

# ALGORITHMIC ANXIETY: ANTI-FACIAL RECOGNITION MASKS

One could say, in the spirit of Langdon Winner, ‘algorithm’ is a word whose time has come. For a long time, artistic engagement with algorithms was marginal in contemporary art. Over the past eight years, however, a growing number of artists and critical practitioners have become engaged with algorithms, resulting in algorithmic theatre, bot art and algorithmic media and performance art of various kinds, which thematize the dissemination and deployment of algorithms in everyday life. The numerous art exhibitions that have been curated over the past years in art institutions, at festivals, in galleries and at conferences—both large and small—in Europe, the Americas, Canada and in China, reflect this rising prominence of algorithmic art. These exhibitions aim at imagining, representing and narrativizing aspects of what is called algorithmic culture.

According to critics, we live in an algorithmic culture. This culture is characterized by the extent to which algorithms are part of our everyday lives. In other words, everyday aspects of life are increasingly being partly transferred to algorithms. Ted Striphas describes this developing algorithmic culture as a “shift” which first began 30 years ago, as humans increasingly started to delegate “the work of culture—the sorting, classifying and hierarchizing of people, places, objects and ideas—to computational processes” (Striphas 2015, p. 395). Algorithms are part of mechanisms that privilege quantification, proceduralization and automation in human endeavors, Tarleton Gillespie argues (2016, p. 27). And Taina Bucher (2018) contends that algorithms co-produce social life and political practices, “In ranking, classifying, sorting, predicting, and processing data, algorithms are political in that they help to make the world appear in certain ways rather than others” (Bucher, 2018, p. 3). They do so, to an extent, in ways that are invisible to the human eye—an effect of, amongst other things, proprietary laws and regulations, computational scale, speed and complexity.

Their pervasiveness, the claim that algorithms shape our socio-technical world, the alleged “merging of algorithms into the everyday,” and the notion that they are “taking decisions out of the hands of human actors” are all taken to be indicative of the ways algorithms have become a critical infrastructural element of contemporary life (Beer, 2017, p. 5). Like infrastructure, algorithms have become a key site and gatekeepers of power and power relations (e.g. Bucher 2018; Cheney-Lippold 2017; O’Neil 2016). Altogether, this has made for an intriguing art object—

invisible yet omnipresent, proprietary yet pervasive, and with assumed socio-political powers that co-produce our lives.

The claim that algorithms shape, organize and co-produce everyday life, has also given impetus to anxieties about the present and future of algorithmic culture in light of these developments. It seems “the algorithmic” and “algorithmic culture” have become shorthands for a nexus of concerns about the entanglement of the social and the algorithmic. Of course, not all algorithms are subject to criticism; some types of algorithms are criticized more often than others. A growing number of artists, designers, activists, human rights organizations and interest groups are particularly concerned about the spread and use of facial recognizing algorithms. They express their concerns about how the spread and use of recognition technology is changing the relationship between citizens, governments and corporations.

### CAPTURING THE FACE

Facial recognition technology is used in security systems, for example in CCTV and security cameras at border crossings on land and at sea, on motorways, stations and in supermarkets, shopping malls, trains, port areas and airports. Some companies run pilots for its use in HR processes. Apple Face ID is perhaps the best known example of facial recognition technology for consumers. Face ID uses a grid of infrared dots to measure the physical shape of a user's face, thus securing access to iPhones, iPads and Apple Pay. Facebook also uses facial recognition technology for its photo tagging application. A facial recognition algorithm scans an image for the presence of geometric shapes that are characteristic and indicative of the shape of a face. For this purpose, the image is divided into diagrams and these are compared with the characteristics of human faces stored in a database. These are mainly geometric shapes: the distance between the eyes, nose and mouth and dark and light patterns. Facial recognition technology is associated with restrictions on civil rights and violations of people's fundamental freedoms. Various human rights organizations and interest groups argue that its use acts as a surveillance system that disproportionately violates the rights of minority groups in society. They fear the computerization of discrimination and exclusion and that political resistance is made impossible, which is called social chilling.

