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Algorithmic anxiety: Masks and camouflage in artistic imaginaries of facial recognition algorithms

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Abstract

This paper discusses prominent examples of what we call "algorithmic anxiety" in artworks engaging with algorithms. In particular, we consider the ways in which artists such as Zach Blas, Adam Harvey and Sterling Crispin design artworks to consider and critique the algorithmic normativities that materialize in facial recognition technologies. Many of the artworks we consider center on the face, and use either camouflage technology or forms of masking to counter the surveillance effects of recognition technologies. Analyzing their works, we argue they on the one hand reiterate and reify a modernist conception of the self when they conjure and imagination of Big Brother surveillance. Yet on the other hand, their emphasis on masks and on camouflage also moves beyond such more conventional critiques of algorithmic normativities, and invites reflection on ways of relating to technology beyond the affirmation of the liberal, privacy-obsessed self. In this way, and in particular by foregrounding the relational modalities of the mask and of camouflage, we argue academic observers of algorithmic recognition technologies can find inspiration in artistic algorithmic imaginaries.

Keywords

Identity recognition technology, algorithmic anxiety, masks, camouflage, self, Kierkegaard

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Introduction: Capturing face

This chapter discusses prominent examples of what we call "algorithmic anxiety" in artworks engaging with algorithms. In particular, we consider the ways in which artists such as Zach Blas, Adam Harvey and Sterling Crispin design artworks to consider and critique the algorithmic normativities that materialize in facial recognition technologies. Many of the artworks operating with, and on, algorithmic anxiety center on the face, and use either camouflage technology or forms of masking to counter the surveillance effects of recognition technologies. We argue here that face, mask, and camouflage figure so prominently in thematizations of algorithmic anxiety because they illuminate the ways algorithmic technologies (re)configure identity and subjectivity. We suggest that an assessment of the complex relationality of these concepts allows for a better understanding both of algorithmic anxiety and of the politics of algorithmic facial recognition technologies.

An "anti-facial recognition movement is on the rise," writes Joseph Cox for *The Kernel* (2014).

It is perhaps premature to speak of a "movement," but indeed a growing number of artists has expressed anxiety about the alleged ubiquitous implementation

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and dissemination of facial and identity recognition technologies.

When contemporary artists engage with facial recognition algorithms their works—and this should not surprise many—often center on the human face. In particular masks and camouflage wear have emerged as a response to facial recognition technology. They are exhibited in international art shows, both as art and design projects, and as a socio-technical commentary. Some masks and camouflage wear is also commercially available as gear that provides access to potentially subversive modalities of being public; it is sold with the promise that it undercuts or confuses facial recognition algorithms. In Western societies the face plays a central role in human interaction (Ingold, 2000; Napier, 1986). For this reason, communicative interaction in physical presence is often described as talking "face-to-face"—a concept extended by platforms such as Skype and FaceTime. Interaction, as Goffman has famously said, is always also about avoiding "being in wrong face" or "being out of face" and about "saving face." What he calls "maintenance of face" is thus a condition of human interaction. And hence what he terms "face work," "the actions taken by a person to make whatever he is doing consistent with face," is a key part of any interaction (Goffman, 1967: 12). Goffman thus uses "face" in a relational sense, defining it as "the positive social value a person effectively claims for himself by the line others assume he has taken during a particular contact. Face is an image of self delineated in terms of approved social attributes" (5). Because of this centrality of the face in interaction, it is at the same time an ambiguous phenomenon: it is both a screen that permits an assumed "internal" state to be seen, and a cloak that conceals, as when secrets are hidden behind a "straight face" (1974: 216).[1]

Likely because of its centrality in interaction, the face is central in political battlefields over socio-technical change, too. It should perhaps be no surprise that one of the biggest ongoing privacy battles is waged over a platform called Facebook. Or witness, for instance, the debates around the biometric passport in the EU, the media frenzy, in mainly the UK and the US in the Fall of 2017, after the publication of a study from Stanford University which found that facial recognition technology could detect sexual orientation from facial images,[2] or the concern about the use of facial image processing software that could be used to generate and disseminate the so-called portmanteau "deepfake" videos—i.e. convincing fake news. Less sophisticated facial image processing technology is used in popular apps such as Face Swap, Face Stealer, MSQRD, which allow users to take a portrait picture and swap their face with that of a friend, or any other person, or animal. Similar by-products of the (in)famous selfie culture involve apps such as Fat Booth and Meitu, which allow users to "beautify" or "cartoonify" their selfies. Apps like these made the news both for the amount of data they extract from user's phones and for being the latest form of auto-profiling. For some years now Apple and Facebook have been adding to the mainstreaming of the use of facial recognition technology. In case of the latter by way of its photo tagging features, and Apple's iPhone X has a feature that unlocks your phone after recognizing your face as a security check. Similarly, in the summer of 2018 MasterCard launched its biometric card which uses biometric and facial recognition technologies to verify the cardholder's identity. The different machinations of faciality outlined above—as a singular, unique, personal, and identifiable security-check, as the imposition of a political norm, as a plural, multiform, malleable, and amendable canvas, as a means to play with identity, and as a source of data extraction—indicate that supra-individual cultural narratives and normativities are braided around the socio-technical capture of the face.

