodzinski

Vision and pedagogy, the two terms that constitute visual pedagogies as explored theoretically, empirically, and practically throughout this collection present educators, artists, designers with an extraordinary challenge in the 21st century, a century where global de(sign)er capitalism has brought about an 'aestheticization of the wor(l)d picture,' where the signifier as word and image has become ubiquitous over the myriad of screens of all sizes, the clamour of representational *difference as diversity* heard everywhere, like a paradoxical *mise en abîme* echo effect. It seems the Earth is for sale, commodified and aided by corporate surveillance satellites and Google Earth satellites that also record the inferno fires in California, Australia, Siberia and the Amazon Rainforest, as well as the steady formations of hurricanes, where in 2020 alphabetic names for them have been exhausted. The industrial air pollution from oil and coal and the burning of used and outdated computer boards darkens the iconic image of Apollo 17's 'blue marble' taken in 1972, often requiring infrared (IR) optics 'to see' through the density. The sublime beauty of Edward Burtynsky's (2003) photos and videos of anthropogenic 'manufactured landscapes,' severely (and perhaps unjustly) criticized for their spectacularity in what appears as their perverse celebration of visual beauty of technological and geological mastery. They seem devoid of an environmental critical aesthetic. How then are we to relate Burtynsky's industrial landscapes of (violent?) devastation with so-called Earth Art paradigmatically and iconically represented by Robert Smithson's *Spiral Jetty* (1970) and Michael Heizer's *Double Negative* (1969–70), both works have received an inordinate amount of theoretical attention by the art-world?

And, what of Chris Jordan's (2006–) 'manufactured' photographs that visualize the invisible truths of our time by capturing hyperobjects through the compositional repetition of a single unit of a waste-product to generate the unthought (invisible) as thought (visible) by way of sublime numbers that seem ungraspable. For instance, the visual representation of a Tyrannosaurus rex dinosaur (symbolic of living oil) composed of 240,000 colored plastic bags that is representative of ten seconds of their consumption around the world. Or, an image of a small stuffed animal tiger repeated 3200 times, which forms

a running border around a big black void. The number 3200 is the actual number of tigers left on the planet, while the size of the void filled up equally with the same sized tiger images represents the global population known in 1970: 40,000 tigers. *Three Second Meditation* is an image of a Buddhist Mandala that is made from 9,960 mail-order catalogues which are equivalent to the number of pieces of junk mail printed, shipped, delivered and then discarded in the United States every 3 seconds. Jordan's images and video on Midway Island shows the aestheticized horror of baby albatrosses that die by being fed bits of colored plastic items (bottle caps, lighters, white plastic forks, toothbrushes, gun shells) mistakenly as food by their parents picked up in the ocean current of the pacific Gyre known as the Pacific Garbage Patch. The sublime horror of these images reveal processes at work that may be known cognitively, even intuitively, but now they confront us in ways that force an anamorphic perception, one that disturbs our usual framing.

Climate change, in particular, seems incomprehensible, invisible and ephemeral. *Army of Melting Men* by Brazilian artist Néle Azevedo is a recurring installation that has been performed in Brazil, France, Japan, Italy and Germany. It addresses global warming, and presents the precariousness of existence under climate change. One thousand to 1,300 cast mould ice figurines, generically male and female, approximately 45 cm high (18 in), are placed on site, usually on the steps of some well-known state building of legislative authority (but not necessarily) by a participating public. Like the melting of the Artic ice in Greenland and Antarctica (sea levels will rise over a metre by 2100), these statuettes begin to 'disappear' as they melt – in as little as 20 minutes. During this time, the melting 'sculpturines' undergo subtle differences of form before 'becoming extinct.' Their inactivity as they melt away speaks directly to the inactivity of humankind towards climate change. The sculptural minimalism and autonomy addresses 'every[person]' who cannot escape, regardless of class, wealth and power.

The effects of global capitalism are pervasive, but how do you visualize the 'abstraction' of xenocurrency in the way it operates in the global stock markets? Here, machines speak to machines that are outside human cognition. The installation *Black Shoals Stock Market Planetarium*, 2001/2004, by London based artists Lise Autogena and Joshua Portway projected an array of *otherworldly constellations* onto a planetarium-style dome, making the night sky disturbingly different from the one we are all familiar with. Each astral body in the night sky corresponded, not to nature, but to a publicly traded stock company. A computer program translated the real-time financial activity of the world's stock exchanges into glimmering cluster of 'stars,' the way they 'shoal' together. The bigger the star, the more it was 'worth.' In 2001, the artwork was connected to a Reuters news feed. In 2004 when the artwork was displayed at the Nikolaj,

Copenhagen Contemporary Art Center, it was wired to the local stock exchange. Stars flashed more brightly whenever stock was traded. They gathered into clusters or dispersed according to market momentum. Added to the complexity of this celestial panorama, the artists introduced digital creatures into this luminous ecosystem. This ecosystem was solely artificial, devoid of any natural life. Cefn Hoile, an artificial-life researcher and programmer, designed evolutionary algorithms so that these creatures could feed on the energy off the 'stars'; they grew into complex beings and reproduced in order to better survive in this media ecology. With a market downturn, these 'creatures' experienced famine and died out, overcome by darkness. They were 'accelerated' to death, so to speak!

The project puns and utilizes the so-called Black-Scholes option-pricing formula, published in 1973 by University of Chicago professors Fischer Black and Myron Scholes, which set the course for the trading of financial derivatives on an unprecedented scale. *Black Shoals Stock Market Planetarium* reduces such complex calculations to the level of a video game's seductive visual logic, whereby the ravenous AI life forms simulate the speculative passions that have led to real-life suffering and disasters. Hoile, their creator, maintains that the creatures' relationship with their artificial world of stars is like a mirror of our own relationship with the financial markets. The creatures survive by competing with each other in a world whose complexity they are too simple to fathom, just like those who 'play' the stock markets. The *Black Shoals*'s creatures are nothing but a purified expression of self-entrepreneurship – approximating the biopolitics of *Homo economicus*, the subject of neo-liberalism. Picturing a life-world merged with capital, Autogena and Portway's starry sky presents the activity of the stock market via a technology of visualization, showing just how artificial the financial system is, revealing the vulnerability of life exposed to a purely economic rationality. The market is seen as a second Nature, as if global capitalism and trade is the 'natural' economic activity of our species.