Criticism comes not only from so-called tech-savvy artists. Advocacy groups and experts but also, for example, from young adults in Hong Kong protesting against China's interference in Hong Kong politics. In 2019, photos and video footage appeared in the media of protesters in Hong Kong aiming laser pointers, with bright green and blue light, at police and CCTV cameras. This is a low-tech strategy to obstruct the view of riot police and to disrupt cameras with facial recognition technology. Demonstrators did this out of fear that the use of facial recognition technology could potentially lead to their identity being exposed and their data handed over to police forces in Beijing. And in the Summer of 2020, when Black Lives Matter protests engulfed the United States, opposition to facial recognition

technology came from IBM, Amazon and Microsoft. These major tech companies took a political stand. They called for a (temporary) halt to the sale of facial recognition technology to American police departments and urged the government to regulate the use of this technology.

Having visited numerous exhibitions thematizing algorithmic culture, striking is the high volume of artistic engagements with facial recognition algorithms. It seems these types of algorithms have garnered more artistic responses than other types of algorithms. What is more, the criticism of facial recognition technology from the arts shows a striking trend. In reaction to the use of this technology by governments and companies, artists and designers are making face masks. Of course, ever since the portrait photography of Ellis Island immigrants by Dorothea Lang, Walker Evans, Arthur Rothstein and Gordon Parks, the face has undeniably become a political landscape in the arts. Today, however, artists are more focused on distorting facial recognition algorithms that aim to recognize and identify the face through high-, low- and no-tech masks that make the face unrecognizable to facial recognition algorithms. Such face masks are exhibited in international art exhibitions as symbols of artistic socio-technological critique. Some are also commercially available and are sold with the promise of undermining facial recognition algorithms. These mask projects can be seen as a form of shadow boxing between humans and facial recognition technology. The balance of power between the state and citizens is central to this art form. The algorithmic capture of the face causes anxiety partly because of the powerful capabilities with which facial recognition technology is associated.

Take for instance the facial masks that are part of *Facial Weaponization Suite*, a project by artist Zach Blas. Blas's series of mask projects are designed to visualize how identity recognition technology analyses human faces whilst also resisting identity recognition technology by offering an undetectable face masks. His *Facial Weaponisation Suite* (2012–2014) comprises a series of amorphous collective masks designed and produced during community workshops by at LGBTI+ and minority groups. They are a form of resistance against facial recognition technologies and the inequalities these technologies normalize affecting minority groups disproportionately. These masks, by virtue of their shape and cryptographic material, will not be recognized as a face by identity recognition software. Identity recognition technology, as Blas sees it, “control[s] through an optical logic of making visible” to “police and criminalize populations all over the world” (Blas 2014). Due to their shape and cryptographic material, these masks are unrecognizable to facial recognition algorithms.

The artist and technologist Sterling Crispin is concerned about the future effects recognition technology may have on humanity as a whole. He states: “I am concerned with the aggressive over-development of surveillance technology and how this is changing human identity and how human identity interacts with technology” (quoted in Doring, 2018, p. 83). His *Data-Masks* (2013–2015) are 3D

printed face masks that visualize what robust, model-based recognition and detection algorithms recognize and detect as a face—or what passes as a face. They have been produced by reverse engineering facial recognition and detection algorithms. These *Data-Masks* are meant to make visible aspects of what Crispin understands as invisible power structures. These masks, too, protect the wearer from facial recognition algorithms. According to Crispin, we live in a totalitarian police state where people are reduced to data. He claims that we are witnessing the emergence of a global technological organism in which humanity is lost. He is anxious about the possible “Frankenstein-effect” he sees facial recognition systems to be a part of.