In the arts, ever since the portrait photography of Ellis Island immigrants by Dorothea Lang, Walker Evans, Arthur Rothstein and Gordon Parks, the face undeniably has become a political landscape. In a way, the mask and camouflage projects that form the subject of this paper constitute a reversal of the classic artistic tradition of portraiture and of the latest craze in the selfie culture. It also seems to constitute a reversal, of sorts, of what Mark BN Hansen dubbed the "digital-facial-image" (DFI), with which he described a trend in contemporary new media artworks that focused on the digitally generated face. Leaning on Guattari and Deleuze in their conception of facility and the face machine, Hansen proposed his notion of DFI as "a new paradigm for the human interface with digital data" (2003: 205). The experience of the viewer's encounter with digitally generated images of a face, and specifically the affective correlate it generates in the viewer, functioned as "the very medium for the interface between the embodied human and the domain of digital information" (205). These days, however, artists are less focused on generating digitally generated faces and more on generating masks and camouflage couture using various forms of technological engineering. These works are less focused on interaction with an assumed viewer and more focused on hiding the face, covering it up, or in rendering it unrecognizable to facial recognition technology. Masks and the camouflage couture here function as a mediation in the relations between the self, the face, data algorithmically extracted from facial images, and more abstract notions and preoccupations about what

the future of algorithmic culture might entail for humankind.

The aim of this paper is to unfold the narratives that emerge from facial recognition technology, more specifically the algorithmically captured face, and manifest into face masks and camouflage couture in contemporary media art. We focus on the concerns about these relations between the self, the face and a supposed algorithmic culture, which are at the center of these artistic imaginaries. We argue that what we call ''algorithmic anxiety'' revolves around concern about the extent to which we live our lives as imagined, self-transparent subjects in relation to algorithmic technologies. Algorithmic anxiety is not a sentimental subjectivity, or a personal pathology related to one's feelings regarding algorithms. Instead, it revolves around the position of the self in algorithmic culture. It questions the normative affects of algorithmic culture on a self immersed in a regime of visibility that itself remains largely invisible. Questions concerning the conceptual understanding of the self in relation this regime of visibility are the focus of this analysis. If in 1999, Bill Gates could ask ''what is it about sitting face to face that we need to capture?'' (quoted in Peters, 2015: 274), today it is clear that there is something about the very practice of ''capturing face'' that engenders an algorithmic anxiety.

In what follows, we first introduce a number of popular pieces of mask and camouflage couture. Then, along the lines of Kierkegaard's conception of anxiety, we propose the concept of *algorithmic anxiety* as a form of despair rooted in a lack of possibility. With the concept of algorithmic anxiety in mind, we provide a reading of specific artistic critiques of facial recognition algorithms that embed these technologies within layered and interrelated historical, epistemological, ontological constellations, and technological developments. This mix of lineages, influences, histories, and orientations may serve as a guide to reimagine these masking and camouflage project not as anxious defense mechanisms against facial recognition technologies, but rather as a Kierkegaardian desire for possibility offering understandings of relationality attuned to life under algorithmic observation.

Kierkegaard is not interested in anxiety as a state of the mind, but in what the concept of anxiety reveals about the self. In anxiety one becomes self-aware, aware that one exists in relation: to our body, to our abilities and inabilities, to the cognitive skills we have and lack, to our surroundings, our family, our past and future, the nation we inhabit, its culture, and the entire history of humankind ([1844] 2014: 68). The self is a synthesis, Kierkegaard writes, and this synthesis is a relation ([1844] 2014: 88). In *The Sickness Unto Death* ([1849] 1983), Kierkegaard explains that he self is a synthesis and composed of contrasting elements: temporality and eternity, freedom and necessity, and infinitude and finitude ([1849] 1983: 30). The task is to think these contrasting elements together, to attempt to actualize them together. Existence is the never-ending attempt to synthesize them. This attempt to synthesis is however never fully realized, and although some people are more successful than others, tension and contradiction remains. One side of the opposite may be emphasized over the other; one side may be overdeveloped, the other underdeveloped, and in turn the synthesis of opposite elements around which the self coheres falls apart, instilling anxiety. In *The Sickness Unto Death* Kierkegaard explains that a misrelation between possibility and necessity and the finite and the infinite causes despair. He distinguishes different forms of despair by reflecting upon what each form of despair lacks. He explains that when an individual leans to infinitude, the despair it feels is caused by a lack of finitude. Similarly, the despair of finitude lacks infinitude; the despair of possibility lacks necessity, and the despair of necessity lacks possibility ([1849] 1983: 30–42). These types of despair overlap and are dynamic.

In a misrelation, when one leans to possibility, what is missing is to submit ''to what may be called one's limitations,'' Kierkegaard writes ([1849] 1983: 36). Many things are not up to us. To begin with, we cannot freely choose our gender, ethnicity, the family we are born in, our place of birth, as well as numerous other things. A human being does not create itself—like Sartre argued.[3] Alas, life is not a supermarket, nor string of fair and causal relations. The self is, therefore, and perhaps not surprisingly, not an autonomous self. Kierkegaard writes,

> the self is a relation that relates itself to itself or is the relation's relating itself to itself in the relation; the self is not the relation but is the relation's relating itself to itself to and in relating itself to itself. . . . The human self is such derived, established relation, a relation that relates itself to itself and in relating to itself it relates to another. (1980: 13, 14)

The ''another'' is ''that which established the entire relation of the self to itself'' which is not the self (13). Kierkegaard stresses the importance of a self relating to itself, to one's limitations and possibilities. As we are relational beings, we are not wholly transparent to ourselves, nor to others, neither are others to us; something always slips out of our grasp. We are inseparable from, but cannot be reduced to, our relations, desires, anxieties, and beliefs. Kierkegaard insists that there are no universal answers to the nature of self, to the productions of our minds nor to our relations to the societies we inhabit, just as there are no rule books to existence.