The installation is not just a means of visualizing abstract data but an existential model for predatory life under advanced capitalism, within a zone where nothing else – not bodies, social life, religion or aesthetics – matters much. The fact that the 'creatures' have repeatedly rendered themselves extinct during the running of the installation proposes that, at its most extreme, the project is to be taken as a dark allegory. It is a stark warning for our precarious existence as a species whose actions are putting our very viability at risk. Perhaps, more to the point, this installation shows the machinic enslavement capitalism engenders. It is the asignifying semiotics that are at stake and taken into account: stock market indices, currencies, mathematical equations, diagrams, the computer languages, nation and corporate accounting. These are not conscious and representational; they do not have a subject as a referent.

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Burtynsky, Jordan, Néle Azevedo, Lise Autogena and Joshua Portway, I argue are 'an avant-garde without authority' (jagodzinski, 2019). They are exemplary pedagogues and teachers, each in their own singular right. They are, in effect, visionaries; they 'see' more than is seen. And, as Paul Klee famously said: "Art does not reproduce the visible; it makes visible. Art does not reproduce what we see. It makes us see." This is seeing the world from the vantage *point of abstraction*, and not abstraction from the world. It is to 'glimpse' or intuit the Real as the 'given that is given'. In François Laruelle's (2015) non-philosophical terms this abstraction is performed 'in the last instance'. The Real refers precisely to this 'point of abstraction'. The chaotic 'grey-point' (*Graupunkt*) in Klee's (1961) color theory that creates the cosmos is a prime example from where the order of color emerges. Such an 'avant-garde without authority,' as visionary pedagogues are 'symptomatologists' of the social order, as Gilles Deleuze (1990, p. 237) called them. They become aware of the *signs* around them, enabling a viewing and participating pubic to feel rage, anger, shame and grief by enabling an *affective encounter* with what is *imperceptible*, like the loss of species in what is the sixth mass extinction-event, which is likely to include our species as well; or the effects of climate change as the amount of carbon dioxide released into the air increases to 421+ ppm. These are forces that seem abstract and invisible and cannot be immediately felt, like the cruelty of capitalism that the 1% do not feel. Such teachers as pedagogues enable a form of witnessing where the object gains *agency* and 'looks back,' thereby deterritorializing and decentering our previous associations and investments we may have had in the everyday living within a commodified world. Such encounters are prophylactic to consumption, what Bernard Stiegler (2018) would identify as a form of negentropy, the paradox of a pharmakon. They enable a form of death of oneself; a deterritorialization of who one is; a zone where the world-for-us becomes inverted in a way that can shock one into a new attitude; an ethics of caring that recognizes the global biome, the connection of all living things. Such an ethics of caring, which recognizes nurturing, healing as well as suffering of all organisms, is what Bruno Latour (2004, p. 205) calls 'learning to be affected'. This would mean being open to human sensibilities which allow for the compassion of all life forms. Suffering, grief, sadness and love are oddly bound, entangled in the care of things, in the fragility of life, when they *look back* and participate in our own event of becoming. The 'becoming of things' – becoming animal, becoming plant, becoming imperceptible as developed by Deleuze and Guattari (1987) – when natureculture collapses and something of the cosmic forces are revealed, this gives us a glimpse 'in the last instance' of the infinitude of the unknown, and the wonder and impossibility of ever fully knowing.

I am reminded of a cinematic sequence from the film *Fat Man and Little Boy*, a 1989 war film directed by Richard Joffé. The story line follows the Manhattan Project, the secret endeavour by the Allies to develop the first nuclear weapon during World War II. The scene I describe is available on YouTube,[1] a 2.42 min clip which dramatizes the 60 sec countdown before the detonation of the bomb to see if it actually works. Classical music is playing in the background that can't be switched off despite the order of one of the commanding officers, perhaps a grim reminder of the classical music that was played as Jews stripped and entered the gas chambers thinking that a shower was awaiting them. A line of VIP generals and physicists who are responsible for the project, all wearing dark goggles, await the explosion in a bunker that has sandbags neck high. Robert Oppenheimer, apprehensive, pulls down his heavy darkened sun goggles with 26 sec. to go in the countdown as all the switches are thrown one at a time. The camera switches to a long view of the Mexican dessert, panning a darkened landscape, three-quarters of which is sky. The countdown is in its last few seconds. Oppenheimer nervously pulls out a cigarette with three seconds to go. At zero the cigarette has yet to be lit as his entire face is covered by a yellowish-glow. What is particularly striking are his goggles. They have turned into two huge opaque yellow eyes, the size of two eggs sunny-side up. His face has transformed into a ghastly mask. The sound of the bomb's roar now consumes the scene, and it is the wind blast, which quickly blows out the lighter and begins to hollow out his mouth, making it tremble like a scream that cannot come out, the upper and lower teeth of an open mouth reveal themselves. His face darkens a little as we now only see the ovals of his goggles lit up like the intensity of the sun, the image of the bomb's blast appearing identical on each goggle. The sublime beauty of such horror has been released as the iconic cloud begins to form. This event, of course, like the Anthropocene, has changed the global ontology into a pre-and-post nuclear world. After World War II, Oppenheimer went on to be a vocal supporter for nuclear control. He actively fought against the proliferation of nuclear arms and the H-bomb. Accused of having communist ties, he was eventually removed from his position on the Atomic Energy Commission's advisory committee.

But, why describe this particular scene/seen in relation to the visuality and pedagogy?

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The history of bourgeois perception in the 19th and 20th century is instructive as we are far enough away to take note how technologies mediate and change perception. The fear indigenous peoples had that their 'soul' was stolen when

photographed, the extreme anxiety felt in the early days of portraiture as reported by Nadar as this was the first time many Parisiens came face to face with their images, is well documented. The Venetians of Murano in the 16th century compressed a layer of mercury between a sheet of glass and a sheet of metal to form the first distortion-free reflections, but few people possessed such mirrors. They remained exclusively in the hands of royalty and nobility. No mirrors would decorate the walls of ordinary homes before the end of the 19th and beginning of the 20th century. For photoliterate people, the mirror image is fugitive: you know it isn't there when you aren't looking. The opposite is the case for those without mirrors: the image is fixed, like your shadow. Every time you sneak a glance in the mirror 'you' are there. The lack of self-awareness in the visual sense provides an inkling of the hysteria that accompanied the early years of photography. Accounts of how clients, photographed for the first time, could not recognize themselves, became angry, or refused to accept that they appeared less good-looking than they had believed. In some cases, clients received, by mistake, portraits of some-one else and were completely satisfied with the result. Even when the error, as Nadar noted, was discovered to make a switch, the client refused to believe him. Stories of photographs capturing ghosts and haunts of the dead are legion from this early period as customers and the public were easily fooled and persuaded. Is there a difference today by way of social Internet platforms?