*CV Dazzle* by Adam Harvey shows the Achilles’ heel of facial recognition technology. *CV Dazzle* uses analogue camouflage to undermine facial recognition technology. The term “dazzle” refers to a painting technique that was used on warships during World War I. The stripes and bold colors of this technique were designed to disrupt the outline of a ship. Dazzling made it difficult for an enemy ship to detect a ship’s size, range, and direction at sea. Inspired by this technique, Harvey’s *CV Dazzle* makeup design disrupts detection by facial recognition algorithms by dazzling facial features. As mentioned, facial recognition algorithms scan geometric patterns characteristic of a face—the relative distance between eyes nose and mouth and dark-and-light patterns. By adding dark patches to the face, the typical geometric patterns are interrupted and the face is not recognized as a ‘face.’ *CV Dazzle* is part of his larger project, *The Privacy Gift Shop* (2012), an e-commerce platform for counter-surveillance gadgets mainly aimed at subverting national security technology and meant to “minimize or degrade the useful information received by the observer” (Harvey, 2018, p. 130). He explains in an interview with the BBC that what motivated this work is that he feels that somebody is watching him in his day to day activities, “that you always have a chaperone,” someone who looks over your shoulder (Harvey 2014). Harvey is concerned mostly by the unknown ends to which recognition systems might be used in the near future and how this might impinge on hard-won liberties.

What do these masks provide that otherwise is lost to facial recognition systems? Harvey’s camouflage projects claim to provide “more control over your privacy” by “protecting your data” (Harvey 2013). Crispin caters to the supposed needs of protestors. His *Data-Masks* are “intended for use in acts of protest and civil disobedience” (Crispin 2014). They are themselves “an act of political protest” by means of “giving form to an otherwise invisible network of control” (Crispin 2014). Blas sees his masks as a tool in the tradition of collective protest movements like Anonymous, the Zapatistas and Pussy Riot: “[f]acelessness and becoming imperceptible are serious threats to the state and capitalism,” Blas claims in a video *Communiqué* (Blas quoted in Cox 2014). It thus appears that, to these artists, to be ‘seen’ is to be recognized, to be recognized is to be analyzed and to be analyzed is to be reduced to information. This information is, in turn, used by states and corporations as the primary tool to gain and maintain power.

### THE SELF ENTANGLED WITH ALGORITHMS

Described in the above are anxieties about the effects of algorithmic biopolitics, and the disciplinary governing of people by way of an algorithmic logic of cost-reduction, calculations, measurements, comparison, and evaluation, which is indicative of a particular understanding of the self and a specific understanding of facial recognition algorithms. It is feared that employed in a certain way, the alleged power of algorithms may nudge people into amiable, docile tools for those in whose interests recognition technology systems operate. The biopower ascribed to facial recognition systems flows from its collecting and using of information to which the captured face gives access. This mask-trend in the art world shows that supra-individual geopolitical and cultural narratives and anxieties are intertwined with the developments of the algorithmic recognition of the face. The implications of facial recognition technology are by the account of the artists understood in relation to possible “ends” of privacy, liberty, autonomy, and humanity. Facial recognition technology is given significance in relation to these supposed ends. It is these ends that give meaning to these technologies as a means in the present.

On the one hand, these masks underline a widely shared cultural understanding of ‘the face’ as singular, unique and personal, *and* as a means to an identifiable security measure. The mask symbolizes the political norm of the bare face and as a possible source of personal data extraction. On the other hand, the face mask symbolizes a form of resistance and empowerment, as a canvas—a means to play with identity, power and difference and the relations between citizens, technology and the state. For one, these playful and technically ingenious artistic interventions show that the technology underlying facial recognition algorithms is fallible and hackable. They perform a play with relations between self, environment and the algorithmic medium of capture. Seen this way, they can also be used to re-think the self as a relational synthesis. These artworks bring the relationally of the self to the fore, and function as mediation in the relations between the self, the face, data algorithmically extracted from facial image and more abstract notions and preoccupations about the future of algorithmic culture for humankind.