That most of Kierkegaard's books do not bear his name attests to this insistence. His pseudonyms are not made in jest, they emphasize that we lack a "timeless," "impersonal," or "objective" view from nowhere from which the self can be understood. The different viewpoints he embodies with different pseudonyms and personas attest to his conviction that a self is always bounded and embedded in partial and timely relations.

What, then, is specific to what we propose to call algorithmic anxiety? Algorithmic anxiety, we argue, is about more than uncertainty and a lack of control in the face of algorithms (as in Jhaver et al., 2018). It is rather a more "existential" anxiety, as in Kierkegaard, but this time an anxiety of the self that relates to itself and in this self-relating it relates to the algorithmically mediated realm of possibility and necessity. Algorithmic anxiety seems to flare up when normative conceptions of subjectivity are perceived to be challenged by the capture of the face-by-facial recognition algorithms. It is an anxiety concerning the very question *in relation to whom or what* subjects constitute themselves. It thus concerns anxiety over who participates in crafting observations, recognition, and accounts of the self, where this takes place, and at what consequences in terms of the affordances of identities and the possibilities for being a subject it might bring about. According to Kierkegaard, situations that evoke anxiety are undetermined, vague and unstilted, and defy knowledge, causation and rationalization. The question, for Kierkegaard, is how one relates to such situations, how one positions itself in relation to it. Algorithmic culture could be described as evoking anxiety in relation to the future disposition of the self. This is a normative concern through and through, as it pertains to what one should or might be and do. As Judith Butler has argued, giving an account of the self is an intricate part of subject formation (2005, 2015). And, she argues, such accounts always relate to norms, and so the very "substance" of the self always already relates to normative demands. In analyzing artistic imaginaries of technologies of algorithmic facial capture, we thus seek to contribute to an understanding of algorithmic normativities as ways of calibrating subjectivities. Algorithms are imagined to "do" something to the "self", and that is both why algorithmic anxiety surrounds such technologies, and why that anxiety provides a window on the socio-technically entangled relationality through which subjects begin to imagine themselves in the first place. In what follows, we introduce three artistic imaginaries of facial recognition algorithms that we analyze in the following sections. As we will argue, what is at stake in algorithmic anxiety is an uncertain and perilous relation of the self in relation to facial recognition systems, oscillating between conceptions of possibility and necessity. The masks and the patterns of camouflage provide the point of entry into this relation.

Anti-facial recognition masks and camouflage: Three cases of algorithmic anxiety in the artistic imagination of algorithms

Artist and scholar Zach Blas' series of mask projects are designed to on the one hand visualize how identity recognition technology analyses human faces, and to resist identity recognition technology by offering an undetectable face masks. His *Facial Weaponization Suite* are series of amorphous masks designed and produced during community workshops, geared at Lesbian, Gay, Bisexual, Trans and Intersex (LGBTI+) and minority groups. These masks, by virtue of their form 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" (2014). His masks represent a resistance to what he calls "informatic visibility" which is reducing us to mere "aggregates of data" (2014).

Technologist and artist Adam Harvey has a different approach. With *HyperFace* he designed camouflage couture which aims to confuse facial recognition systems. His couture does so by presenting these systems with countless false positives. *HyperFace* is a textile print that identity recognition technology detects as a face. The patterns are based on ideal-type, models, of algorithmic representations of a human face. *HyperFace*, he explains, is "a new kind of camouflage that aims to reduce the confidence score of facial detection and recognition by providing false faces that distract computer vision algorithms" (Harvey, 2017). "[It] aims to alter the surrounding area . . . [and] offers a higher confidence score for a false face by exploiting a default in certain algorithmic systems for the highest confidence score" (2017). *HyperFace* reduces the confidence score of the true face (figure) by redirecting more attention to the nearby false face regions. In an interview, Harvey states that his projects are motivated by concerns about how computer vision will be used "to extract knowledge without the cooperation or consent of an individual," and that facial recognition technology "poses a significant threat to privacy" (quoted in: Samuels, 2017). He explains 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).

The *Data-Masks* of the artist and technologist Sterling Crispin have been produced by reverse

engineering facial recognition algorithms. His face masks are 3D printed masks that visualize what robust models recognition and detection algorithms recognize and detect as a face—what passes as a face online. They "show the machine what it's looking for," hold up a mirror to the machine (Crispin, 2014). These *Data-Masks* are "animistic deities, brought out of the algorithmic spirit-world of the machine and into our material world, ready to tell us their secrets, or warn us of what's to come" (2013). Crispin writes about how we are "always already being seen, watched and analyzed" by what he calls a "Technological Other," that is "peering into our bodies" (2014).