Mirrors and photographs, as they increased in ubiquity, reaffirmed what Jacques Lacan (1995) was to develop as a split-self: a physical and a symbolic social self, opening up an irresolvable gap between an ideal ego (how you your-self think you are) and an Ego Ideal (how others see you). The symbolic self, as the Ego Ideal became more and more publicly exposed within urban settings in the 19th century. Now, a distinction between visibility and visuality can be made, the former interweaves the sensory and the representational (symbolic) registers together; what can be see and what can be said is laid out (Brighenti, 2010). It is no accident that Lacan developed his well-known 'mirror stage' as the tensions concerning the exteriorization of visuality grew. Early photogra-phy dwelled on the physical self, to preserve likeness as a 'mirror of memory' or 'mirror of nature' for prosperity and commemoration. The photograph did not 'lie,' like the evil queen's mirror in the fable of *Snow White*. It told the 'truth' until the gaze of the Other came more and more into play. The shift toward the socio-power of the Ego Ideal was inevitable as was the shift toward *artifice*; at first portraiture simply meant conforming to social types through stereotyped poses and caricature that characterized one's social position (baker, labourer, businessman, barber, 'lady') along with the suitable props. But the gap between ideal ego and ego Ideal began to show. The face was, as yet, only a small part of the overall decorum. The idea was to conform. But this began to change as the

face became more and more prominent. A great portrait captured the 'soul' of the sitter, which meant photographing them in their best 'light,' wearing right clothes, setting and so on, by retouching and the doctoring of the image to correct blemishes. The next step led to dancers and actresses demanding their portraits live up to their stage mystique; to pose and gesture into the camera led directly to the cosmetics of advertising and the cinematography of the moving picture where the big screen magnified its 'stars.' This marks an important understanding of the image in Bergsonian (2004) terms at this historical point of the early 20th century. The 'movement-image' is not the usual static visual representation of an object, but a virtual summation of the possible states of an object; its dynamic unfolding of its material presence. Deleuze names this 'invisibility' of the visible, a virtual expanse that is a 'mist' of images surrounding each actual object. Deleuze's (1988) Bergsonian appropriation of the virtual invisible is paradoxically the visible without a theme, as yet to be actualized. Andrea Brighenti (2017) has extended this developmental line of theorizing 'the visible' as the non-codified laws of immanence that Deleuze and Guattari called *anorganic life* by drawing on the mathematician René Thom which then enables them to theorize relational intensities between things.

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Bergson's insight that the *image is movement* was taken up by Deleuze (1986, 1989) in his cinema books, and by Patricia Pister's (2012) attempt to extend his insights and map out what she called the 'neural image' that relies on its digitalization. Thomas Nail (2019) has made an attempt to further extend these insights in the way the image has always been *fundamentally kinetic*, the electromagnetic field being foundational to digitalization. In his scheme of things digital images are characterized by three features: hybridity (granularity), feedback (interaction) and *pedesis*, the last characteristic refers to the indeterminacy at the quantum levels. In Nail's schema, the digital image has two sides: the hybrid image and the generative image. The hybrid images is defined by a high degree of ordered differentiation, binarization, operationalism and ordered electromagnetic flow. Here functionality is primary with the app being the paradigmatic example. Generative images introduce higher levels of pedesis and feedback (interaction), making them less predictable and more creative. Perhaps a creative example of such manipulation are the experimental videos of Bill Viola, the affects of which are brilliantly theorized by Maurizio Lazzarato in 1997 (2019) who provides theoretical insight in the way the electromagnetic field can be electronically manipulated to break with the standardized norms used by digital-designer capitalism. This direction has

also been attempted by both Lev Manovich (2001) and Mark Hansen (2004). Another example of generative images that are less ordered are to be found in the *Transformer* film series, directed by Michael Bay where the electromagnetic flow is allowed more free play to the point of almost chaos as with the moments of 'turbulence' that happens when the machines transform. This is pedetic matter in its 'becoming.' Entering complete chaos, what I call below *immaterial*, where the image exploration is that of quantum-field patterns unfolding and infolding in the electromagnetic field. It is the material level's self-affectiveness and sensuousness (*aisthesis*), as pure abstract matter as '*imag*ined' by pure mathematical idealism. This is the realm of the radical Real; that is to say, the primacy of motion in flux and feedback (interaction) in all of sensible nature, where electrons 'appear and disappear.' What has been called the 'new aesthetic' of the post-digital condition refers to the open and free play with this electromagnetic field (Contreras-Koterbay and Mirocha, 2016).

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This is the 'long road' to individualization of power by disciplinary societies as Michel Foucault showed. Individualization as the ascendency of power, proliferates with the painted portraits of kings and nobility but then individualization 'descends' to be 'democratized' through ubiquitous photography. Power is exercised by surveillance rather than ceremony, ending with the elevation of 'faces' of stars and celebrities as the paradox to mediate the anonymous masses against those who are the 'chosen' or might be chosen. The 'humanized' face became a 'universal face' as a power apparatus, layered over with the face of Christ in Christian countries who appeared both as an individual (secular) and universal (sacred). The body then becomes overcoded by the face (Deleuze & Guattari, 1987).

Lacan's psychoanalysis understood this cinematization of the wor(l)d picture post WW2 in the 1950s as shaped by the split between the gaze and the eye; how the eye 'coveted' the power of the gaze to accrue power and control via the means of representational media. It brought home desire as *lack*, that is, desire as the circulation that took place in the unconscious Real (beyond word and image), the gap between the ego ideal and Ideal Ego where the processes of want and need were shaped through the staging of fantasy. The image as well as perception, in the Lacanian paradigm, was always *framed* by a non-visual and unsayable Real, which constituted its 'truth.' *Objet a*, in his lexicon, was never an object per se, but what an object 'promised' that would make a subject complete and satiated with him or herself. A crude example would be to possess and carry a gun that the Second Amendment of the US constitution