Anxiety, Søren Kierkegaard teaches us, is about lack and lack is about desire. As much as these projects are about thwarting facial recognition technology, they too allude to the desire of being included, valued and acknowledged—in short, a longing to be recognized and seen by others. Algorithmic anxiety about the self is about the thin line between, the desire to be noticed, to be seen, and the fear to be exposed, judged, or to fall short. To be seen, as Audrey Lorde explains in a different context, “... is always fraught with danger ... of contempt, of censure, or some judgment, or recognition, of challenge, of annihilation. But most of all, I think, we fear the visibility without which we cannot truly live” (Lorde, 1984, p. 42). Lorde emphasises the inherent vulnerability of the relational self. Rather than an autonomous, independent, powerful individual, the self in relation to algorithmic culture is experienced as relational, dependent, vulnerable, malleable—at risk.

Considering these projects in more detail, tacitly but poignantly, brings complex connections between software, self and environment to the surface. These are connections that in a way, could be productively understood to remind liberal subjects, produced under conditions of the disavowal of their entangled being, of their relationality and what they desire and lack. Through the play with masks and the dissolving of self and environment, connections are made that mobilize a critical perception of human and machine relations, opening up an artistic space which challenges dominant understandings of a self and allows for a different way of relating to algorithmic culture.

Masks always already presuppose entanglement. As Tim Ingold notes, “the mask is not a disguise intended to hide the identity of the bearer” (Ingold, 2002, p. 123). Rather, practices of masking intervene in the way the self becomes visible in relation to the self, others and to its environment in the first place. To avoid being captured by recognition algorithms, camouflage provides a way to vanish in the background to non-identity. In the triad between self, environment and medium of capture, the self merges with its environment to the effect that it cannot be captured.

Blas’s face masks represent the desire to “let exist as such that which is immeasurable, unidentifiable non-identifiable and unintelligible in things” (Blas, 2016, p. 48). This *laissez exister* is imagined as a possibility which is possible only in safe spaces that are free from intrusive technologies of informatic visibility, or what he calls “autonomous freezones”: protected and closed-off areas. The “ideal of peace and quiet” is here produced by engaging masks as a weapon in combat against an imagined and externalized influencing machine (Colomina, 1991, p. 7). However, it is by virtue of this “free zone” between humans and their technological environment that the synthesis between the two is foregrounded. The possibility of individual alterity and singularity—externalized and imagined as a form of negative liberty—appears to stand in direct relation to, even depends on and is tied to, face capturing technologies. Any sense of autonomy is here due to others, to the network of people and technologies we are a part of and their dependencies.

To avoid being captured by recognition algorithms, CV Dazzle provides a way to vanish in the background, to non-identity. In the triad between self, environment and medium of capture, the self merges with its environment to the effect that it cannot be captured. The pattern design keeps the face unrecognizable to facial recognition systems. Harvey’s CV could be considered as a form of “depersonalization by assimilation to space,” a way as to vanish in the background, to merge with one’s environment.

Kierkegaard argued that people tend to identify themselves with preconceived ideas about the self and others. The images we have of facial recognition algorithms and of our relation to them show the importance of how we think of the self in relation to broader abstractions. Crispin is anxious over a certain idea he has of humanity in relation to large abstractions conceived as not-Humanity,

or outside of humanity. If he did not have this idea—of humanity as severed from technological others—there would be other ways to relate to the dissemination of Technological Others aside from masking the self. In a different reading, his *Data-Masks* could be read as ways to ‘actualize’ the virtual. His “deities,” as Crispin calls them, represent the (pan)optical logic as a belief in ghosts. The “belief” in recognition technology and the data it spits out might very well turn out to be the ghost of the twenty-first century. His *Data-Masks* conceal by way of mirroring; his masks reflect back and “hold a mirror up to the all-seeing eye of the digital-panopticon” (Crispin 2013). Invisibility understood as unrecognizability is here achieved by way of swapping one’s real face with a model. What is reflected in the mirror Crispin holds up to identity recognition technology is not Reality, but the Model and the unbridgeable gap between the two.