The work of these artists has been widely exhibited in museums, galleries, art institutions, and at festivals and conferences in Europe, the US and the UK, and each of these projects has garnered a fair deal of media attention in the international press and by magazines and blogs that discuss digital media culture. And each of these projects is specifically aimed at facial recognition technology—different from other mask projects that engage with online or and offline anonymity, privacy in relation to political activism and in general.[4] More often than not, these projects are framed as artistic responses to surveillance, as surveillance art. Masks and camouflage wear, too, are often understood merely as counter-surveillance strategies. Here, we interpret these mask and camouflage projects as different modes of algorithmic anxiety relating to the dissemination of algorithmic facial recognition systems, a characteristic of an algorithmic culture. In these explorations we aim to account for the conception of self in relation to these anxieties. Why take the route of concealment strategies? What imperatives shape and underpin these designs? What forms of relating to facial recognition technology does it privilege?

Camouflage and the mask: Concepts of entanglement

To mask is to camouflage, a tactic to disappear from view. In *Hide and Seek: Camouflage, Photography, and the Media of Reconnaissance*, Hannah Rose Shell argues that camouflage is a way of "not showing up," to appear to disappear, to recede into the background, to become invisible (2012: 10). The objective is to minimize the difference between figure and ground, object and environment. Crucially, however, camouflage does not so much pertain to complete invisibility, but rather to becoming unrecognizable. Camouflage involves both revealing and concealing (Leach, 2006: 244). It is thus a tactic of invisibility through visibility.[5] This play between the visible and the invisible in camouflage displays its entanglement with both art and warfare, as both share the desire to explore the limits of vision, and importantly with the entanglement of a subject with its socio-technical environment. Shell recounts how different historical forms of camouflage were developed in tandem with artists, using different media from painting to film (2012). What all forms of camouflage have in common, is the shared concern with the blurring of boundaries between self and environment. Likewise, contemporary army uniforms are camouflaged as to be "disruptive": their "purpose is to make it difficult for the eye to discern the edges and contours of the wearer's form. They are designed not to look like bark, grass and leaves which is the paradigm of the old camouflage, but rather to dissolve into formless dapples of detritus, light and shadow" (Swedberg, 2007). Both in traditional forms of camouflage and in the contemporary artistic camouflage forms described here, camouflage is aimed at blurring boundaries: the point of giving off bark and leaves was always to blur the boundary between self and environment, to escape from vision by an adversary or some medium of capture. And so camouflage is as much a concept of entanglement as it is of concealment. This, too, follows Roger Caillois's classic description of camouflage. Writing about "mimicry and legendary psychasthenia" Caillois discussed camouflage as the loss of boundaries of the self in terms of natural phenomena of concealment, noting in particular a form of "depersonalization by assimilation to space" (Caillois and Shepley, 1984). Camouflage always concerns a desire to escape from vision by something or someone, and a play with relations between self, environment, and a medium of vision. At the same time, as Hannah Rose Shell notes, camouflage is "a form of cultivated subjectivity" (2012: 19).

Masks, too, have historically been among the primary media through which subjectivities have been cultivated. In fact, the concept of person comes from the Latin *persona*, denoting a theatrical mask. Less well known is that persona is a more complex concept altogether. It signifies movement and sound, a sounding through the face, literally a form of *per sonare*. The theatrical concept of the *persona* stands for both the mask and for the part played, but also for the face. Masks gain their connotations of ingenuity and of being antithetical to true, interior identities from later medieval, interpretations (Napier, 1986: 6–9). These connotations can still be found in the English language in expressions like "to show your true face", "put on a brave face". In Greek physical theater, for example, masks symbolized a certain character, but as masks transfix facial expressions, they divert attention from the face to the body, to its composure, how it moves around in space. In physical theater, where emphasis is laid on the embodiment of the narrative and on imagining narrative spaces through the body, the expressive

face is seen as a possible distraction and obstacle to that end. Japanese conceptions of masks, known for instance in no and kabuki plays, have been discussed as much more complex than simply the concealment of an interior self. Sakabe Megumi has for instance noted that in Yamato Japanese the word for mask and for face was one and the same: *omote*. And, he argues, the related notion of *omo-zashi* (the features of the face) makes clear that this conception of the face is always already relational, as it involves both that which is seen by the other and that which sees itself. According to Megumi "*omote* is evidently the structure of the mask (...), but at the same time it is also the structure of the face. The reason is that the face also is what is seen by the other, what sees itself, and what sees itself as an other" (1999: 245). Crucially, *omote* refers to the structure of a surface, but a surface without original. Its relationality pertains not to hypostatized "personal" selves, but to a surface play of reflections. Likewise, discussing animal masks among Inuit and Yup'ik people of Alaska, Tim Ingold notes that "there is no face peering out from behind the mask. In effect the identity of the human mask-bearer is not so much disguised as displaced by the mask he carries" (2000: 124).

With these different conceptions and histories in mind, we propose to consider the engagement with masks and camouflage by the artists introduced above. Camouflage is here not a literal form of invisibility, it is first and foremost a form of unrecognizability. As a countermeasure to the anxiety facial recognition algorithms induce, tactics of unrecognizability are mobilized. Anxiety about the disposition of the self in relation to facial recognition technology is assuaged by unrecognizability, by concealment, in becoming undetectable and unidentifiable to identity recognition technology, by way of camouflage. Blas, Harvey, and Crispin maintain that one can undermine being captured by recognition technology by becoming unrecognizable to it. The question most relevant at the level of the social imaginary, we argue, will be what concept of relationality and entanglement is operative in the deployment of masks and camouflage by the artists discussed here. In order to answer that, we first explore from what power they desire to become imperceptible.