allows. It is what the gun 'promises' (liberty, protection, manliness) and not the gun itself that constitutes the 'real' of this object. Lacan (1995) illustrates this with the Greek parable of the art contest between Zeuxis and Parrhasius. Zeuxis painted grapes that were so 'real' and lifelike that birds came and pecked at them. Parrhasius on the other hand painted a picture of a curtain. When Zeuxis came over to see what Parrhasius had painted, he tried to pull away the curtain and realized that he had been fooled. Lacan's point is that it was not the quality of the curtain (*linteum*, meaning veil in Latin), birds merely require the crude stimulus to be attracted, but Zeuxis' gaze had been seduced by the fantasy of what lay beyond the present; in brief, the desire for what is absent, when, in fact there is 'nothing' behind the veil except another veil (in this case, the canvas). Lacan's retort is another questioning of the expressivity of art (of the image) that still dominates in that an image always has or expresses a meaning, whether it is the artist's idea, a 'world' (Heidegger), an unconscious or conscious intent, or what a spectator interprets it. It becomes an assemblage of signs that then has to be decrypted to get at what is 'behind' it. Here, however, within the context of this contest, it is what the painting of the veil can do; its production of unconscious desire. It is all about its power, capacity or affect in its encounter with Zeuxis, what Deleuze (1989) was to call the 'powers of the false.' But, this is only part of the story. The symbolic order (language) and vision (the Imaginary) come together in complicated ways; the tensions between text and vision (explored by René Magritte's painting oeuvre), François Lyotard's (2011) 'discourse, figure,' and figure, figuration, and Deleuze and Gauttari's (1987, pp. 141–142) *diagram*, which 'never functions to represent' but 'constructs a real yet to come,' began to undermine occularcentrism. But more to the point, the image was understood to work like a *machine*; it produced *something*. Parrhasius' painting of a *veil* placed in a different context would produce different affects. The machinic assemblage would necessarily change as other machines are affected by coupling with it (other spectators, another culture perhaps, or another historical time such as its use as an illustration in this essay about images).

Lacanian psychoanalysis forwarded by Christian Metz (1982) and others spurred a great deal of visual pedagogy in relation to the cinema in the mid-90s, including my own efforts (jagodzinski, 2004). We can say that the advent of visual cultural studies began in the late 90s with the establishment of the *Journal of Visual Studies* in 2002. To follow Martin Jay (1993), this was a question of 'down cast eyes,' the 'degeneration of vision' as ocular centric representational thinking in all fields began to wane and be questioned, replaced by a 'linguistic turn' of Derridean deconstruction, and Foucauldian assemblage of the panoptic apparatus with its surveillance capacity. Deleuze (1992) famously

referred to this development as 'control societies' based on the first and second order cybernetics. This development has now moved on to 'clairvoyance societies' (Neyrat, 2018), societies where pedagogues, teachers, educators, designers, artists now face issues not only of 'remediation' but 'premediation' as Richard Grusin (Bolter & Grusin, 1999; Grusin, 2010) argues. A dystopic variation of Philp K. Dick's *Minority Report* has been achieved. *Algorithmic governmentality* (Rouvroy & Berns, 2013) does not merely normalize individual behavior but rather predicts patterns of a given group or population. Machinic learning processes, especially computer vision that use statistical calculation to extract patterns from datasets, have built in algorithmic discrimination based on inferential potential and experimentation by the machines themselves. Access to what lies 'outside' the realm of mediated reality, as hyperbolized by the brilliance of Jean Baudrillard's (1994) writings are of key concern.

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The writings of Paul Virilio (1994) and Bernard Stiegler (2010) have addressed the power and control of the screen-based media platforms on youth. All this is made possible through 'objected-orientated programing': what is known as digital media was prefigured by three primary manifestations: computer games, graphics and simulations (Alt, 2011). Image transmission is made possible through three modes of energy – potential (latent, static), kinetic (actual, movement) and cinematic [kinematic] (fluid, perception from the effects of movement, varying speeds on ocular, optical or optoelectronic perception) (Virilio, 1998). Kinematic game platforms are made for the 'digivolution' of children of the dromospheric generation. They require a speed of play where digital dexterity, cognition and abstraction of a narrative takes root, although narratives are not always required. Play is the platform activated most often through a handheld device that enables the flow and transference of energy through to the body. It is through play that a territory is created, which then can be inhabited. This experience is an already programmed quantified algorithm; a game platform maps out potential and possible movements, actions and pathways by console users as the game's ecology caters to a broad range of modalities.

The dromospheric generation of the 21st century is easily captured by the seductions of the videogame image forcing visual pedagogy to recognize its dangers. Is the machinic turn toward the manipulation of sensibility eating our young? Stiegler (2017) has called it the 'proletarianization of sensibility,' the loss of the ability of doing and making (*savoir-faire*) and living (*savoir-vivre*) replaced by consumerism. There are many studies of media use in school,

but the one I describe here is especially apt in presenting how the 'outside' is closed to the dromospheric generation through the ubiquity of images that can 'steal' desire. Antti Paakkari and Paulina Rautio's (2019) study takes place in an upper secondary school in Finland. Utilizing Deleuzoguattarian conceptualizations from *Anti-Oedipus*, they mapped out the various de- and re-territorializations that took place through student's mobile phone use as informed by the flows of capitalism in the assemblage within the classroom (as well as networked outside). The focus in this study, which is part of a larger research initiative, was to focus on one girl-student's photoblog stream, named Maria, on Tumblr during and outside a class lesson on puberty. A mirror screen app made this possible with ethical considerations in place. All students were over the age of 15. The researchers show how the confined space of the disciplinary classroom is deterritorialized via affective shared space on Tumblr that enable escapes of desire into other spaces (scenes of sparsely populated beaches and places of solitude) to take place while the health lesson is being taught. Compared to Facebook, Instagram or Snapchat, Tumblr is more suited to counterpublics as it is more private and closeted. Tumblr profit model is advertising and popularity as a company on the financial market. The discourse on puberty by the teacher is confined to procreation and the biological body, which becomes simultaneously overcoded by Maria's Tumblr stream of sexualized bodily images of desire and pleasure. This stream of images Maria summons through her mobile phone participates in a movement to deterritorialize the classroom, extending her affective space by reaching out into the desires of consuming bodies, tourist travel, and simultaneously being part of the unpaid digital labor that translates into Tumblr's shareholder value. There is no 'escape' from the affective economy of digital capital. Agency and consumption coincide. This is glaringly the case for the Instagram platform where the profiles of *influencers* differentiate class tastes. The selling of desire as pure simulacra gives the appearance of having control and money, part of privileged life that their followers strive for. Although there is only 'contaminated space,' it is not the whole 'sorry' for young people who find solace in their own communities that head 'south' in their performativity of resistance. Yet, as Deleuze and Guattari (1987) remind us, there is no safe 'smooth' space.