### A RELATIONAL CHOREOGRAPHY OF SELVES

How we imagine the future of algorithmic culture gives us an idea of how we think of the self. In “Subject Without a Face,” Marcus Steinweg suggests: “We need to learn to do without identity. We need to muster the courage to exist with more than merely a thousand faces; by comprehending that science is not everything. Life does not close in on itself. The circle is broken” (Steinweg 2010). Instead of understanding the face as a gate-way to identity and identity as something that we “are,” “have,” “posses,” or “own,” Steinweg argues that we need to “... understand the self as a scene of continual self-exceedence ... The play with masks, the dance of faces that dissolve into and replace each other, it is the movement of life in its opening up to other subjects. The face mediated between the Other and me. An excessive variety of possibilities” (Steinweg 2010).

Steinweg proposes an alternative understanding of identity; however, it is one that lacks grounding in necessity, in the concrete realities of everyday life. The self is not an object for one’s eyes, neither an excessive or fluid variety of limitless possibilities. It is not merely contingent and inconsistent; it is also defined, described, embodied, embedded, and limited. A relational understanding of the self allows for an understanding of the self neither as a being nor as some fixed substance. A relational understanding of the self asks not what the self is, but how it comes to be and what it can do in different contexts and settings. Masks may be understood as subverting the “tyranny” of a normative understanding of the self (Pearl, 2018, p. 160). They offer a subversive play with relations between the public manifestation of the self, the viewing of the self by the self and by an assumed (algorithmic) Other—including the power relations in that space—and a relation to the possible, of other ways of being and relating. Power relations are key here. Although never absolute, the possibilities of some faces seem limitless while those of others are strictly limited.

Masks foreground individuation and our relational entanglement and alignment with others, our environment. Through these artworks, the self appears as

a dynamic relation in the synthesis between the virtual and the actual, the social and the material, possibility and necessity. Seen this way, the desire to isolate the self, for singularity and insularity, and to be sealed off from one's surroundings is co-constituted and inseparable from dependency and existential uncertainty; it is inseparable from the desire to belong and be recognized. To state it another way, algorithmic anxiety is a lack of balance between a desire for autonomy, singularity and controlled isolation, and a longing for a sense of belonging and existential certainty, or to immerse oneself in a collective. It is the experience of entanglement and the simultaneous experience of limited control over one's future position in relation to algorithmic culture that triggers anxiety and the desire for a closed-off space, a safe haven, a demarcated line between "inside" and "outside." A relational understanding brings to the fore that the self is not something one "has" or "possesses," nor the sum of its rational decisions. Subjectivity takes place in a larger whole of relations, immanent and transcendent. One does not exist in a vacuum but in entanglement with others.

Taken together, Harvey's strategy of the merging of the individual in its environment, Blas's facial weaponry which operate as a demonstration of entanglement with facial recognition technologies and Crispin's ghost-busting, all de-emphasize the individual symbolized by the face including the assumptions of origin and instead foreground individuation and our relational entanglement and alignment with others, our environment. Designed to symbolize protection against and a critique of the perceived intrusion, policing and controlling powers of recognition technology, masks and camouflage wear could be considered as offering an interventionist play with the desire for a controlled environment, a transparent space where the individual is in possession of itself and has the final authority in the situations it is in, a context where individuals are always already embedded and entangled in relations with their socio-technical environment. What masks offer are an intervention in the form of a kind of re-balancing between practices that circumscribe, pin down, enclose and encircle the self and those that move, open up, change and make fluid.

By extension, the self is not something that can be captured by facial recognition technologies, but is always already escaping it and itself.