Black boxing the self

Kathryn Schulz writes: "[T]he dream of invisibility is not about attaining power but escaping it" (2015). According to the campaigns of many social movements of the past 60 years visibility, in the form of recognition of identity, is a precondition for emancipation, and thus representation and power. For these artists, however, invisibility is less of a condition to be overcome and more a precondition of the possibility of empowerment. Where identity and recognition politics are traditionally about becoming recognized and visible—as visibility and recognition is the privilege of the white male and dominant class—here, unrecognizability is regarded as politically empowering. Obviously, the shapes and patterns that subvert algorithmic detection, through masks and textile, are hyper-visible, make you stand out in a crowd. It then seems ironic that these hyper-visible camouflage projects are designed by white, Western, tech-savvy, educated men; an already highly recognized and visible identity. Within these artistic imaginaries, however, being visible and recognizable has to do with automated administration, with technological detection, with being monitored, pinpointed and identified, in the interest of others, and this time directed not predominantly at colonial subjects but including, precisely, white, tech-savvy, educated men. From what do these artists imagine to hide?

Blas his *Facial Weaponization* masks aim to avoid becoming visible to recognition technology, which he associates with the control and policing of in particular minority groups. This controlling and policing he suggests happens by way of data aggregation via recognition technology. Harvey's *HyperFace* garment aims to prevent the extraction of knowledge by way of recognition technology, which he associates with a threat to privacy. And Crispin's *Data-Masks* aim to visualize machine vision, a vision he associates with being "seen through" by an technological Other. According to Crispin "we live under the shadow of a totalitarian police state..." (2014). He claims we are "witnessing the rise of a Globally Networked Technological Organism" that will "exceed the human mind," and that the "human is lost in all this" (2014). For Harvey the problem is the "imbalance of power between the surveillant and the surveilled [sic]" (2013). It is the "ubiquitous and unregulated profiling and cataloguing aspect" of these identification technologies that he considers a threat to privacy (2013). Blas fears that "the global standards" recognition technology relies on "return us to the classist, racist, sexist scientific endeavors of the nineteenth century" and lead toward "Total Quantification" annihilating "alterity" (2014). Algorithmic culture is associated with a police state, with classism and racism, with a dehumanizing organism, and with being catalogued like a proprietary object. What evokes anxiety is the possibility of powerlessness, the possibility of being exposed, identified and characterized, being surpassed and overpowered by a Technological Other, being discriminated against and judged on the basis of numbers according to set standards. Whether it is capitalism, asymmetric power relations or technological rationality, all three are anxious about future possible

scenarios of algorithmic identity recognition technology and the disposition of the self therein, and all three are interested in creating ''spaces'' of invisibility, opacity, or unrecognizability.

What do these zones of unrecognizability 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'' (2013). Crispin caters to the supposed needs of protestors. His *Data-Masks* are ''intended for use in acts of protest and civil disobedience,'' and are themselves ''an act of political protest'' by means of ''giving form to an otherwise invisible network of control'' (2014). Blas sees his masks as a tool in the tradition of collective protest movements like Anonymous, the Zapatistas and Pussy Riot. ''Facelessness and becoming imperceptible are serious threats to the state and to capitalism,'' Blas claims in a video Communiqué (Blas quoted in Cox, 2014). He calls for ''radical exits that open pathways to self-determination and autonomy'' (Blas, 2016: 47). It thus appears that, to these artists, to be ''seen'' is to be recognized, and 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. This power is expressed in the influence it allegedly exerts over one's behavior.

This form of imagination is comparable to a variety of approaches to algorithms in academic studies. Frank Pasquale, for example, is worried about the social implications of the invisible and secretive algorithmic practices of companies and governments that hide the way people are labeled and treated (Pasquale, 2015a: 3). He argues for transparency and intelligibility of these systems (Pasquale, 2015a: 217). ''As we are treated algorithmically (i.e., as a set of data points subject to pattern recognition engines), we are conditioned to treat others similarly,'' he cautions (Pasquale, 2015b). Or, as Stefania Milan puts it ''creators, owners and exploiters of algorithms control much of our digital life'' and ''deeply influence our ways of making sense of interpersonal and spatial interactions. . . . altering our perception of self and our relational being-in-the-world,'' she observes (Milan, 2016: 22). ''Individuals,'' she fears ''become merely a pile of data'' (22). Similarly, Anselm Franke et al. argue in *Nervous Systems: Quantified Life and the Social Question* (2016) that every individual, locked inside algorithmic filter bubbles, ''becomes a digit, a dot, a self-entered data point,'' a ''statistical aggregate'' (Franke, 2016: 14, 22). In *The Black Box Society* (Pasquale, 2015a) Pasquale writes about how algorithms deployed on the labor market change how we are seen, as individuals. And in *We Are Data: Algorithms and the Making of our Digital Selves* (Cheney-Lippold, 2017), John Cheney-Lippold observes that data analytics firms may mark an employee as ''high cost'' or as ''unreliable worker,'' without one's knowledge or participation (Cheney-Lippold, 2017: 4). Cheney-Lippold contends ''who we are in the face of algorithmic interpretation is who we are computationally calculated to be'' (6). Who you are, he writes, is decided by advertisers, marketers, and governments' their secretive, proprietary algorithmic scripts, recasting identity ''into the exclusive, private parlance of capital or state power'' (6). According to Matteo Pasquinelli this amounts to a new landscape of knowledge: ''the magnitude of this epistemic revolution is comparable to previous paradigm shifts, displacing the centrality of the human'' (Pasquinelli, 2016: 281).