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The above short excursion in the past 19th and 20th century is meant to vivify the importance of technologies in visual pedagogy. Cinema brought into relief the 'kino eye' as nonhuman and machinic, exemplifying what Michel Serres (2001) called the exo-Darwinism of technological advances that modify both

the physiology and the human psyche as neuro-micro changes take place from one generation to the next. For those who have only experienced the digitalization of the image, it is easy to know nothing else, much like I can only dimly recall using library catalogue index-card files for my own research. Serres, then in his 80s, tried to bridge the gap between him and his networked grandchildren by writing a 'love letter,' *Petite Poucette* (Thumbelina, a play on Tom Thumb) about the culture and technology of Millennials. The pun is on the agility of the digi-kids in their ability to text with the touch screens on their mobility devices. Cinematic vision has morphed into the digitalized image in this 21st century where surface has replaced any sense of depth, the individual has been replaced by the population as a mechanism of security, while the mass/individual dyad has become 'dividuals' and 'data banks.' The dividual is simply contiguous with the machines that 'counts' its various affordances that then forms its 'electronic body,' which is then fed back into the existing data bank. A signifying regime of signs (the personal privatized body) and an asignifying regime of signs (the electronic body as a cog in the statistical machine) make up a cybernetic system that maintains the metastability of a capitalist global system, the symptoms of which form the Anthropocene era.

Machine enslavement and social subjectification, as Deleuze and Guattari (1987) develop this in terms of faciality is well at work in our school classrooms, which make it difficult for any forms of interventions by visual pedagogies that can break the circuit of constantly fed screen and escapes for students. It's not like there is not enough media studies research by feminists, racial sensitive researchers, and queer researchers as to what's going on. There is an inexhaustible number of visual and media studies which provides insights as to how individuation and subjectivation takes place in schools and publics. Yet, the paradox *of mass individualization* persists via the 'personalization' of designer capitalism through various machinic assemblages, which enable the affective flows of control to target individuals who identify with a specific group profile, movement, or causes that successfully manipulate desired responses by state and corporate interests. Social media platforms are the safe harbour for numerous right-wing groups who virtually recruit, gather and plot their actions. All this is well-known. The citizen is left with a choice that is no choice: Either, for instance, vote and buy into the prevailing system and at least have a pretense of agency, or simply refuse by becoming cynical thereby forfeiting any semblance of agency, or worse: becoming a drug addict, criminal, terrorist of one kind or another by opting out of the given social order. With algorithmic face recognition technologies that are linked to data bases as well as body-worn cameras (BWC's), the 'face' is treated as the sign of a privatized body and as the new 'fingerprint.' The potentiality of being a terrorist, criminal or simply a

consumer is registered at the supra-individual level and then *profiled*, assuring the premediation of a clairvoyant society mentioned earlier.

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Let us go back to Oppenheim and the close-up of his intensive face watching the bomb go off, him witnessing what could be the end of the world as we know it. In *Cinema 2*, Deleuze discusses this intensive face (as opposed to a reflective one which is simply a sign of individuality captured by face-recognition AI). This intensive face is not linked to an individual. Although we are watching Oppenheim, he could have been each and anyone of us in this bunker. The intensive or affective face highlights the transitionary nature of human nature through the intensity of its expressions. It refers to the asignifying domain that challenges the connection that is fixed between a face and its identity. It is no longer Oppenheim's face, an expression of his inner feelings or emotions, as if acting in a drama play, but the force of the 'thing' – its force that rushes towards him: horror, beauty, sublime are all mixed together. His face, no longer human but now a head attached to a body, it is no longer the image of a signifying face, but a 'probe-head.' A probe-head, write Deleuze and Guattari (1987), is a non-signifying and non-subjective corporeal force where, in this case, the entire destruction of the future is 'seen.' It belongs to the 'animal' and not the 'human.' The scene captures the 'Outside' by pointing to a Real that is not possible to 'frame' – like Chris Jordon's sublime numbers in relation to waste, like Lise Autogena and Joshua's disappearance of the 'stars' in their planetary installation, like the 'disappearance' (THE 'extinction') of Néle Azevedo's ice-figurines, and like, in our first example: Edward Burtynsky's landscapes of destruction and destitution that evoke, after Guattari (2013), 'schizoanalytic cartographies' that produce "alternative assemblages of subjective production" (p. 38) where the imagination is dumbfounded, asking ourselves the similar ethical and political questions that confronted Oppenheim.

Visual pedagogies that pursue an ethico-aesthetic-political paradigm (after Guattari) seem imperative in a post-digital world where the emergence of probe-heads as material asignifying bodies are necessary to decenter subjectivity as we know it under the current order, and inhuman technological artifacts to break machinic enslavement (Lazzarato, 2014). Deleuze and Guattari (1987) speak of 'war machines' which counteract by discharging intense affects 'projectiles just like weapons,' an (im)materiality that penetrates the body. It is *immaterial* because it is neither material nor ideal, but like at the quantum levels the electrons appear and disappear, they become visible and invisible, which is incomprehensible to grasp. *Affect is immaterial* harbouring the

potential virtuality of change, as explored by Andrea Brighenti mentioned above. It moves back and forth, bridging the virtual-actual, or digital-analogical, inorganic-organic, artifice-nature. We now move into quantum levels of indeterminacy, non-visuality and a radical Real. Hence an *immaterial physicality*, a *post-materiality* not necessarily a 'new materialism.' Is this then an aesthetics of violence? Simply of shock? Is that what pedagogy is about? Shock, as we know, is a capitalist play, where disaster is commodified and reaped for its monetary prize. The Anthropocene presents a 'wealth' of disaster, which is why Trump made sure that the Environmental Protection Agency was turned into its opposite: a 'meat cleaver' assault on US wilderness with national parks, oceans, remote lands open for sale and exploitation (Holden et al., 2020).

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This brings me to the last worry: that of *invisible visual culture* of the post-digital age, where the machine image has once more profoundly changed perception. The naiveté of the misperception that the ubiquity of images on digital platforms are made by humans for other humans persists. The interfaces designed for digital image-sharing 'remediate' (through *hypermediacy* – the sampling, borrowing, and copying older media), or through *transparent immediacy* where emerging technologies simply eradicate completely former media traces to establish the new. Computer imagery parrots earlier 'analogue' forms, creating 'albums' for the selfies, travel pictures, pets, and family snaps. Analog and digital entangle one another: a paradigmatic example is the hypermediacy of steampunk. This is a transdigital art style whose affects disturb machinic enslavement. Steampunk bends, hacks and reimagines the technological imagination based on 19th century mechanical engineering, its past as well as its future, so that time becomes anachronistic. A steampunk film like *Mortal Engines* (d. Christian Rivers, 2018) *transes* the present digital technologies in its affects, vivifying and intensifying their materiality via the analog.

The analog-digital entanglement provides a human-inhuman layered couplet: the analog embodies the 'human' (the recognizable image, the feeling of thought, what is signifiable), whereas the digital is the inhuman machinic part, that which asignifies, a potentiality that is the actualized.' In terms of Deleuze and Guattari's 'facial machine,' as developed in a *Thousand Plateaus*, the black hole is what signifies the actual, whereas the white wall, the background, is its asignifying function. The white wall in effect is machinic and 'technological.' Its invisibility is what is virtual – the meta-data banks of information gathered up by algorithms globally from the myriad of media platforms of Web 2.0 and the dark web alike. Analogue belongs to the actual, whereas the digital belongs

to the virtual. The exchange that takes place between them is an *immaterial affect*. Facebook's DeepFace algorithm is 97 percent accurate in identifying individuals as it mines 2 billion photographs that are uploaded *daily* onto its platform. The data base as a 'training set' for the machine-learning algorithm is in the trillions using 'deep learning' networks (Convolutional Neural Networks (CNN)) to actualize the data when these software 'neurons' are activated. There are others like its DeepMask and Google's TensorFlow that identify other asignifying information: economic status, relationships, emotions, and gestures. This list can be as long as the categories imagined and programed.

Autonomous machinic vision has changed visual pedagogy in ways that are yet to be understood. They require interventions and installations that can make visible this invisible dimension of control. Erik Kessels' *Photography in Abundance* (24 hrs in Photos) (2011) installation exhibition does a very strange thing: it quantifies flow, stills time, and seems to evacuate the very desire, perhaps drive in the Lacan-Stieglerian sense is more adequate; that is to say, the circuits of satisfaction as forces of intensity that sustain enjoyment (*jouissance*) of these networked images are ruined. The repetitive circuits that sustain the social bubbles are cut, evacuated, rendered in a form that seems to be a wasteland marked by heaps of trash. Kessels, an artist, designer and curator, downloaded a million photos that were uploaded and publicly accessible to Flickr over a 24 hr period. The images were saved on a hard drive via an algorithmic program; then they were printed on paper and spread on the floor of the exhibition space (Amsterdam's Fotografiemuseum – FOAM, 10th anniversary show entitled, *What's Next?*). The million digital images were then transformed into physical prints, heaped up in piles, the resulting scale was shocking in its comprehensibility, not unlike Chris Jordan's photos, but here there is only formlessness. The equality of the image-mass of photos speaks to the 'commonism of images' managed by platform capitalism for profit ends that parasites on the dreams and desire of those who posted their image-texts, and took their selfies. It is the organizational structure of these images, witnessing the affectivity of lived 'life' that has now but vanished; as if the spirit that drives that structure has left, no longer traceable, leaving only waste behind. The lack of entropic order of these images, the piles upon piles, deconstructs the exhibition space: there is no selection of works, only a presentation of everything; no origins and no framed prints only cheap inkjet prints and colored copies; no barriers keeping spectators away. Rather, gallery visitors were encouraged to walk over the heaps and take images away, seemingly an empty gesture. Here the Anthropocene is evoked in yet another way: not only the image-trash that is accumulated daily, generally stored and never looked at 'much' again, but the hard realization of the machinic labour involved, not only by the machines

that produced these images, but also the machines that printed them, an expenditure of time and energy that is also incalculable, adding to the carbon footprint.

Visual pedagogies and experimental network art must develop software whose affects are able to resist platform capitalism's parasitical grip on surveillance and its ability of power and control through such information manipulation as comprehensively mapped out by Benjamin Bratton's (2015) 'the stack,' and Shoshana Zuboff's (2015) comprehensive analysis of 'surveillance capitalism.' It is no longer 'visibility' that is at stake, rather it is invisibility; that is *imperceptibility* that is at issue, a postrepresentational logic of resistance. The imperceptible addresses a singularity that is not perceived by coding mechanisms, rather, it works with a code's surplus and its potentiality for new connections, actualizing a probe-head as outlined above. To worry the metastability of a social platform requires that the primary focus be on the dynamic *individuation* of entities, to use the vocabulary of Gilbert Simondon (2017) that are understood through their milieu of relations; their performativity must be affected, this being a schizoanalytic move in the Deleuzeguattarian lexicon. By 'becoming imperceptible,' embracing a politics of camouflage as Ayelet Zohar (2014) theorizes it, software art can expose the capitalist culture of the striated commercial software when it opens up a smooth space within it. There are some remarkable attempts at this: Alessandro and Paolo Ciro's *Google Will Eat Itself* (GWEI) (ongoing since 2005), is parasitic to Google's business model of advertising which is inverted. Paolo Ciro sabotage and 'illegal' action projects were again in play with *Face to Facebook* (2011) where one million facial images were scraped off Facebook and then a quarter million of them profiled and sorted by their social temperament were made into a custom-made dating site. His *Loopehole for All* (2013) was an elaborate hack to expose offshore financial secrecy. On a lighter note, and more of a prank than a hack where no imperceptibility is involved, was Simon Weckert's hack of Google Maps App that survey's traffic data and registers were traffic jams are taking place. It does so from local tracking devices even when the app on them is not turned on, generally on mobile phones. Weckert simply used 99 smartphones placed on a pull wagon to walk up and down a quiet street that 'fooled' Google's data mining algorithm onto turning the street from green to red as if a traffic jam had taken place. James Bridle's 'new aesthetic' presented an online research project in 2011 and 2012 (ongoing),[2] which provides an assortment of images and posts that pushback on the post-digital.

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What one does, as an artist, educator, designer do will continue to be the challenge. Now that images look at us and not us at them, visual pedagogies face a dilemma: to see a parallel universe of machinic happenings that are nonvisible; a realization of immateriality as physicality, an in-between existence of the both-and where quanta are at work. The essays in this book explores some of these struggles. Now I come back to the shadow of the Anthropocene which is fundamentally driven by digital capitalism. Anthropogenic labour is fundamentally machinic digitialized labour that the 'new post-digital aesthetic' documents: the shift from earlier machine labor as an amplifier and extender of human action, as a role to augment human labor, to the point where it now does not augment but supplants human labour. The human intermediary that historically lay between the work of the designer-engineer and the fabrication of the plans, has been made redundant and removed. Human agency becomes insignificant in these modes of production. Digital governance is the new mode of governance via Big Data (UN's Global Pulse, the World Bank's Open Data for Resilience Initiative (OpenDRI), Data-Pop Alliance, Rockefeller Foundation on community resilience). As David Chandler (2019) has so clearly outlined, digital governance in the Anthropocene is by 'correlational machines.' It is a fundamental shift from governance that was based on 'problem-solving' and the analysis of 'root causes' to the governance of effects. The ontology of causality is replaced by the surface appearances of change. Relational processes are but appearances that are always changing – surface phenomena. Correlational machines, the AI that run on big data present the next phase of control societies – that of clairvoyance, no longer concerned with depth causation but with predicting causation or preventing it from happening or solving the problem afterwards. In short, the Anthropocene opens up the illusion that the planet can be correlationally managed via these technologies. For visual pedagogy, the shift to grasping this changed situation can only be speculative as pedagogy as it presently stands remains an ideological state apparatus.