To imagine facial recognition algorithms, by extension, to have this power-knowledge, presumes a particular understanding of the self and a certain understanding facial recognition algorithms. It is feared that, reeled a certain way, the alleged power of algorithms may nudge people into amiable, docile tools for those in whose interests recognition technology systems operate. This biopower ascribed to facial recognition systems flows from its collecting and using of information the captured face gives access to. The form of biopower that information collection exerts is imagined in different ways. Blas fears an algorithmic culture in which LGBTI+ and minority groups are excluded, not considered, treated with indifference and regarded as inferior and having little or no say in the course of action in their lives. Harvey fears being itemized, listed, valued only in relation to the whole and not individually. Crispin's fears the loss of authority, being ineffectual and being objectified by an other organism that has no concern for who he is. He argues that these networked systems ''see human beings as abstract things, patterns, and numbers, not as individual people whose lives matter'' (Crispin, 2014).

Algorithmic anxiety could be read as another kind of dystopian technological imaginary. Wendy Chun for instance observes that ''paranoid narratives of Big Brother's all-seeing and all-archiving eye are similarly agoraphobic. They too mark as ideal noninvasive, happy spaces . . . The info-paranoid respond to the current ''public'' infrastructure . . . by creating private (that is, secret) spaces or cloaks, within which they hope to be invisible'' (Chun, 2006: 255). The artists seems to suggest that to safeguard the self from the all-seeing and all-archiving eye of algorithmic culture, what is needed is to thwart facial recognition technology. Indeed, such an imagination, as Hans Harbers argues, echoes ''the endemic Romantic narrative of despair of being overrun by a technological juggernaut, which is guided only by instrumental values . . .'' (2005: 12).

However, looking at these works through a Kierkegaardian lens, a different narrative emerges. It could be argued the despair of the artists lacks possibility, it lacks a sense of the infinite. A person who grounds itself in finitude, Kierkegaard explains, is overwhelmed by a daunting sense of constriction and limitation. He writes, that "the determinist, the fatalist, is in despair . . . because for him everything has become necessity. He is like that king who starved to death because all his food was changed to gold." (SUD: p. 40). A balance needs to be found between a grounding in necessity, and in the desire for self-transcendence, in possibility. And the imagination, "*instar omnium,*" is what leads a person out into the infinite (SUD: p. 31). Kierkegaard compares the synthesis between possibility and necessity with breathing, an inhaling and an exhaling: both are needed in order to live. The determinist, he explains, cannot breathe because one cannot live of necessity alone. And the fatalist has no hope because he lost *his* God, as his God is necessity (p. 40). In order to breathe and not be overwhelmed or overrun by recognition technology, the Romantic humanism of the artists lacks possibility. This raises the question: how to strike a different balance between necessity and possibility?

Camouflaged and masked dividuals

For Crispin and Harvey, algorithmic identification technologies provide an entry-point to corrupt and inhibit what is considered to be a private and independent self, a self that by way of these technologies risks to become objectified as a means to unknown ends. Identity, understood as that part of the self where autonomy and independence reside, is at stake and at loss to facial recognition systems, Crispin and Harvey fear. Blas aims to provide "informatic invisibility" which he describes as "a means of resistance against the state and its identity politics" (2016: 46). To resist the identity politics of the state is to defy its social normalizing techniques for indexing, regulating, and managing human behavior and identity that have been "predetermined by a multifarious conglomerate of corporate, military, and state interests," within which "identity is reduced to disembodied aggregates of data" (45). Such a politics of rubrics and disembodiment, he states "always enacts a politics of reduction and exclusion" and "annihilates opacity" (48). Anxiety, Kierkegaard teaches us, is about lack, and lack is about desire. More than about thwarting facial recognition technology, these projects allude to the desire of being worthy, avowed, included, understood, valued, endorsed, or acknowledged—in short, a longing to be recognized and seen by others. Rather than an autonomous, independent, powerful individual, the self in relation to algorithmic culture is experienced as relational, dependent, vulnerable, unsteady, malleable. And this "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, 42).

Considering these projects in more detail, tacitly but poignantly, complex connections between software, self, and environment are brought to the surface, connections that, in a way, may be productively understood to *remind* liberal subjects, produced under conditions of the disavowal of their entangled being, of their relationality. Through the play with masks and the dissolving of self and environment, connections are made that invite viewers to 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 and camouflage, as we argued above, always already presuppose entanglement. Therefore, as Ingold notes, "the mask is not a disguise intended to hide the identity of the bearer" (2000: 123). Rather, practices of masking and camouflage 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.