I leave on an anecdote. It has been a tradition with my Partnerin and I to listen and watch (on television) the Vienna Philharmonic Concert on New Year's day as we both live in Austria and Canada for half the year. In the Year of Covid 2020, the orchestra played to an empty hall, all of its musicians had been tested and cleared to be safe. The show must go on! As many know, this ritual revives classical music and plays on the glorious times of the Austro-Hungarian empire with its regality, castles, and equally regal buildings. Ballerina dancers always prance about in vignettes to the orchestral score. Johann Strauss II *Blue Danube Waltz* is iconic, and we both well-up as it brings memories back to the both of us. In about the third or fourth score on the repertoire, images of 19th

century automated machines playing the philharmonic's score (heard diegetically) were fed endlessly by a long continuous strip of sheet music complexly notated with perforations to make the gears work and the notes flawlessly play. The 'live' orchestra is juxtaposed by images of automated machines playing their music. This oddity was enforced by an empty hall as it is a televised audience of 50 million around the globe tuned into the broadcast.

As has been well documented in 19th Germany by Katherine Hirt (2010), the tensions between the emotional expressivity and performativity of music through the 'mechanization' of the body needed by years of practice on an instrument, which a mechanized music machine could tirelessly reproduce, were fiercely debated. While not steampunk, the digital-analogue entanglement revealed itself, much like the opening sequence in the televised series *Westworld*, with multiple camera angles enhancing 'human' vision to enhance the feel of the music. To top it off, we watched and heard the concert on YouTube, posted only after it was over. Was there anything missing? Yes, perhaps the feeling of sitting in that majestic *Musikverein* with a privileged crowd, gloating that we had scored place tickets, And, perhaps the smell of the fresh flowers that were arranged above and around the orchestra itself. I am left wondering at this assemblage? My brother-in-law, Bernhard Lang, is a Viennese composer of computer music of some note in the European context. Schooled in classical music in Austria, he knows full well its hierarchical structures, which are reproduced by the structure of the orchestra itself starting with the power and reputation of the conductor. He has written many scores against such spectacles, yet, this spectacle remains as a cultural 'hangover.' Fifty million of us were plugged-in, the concert was sold as the best way to push back 'Covid blues.' It is a personal reminder for me that it is much too easy to suggest counter-actualizations that make a difference in changing the planetary consciousness to rethink our species survival when each of us needs…

Notes

1   https://www.youtube.com/watch?v=emVaK5M0PBg
2   https://new-aesthetic.tumblr.com/

References

Alt, C. (2011). Objects of our affection: How object orientation made computers a medium. In E. Huhtamo & J. Parikka (Eds.), *Media archaeology: Approaches, applications, implications* (pp. 278–301). University of California Press.

Baudrillard, J. (1994). *Simulacra and simulation* (S. F. Glaser, Trans.). University of Michigan Press.

Bergson, H. (2004). *Matter and memory* (N. M. Paul & W. Scott Palmer, Trans.). Dover Publications.

Bolter, D., & Grusin, R. (1999). *Redmediation: Understanding new media*. MIT Press.

Bratton, B. (2015). *The stack: On software and sovereignty*. The MIT Press.

Brighenti, A. M. (2010). *Visibility in social theory and social research*. Palgrave Macmillan.

Brighenti, A. M. (2017). The visible: Element of the social. *Frontiers in Sociology, 17*(2), 1–11.

Burtynsky, E. (2003). *Manufacturing landscapes: The photographs of Edward Burtynsky*. National Gallery of Canada, Yale University Press.

Chandler, D. (2019). Digital governance in the anthropocene: The rise of the correlational machine. In D. Chandler & C. Fuchs (Eds.), *Digital objects, digital subjects: Interdisciplinary perspectives on capitalism, labour and politics in the age of big data* (pp. 23–42). University of Westminster Press.

Contreras-Koterbay, S., & Mirocha, L. (2016). *The new aesthetic and art: Constellations of the postdigital*. Institute of Network Cultures.

Deleuze, G. (1986). *Cinema 1: The movement-image* (H. Tomlinson & B. Habberjam, Trans.). University of Minnesota Press.

Deleuze, G. (1988). *Bergsonism* (H. Tomlinson & B. Habberjam, Trans.). Zone Books.

Deleuze, G. (1989). *Cinema 2: The time-image* (H. Tomlinson & R. Galeta, Trans.). University of Minnesota Press.

Deleuze, G. (1990). *The logic of sense* (M. Lester & C. Stivale, Trans.; C. V. Boundas, Ed.). Columbia University Press.

Deleuze, G. (1992, Winter). Postscript on the societies of control Gilles Deleuze. *October, 59,* 3–7.

Deleuze, G., & Guattari, F. (1987). *A thousand plateaus: Capitalism and schizoanalysis* (B. Massumi, Trans.). University of Minnesota Press.

Grusin, R. (2010). *Premediation: Affect and mediality after 9/11*. Palgrave.

Guattari, F. (2013). *Schizoanalytic cartographies* (A. Goffey, Trans.). Bloomsbury.

Hansen, M. B. N. (2004). *New philosophy for new media*. MIT Press.

Hirt, K. (2010). *When machines play Chopin: Musical spirit and automation in nineteenth-century German literature*. Walter de Gruyter.

Holden, E., Tobias, J., & Chang, A. (2020, October 26). Revealed: The full extent of Trump's 'Meant Cleaver' assault on US Wilderness. *The Guardian*. https://www.theguardian.com/environment/ng-interactive/2020/oct/26/revealed-trump-public-lands-oil-drilling

jagodzinski, j. (2004). *Youth fantasies: The perverse landscape of the media.* Palgrave Press.

jagodzinski, j. (2019). An avant-garde "without authority": The posthuman cosmic arti-san in the anthropocene. In P. de Assis & P. Giudici (Eds.), *Aberrant nuptials: Deleuze and Artistic research 2* (pp. 233–254). Leuven University Press.

Jay, M. (1993). *Downcast eyes: The denigration of vision in twentieth-century French thought.* University of California Press.

Jordan, C. (2006–current). *Running the numbers: An American self-portrait.* http://www.chrisjordan.com/gallery/rtn/#silent-spring

Lacan, J. (1995). *Seminar XI: Lacan's four fundamental concepts of psychoanalysis* (R. Feldstein, B. Fink, & M. Jaanus, Eds.). State University of New York Press.

Laruelle, F. (2015). *Principles of non-philosophy* (N. Rubczak & A. Paul Smith). Edinburgh University Press.

Latour, B. (2004). How to talk about the body? The normative dimension of science studies. *Body and Society, 10*(2–3), 205–229.

Lazzarato, M. (2014). *Signs and machines: Capitalism and the production of subjectivity* (J. D. Jordan, Trans.). Semiotext(e).

Lazzarato, M. (2019). *Videophilosophy: The perception of time in post-Fordism* (J. Hetrick, Trans.). Columbia University Press.

Lyotard, J.-F. (2011). *Discourse, figure* (A. Hudek & M. Lydon, Trans.; Introduction by J. Mowitt). University of Minnesota Press.

Manovich, L. (2001). *The language of new media.* MIT Press.

Metz, C. (1982). *Psychoanalysis and cinema: The imaginary signifier* (C. Britton, Trans.). Macmillan.

Nail, T. (2019). *Theory of the image.* Oxford University Press.

Neyrat, F. (2018). Occupying the future: Time and politics in the era of clairvoyance societies. In K. Stakemeier & S. Witzgall (Eds.), *The present of the future* (pp. 77–113). Punctum Books.

Paakkari, A., & Rautio, P. (2019). 'What is puberty, then?' Smartphones and tumblr images as de/re-territorializations in an upper secondary school classroom. *Discourse: Studies in the Cultural Politics of Education, 40*(6), 873–888.

Pisters, P. (2012). *The neuro-image: A Deleuzian film-philosophy of digital screen culture.* Stanford University Press.

Rouvroy, A., & Berns, T. (2013). Algorithmic governmentality and prospects of emancipation: Disparateness as a precondition for individuation through relationships? (E. Libbrecht, Trans.). *Réseaux, 177*(1), 163–196.

Serres, M. (2001). *Hominescence.* Éditions Le Pommier.

Simondon, G. (2017). *On the mode of existence of technical objects* (C. Malaspina & J. Rogove, Trans.). Univocal Publishing.

Stiegler, B. (2010). *Taking care of youth and the generations* (S. Barker, Trans.). Stanford University Press.

Stiegler, B. (2017). The proletarianization of sensibility (A. De Boever, Trans.). *boundary 2, 44*(1), 5–18.

Stiegler, B. (2018). *The neganthropocene* (D. Ross, Trans.). The Open Humanities Press.

Virilio, P. (1994). *The vision machine*. Indiana University Press.

Virilio, P. (1998). Architecture in the age of its virtual disappearance. In J. Beckmann (Eds.), *The virtual dimension: Architecture, representation, and crash culture* (pp. 178–187). Princeton Architectural Press.

Zohar, A. (2014). Strategies of camouflage: Depersonalization, schizoanalyis and contemporary photography. In I. Buchanan & L. Collins (Eds.), *Deleuze and the schizo-analysis of visual art* (pp. 173–201). Bloomsbury Academic.

Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. Profile Books.

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Figures and Tables

Figures

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is Full Professor of Media Studies at the University of Alcalá, Spain. Her studies analyze how young people use digital media, for example, video games or social networks. Explore the conditions that allow active and responsible participation in society, mediated by the resources provided by the internet. She approaches everyday life and citizenship education from an interdisciplinary perspective. She has been a visiting researcher, among other foreign universities, in the Comparative Media Studies (CMS) of the Massachusetts Institute of Technology (MIT) and in the Digital Ethnography Research Center (DERC) – RMIT University (Melbourne, Australia).

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Tommy Mayberry

(he/she/they) is the Executive Director of the Centre for Teaching and Learning at the University of Alberta. As an academic drag queen, Tommy teaches and researches from an embodied standpoint exploring, individually

and intersectionally, gender, pedagogy, performance, language, and reality TV (to name a few) and has presented work across Canada and internationally in Oxford, Tokyo, Washington DC, and Honolulu. Tommy was a SSHRC Doctoral Fellow during their PhD work, is a recipient of the University of Waterloo's Award for Exceptional Teaching, and is co-editor of the book *RuPedagogies of Realness: Essays on Teaching and Learning with* RuPaul's Drag Race (McFarland 2022). Tommy's partner is visual artist Tommy Bourque (together, they're "the Tommies"), and their family is complete with their 17-year-old Pekingese-Chihuahua, Sam.

Susie Miles

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Chase Mitchell

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Gilad Padva

is a film, culture, men's studies and queer theory scholar. He is the author of *Straight Skin, Gay Masks and Pretending to Be Gay on Screen* (Routledge, 2020) and *Queer Nostalgia in Cinema and Pop Culture* (2014) and co-editor of *Sensational Pleasures in Cinema, Literature and Visual Culture: The Phallic Eye* (2014); *Intimate Relationships in Cinema, Literature and Visual Culture* (2017); and *Leisure and Cultural Change in Israeli Society* (Routledge, 2020). He publishes in academic journals, edited volumes and encyclopedias. He currently

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John L. Plews

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Claudia Ricca

is a researcher, artist, educator and local activist from Buenos Aires, Argentina. She holds a BA in Anthropology from Trent University, Canada, an MA in Gender and Politics from the University of London and has worked for more than twenty years on environmental and human rights in Europe and Latin America. She develops her research and artistic practices with other feminist artists and academics from a wide range of disciplines and has presented and published several articles since 2017, including on art and memory, peasant and rural resistance in Argentina and Paraguay, and decolonial pedagogical practices.

Jennifer Roth Miller

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Alma Scolnik

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Taneli Tuovinen

earned his doctoral degree in the field of visual arts education in 2016 at Aalto University, Finland. His thesis argues how visual thinking is present in all art forms. He has studied also at UdK Berlin and at Art University Linz. At Aalto University he holds a tenure-track lectureship in interdisciplinary arts pedagogy and he works also as a lecturer of art pedagogy in teacher education in dance and theater at the University of the Arts Helsinki. His research, international networks and publications are highly involved with the pedagogical debates of the higher teacher education in the arts.

Susanne Maria Weber

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Elhem Younes

is a transdisciplinary artist and researcher who develops a reflection and an artistic work aiming at questioning the modalities of construction of meaning, perception and imagination. She focuses particularly on the indiscernible as an aesthetic quality and a perceptual modality, and on the liberation of creativity in her pedagogical practices.

Jana Zehle

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