HyperFace keeps the face of its wearer unrecognizable by way of modifying the immediate surroundings of one's face. The print-designs flood or overwhelm recognition systems with false positives, with false faces. Harvey's *HyperFace* could be considered as a form of "depersonalization by assimilation to space," as we noted above, and as a way as to vanish in the crowd. Today, it has become increasingly difficult to hide within the crowd: cityscapes are dotted with state and corporate "gazes" in the form of CCTV and security cameras, recognition technologies, sensors, and monitors that assume constant observation and identification in public space. *HyperFace* provides its wearer the condition of possibility to become a crowd. By sauntering the city wearing *HyperFace* textiles it could be argued Harvey "overturns the principle of being a citizen into a being hiding from itself and losing himself in the crowd" (Isin, 2002: 224). Or in the words of Brecht: "Man [*sic*] does not become man [*sic*] again by stepping forth from the masses but by sinking deeper into them," (quoted in Jonsson, 2013: 160). For Brecht, an individual belongs to several collectives, and is therefore divisible. This notion of the dividual is made explicit in the work of Harvey. The individual

wearer of Harvey's *HyperFace* couture presents itself to recognition technologies as a crowd, it represents an individual as a multitude.

Let us turn to the *Facial Weaponization* series of Blas. He designed his series of masks from the aggregated data of participants that attended the community workshops that he organized. The pink amorphous blob of his *Facial Weaponization* series, for instance, has been generated from the data of the faces of participants who self-identified as gay, the black masks by the aggregated data of participants who self-identified as black. The aim of Blas's masks is to provide ''opacity,'' a concept he derived from the poet Édouard Glissant ([1997]2014). Glissant famously asserted ''the right to opacity'' (189). Here, opacity stands in contradistinction to the West's ''old obsession'' with ''discovering what lies at the bottom of natures'' and its ''requirement for transparency'' (190). Glissant contends that ''opaqueness is to be opposed to any pseudo-humanist attempt to reduce us to the scale of some universal value, to any imposition of universal models on singularities'' (191). Blas associates the ''recognizing'' that algorithmic facial recognition systems do with imposed transparency. With his series of masks Blas addresses who is made ''informatically visible'' pointing to the uneven rights and advantages enjoyed by some and lacked by other so-called minority groups in society. Some faces cannot disappear in a crowd, some faces are more vulnerable than others, some faces are feared, criminalized, and instrumentalized before they are recognized by algorithms. With the series he attempts to ''weaponize'' against imposed transparency, by offering the possibility to equip the face with a way of opting out and escaping from the logic of the visible. His masks are a desire to ''let exist as such that which is immeasurable, unidentifiable non-identifiable, and unintelligible in things'' (Blas, 2016: 48). This *laissez exister* is imagined as a possibility which is possible only in safe spaces that are free from technologies of informatic visibility, in short only in protected and closed-off spaces. 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, 1991/1992: 7). However, it is by virtue of this ''free zone'' between human and 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 of imagined capitalist and state-sanctioned standardization and universalization.

Crispin's *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 ''believe'' 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. Identity recognition technology is represented as a cat chasing its own tail.

Conclusion: Faces of possibility

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'' (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'' (2010). Steinweg proposes an alternative understanding of identity, however, one that lacks grounding in necessity. The self is not an object for one s eyes, neither an excessive variety of possibilities. It is not merely contingent and inconsistent, it is also defined, described and limited. A relational understanding of the self allows for an understanding of the self not as a being, neither as some fixed substance. A relational understanding of the self asks not what the self is, but what can be done with it and how it comes to be in different contexts and settings. Masks and camouflage could be seen as subverting the normative understanding of the self. 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 Other, including both the power relations in that space and a relation to the possible. And power relations are key here. Although never absolute, the possibilities of some faces seem limitless while those of others are strictly limited.

Taken together, Harvey's strategy of the collectivization of the individual, Blas' facial weaponry as a demonstration of entanglement with facial recognition technologies, and Crispin's ghost busting, de-emphasize the individual symbolized by the face including the assumptions of origin, and instead foreground our relational entanglement and alignment with others, our

environment, and with that which established and transcends the self and its environment, that what exceeds science. Through these works an imaginary of the human 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, to singularity and insularity, to be sealed off from one's surroundings, is co-constituted by and inseparable from the dependency and existential uncertainty, the desire of belonging and to 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 sense of belonging and existential certainty, and to immerse oneself in a collective.

It is the experience of entanglement and the concomitant 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." Algorithmic anxiety triggers the desire for "an island unto himself; a place where he controls his own world—a world of . . . security, safety and privacy" (Colomina, 1991/1992: 7). Seen this way, algorithmic anxiety is about the position of the self towards the radical openness and unknowability of the future and towards the regimes that attempt to close in on, narrow and delineate the future.

However, by emphasizing one side of the synthesis between opposites over the other gives room to algorithmic anxiety to rise up, like a wall. As we have explained above, for Kierkegaard, the self is not something one "has" or "possesses" nor the sum of its rational decisions. And by extension, the self is not something that can be rationalized or possessed by other people and things. The self is a relation of that which establishes relations of self-relating, over which we and others have no control but that affects us nonetheless. As the self is a synthesis of opposites and each individual is tasked with a balancing act between these opposites.[6] The desire to overpower facial recognition often conceals the desire to overpower the self, it often masks the desire to be in possession of oneself and overemphasizes the relation of the self towards facial recognition technologies.

The Kierkegaardian task is to think, actualize, and balance together the contrasting elements around which the self coheres. 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, in a context where individuals are always already embedded and entangled in affective relations with their socio-technical environment. What masks and camouflage wear offer is an intervention in the form of a kind of re-balancing between practices that circumscribe, pin down, enclose, and encircle and practices those that move, open up, change and make fluid.

The ember of algorithmic anxiety is stoked when we latch on to the illusion that the individual is "the creator of its own fortune, yes, the creator of itself" (Kierkegaard, [1844] 2014: 393). This is what causes anxiety, according to Kierkegaard. In *Either/Or* Kierkegaard calls any attempt which maintains that we are knowable and transparent to ourselves or to others "ridiculous" (393). It is ridiculous because any such attempt denies the existence of the unknown, any such attempt is the denial of contingency, transcendence, dependency, indeterminacy, and the denial of the partiality of all knowledge. We are not transparent—neither to ourselves, nor to others, Kierkegaard maintains.

Any attempt to ostracize, deny, or attempt to "plug" one side of the opposites that co-constitute the self, is bound to cause anxiety. In fact, it is a lack of contingency, disorder, and blurred borders that induces anxiety. Kierkegaard's subject is situated, aware of its finitude and limited perspective, aware of its task to constantly maneuver between the opposites that constitute the self, and aware of the dangers both of uncritically situating itself complacently in a normative society *and* of speaking above it, of assuming autonomy and of avoiding responsibility. It is precisely indeterminacy and uncertainty that allows for possibility, because that what is ungraspable cannot be grasped or captured or quantified, yet we stand in relation to it.

Kierkegaard saw the biggest threat and Achilles' heel in a society of individuals which has lost the awareness of the limits of the mind, in a society that declared the unknown dead and put reason on its throne. Instead of assuming the underside of a dualism, instead of defending the modernist abstraction of the Autonomous Subject, camouflage and masking gesture to relations of mutual dependence, embeddedness, and entanglement. It is these inherent contradictions and instability that give way to possibility, of relating otherwise, and of the multiplication of relations. The mask of anonymity was traditionally used as a criticism of the self, in order to liberate itself from the idea of the self. However, as Kierkegaard reminds us, the self exceeds "*the idea* of the self." It is by de-emphasizing autonomy, independence, and transparency—and in extension the personal and individual and the assumptions of originality—that possibilities of collectivity and collective belonging come into view that could multiply avenues to work through algorithmic anxiety. The full potential of the mask as a relational play

between self and environment would allow moving beyond hypostatizing conceptions of self and the algorithmic other. Masks and camouflage may free us from the anxiety of living one-sidedly as they allow for the positing of a dividual as a synthesis in relation, offering a diffusion of subjectivity that opens up multiple ways of being, belonging and aligning that call for an imagination that is not wedded to human–machine dualisms, neither to the autonomous subject, nor to the uncritical acceptance of the logic of algorithmic culture.

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Notes

1. The face, as central to the encounter with the other, has been granted a key role in ethics, most famously in the work of Levinas, who (like Goffman) considers the face not as a part of the body, nor even as mere physical appearance, but rather as ''the way in which the other presents himself, exceeding *the idea of the other in me*'' (Levinas, 1969: 50; italics in original). In a similar vein, Judith Butler has called attention to the politics of what she calls ''radical effacement'', whereby certain people never appear in a normative or political register because they have been effectively ''effaced'', either through occlusion or through representation, people whose suffering and death therefore become ''ungrievable'' (2004).
2. See Yulin Wang and Michael Kosinski, ''Deep neural networks are more accurate than humans at detecting sexual orientation from facial images,'' https://osf.io/zn79k/.
3. In *Fear and Trembling* he writes: ''From the external and visible work there comes as old adage: ''Only one who works gets bread''. Oddly enough, the adage does not fit the world in which it is most at home, for imperfection is the fundamental law of the external world, and here it happens again and again that he who does not work does get bread, and he who sleeps gets even more abundantly than he who works'' (FT: p. 27). The idea that if you do good, good will come to you is a falsity, according to Kierkegaard. The external world ''sighs under the law of indifference'' (FT: 27). Some people work their socks off, are exploited, and have no bread to eat. Others do not do a stroke of work and have their bellies full of bread. Kierkegaard challenges the Christian equation of well-being with virtue.
4. Such as the hackers collective Anonymous, and the work of artists such as Mark Shepherd, Martin Backes, Kiri Dalena, Peter Weibel, and Ingrid Burrington, to name but a few.
5. Bauhaus artists László Moholy Nagy, who designed US army equipment patterns (Díaz, 2015: 68), and Oskar Schlemmer were deeply interested in camouflage (Schwartz, 1996), as was Picasso (Hartcup, 1979). Georgy Kepes emphasized that all vision was a creative way of shaping forms out of ''a whirlwind of light qualities'' (1969: 15).
6. The safest route is to be a cog in the wheel, to lose oneself in either side of opposites, in one-sidedness. In a life that lacks possibility one does what society expects one to do, and one thinks what the majority thinks. Security is found in a job, a marriage, property, wealth or fame, and doing what is considered ''right''—this is what Kierkegaard calls ''living by the numbers.'' However, according to Kierkegaard, to assert one's self requires a relation to possibility, the courage to speak above the crowd, separate *is* from *ought*, and it requires persistence and a strong will.

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