Volti artificiali
Artificial Faces

L'enigma dei volti artificiali è che non esistono volti completamente naturali, eppure non esiste volto che non sia anche naturale. I simulacri di volti, indipendentemente da come vengano creati — disegno, pittura, scultura, fino alle creazioni algoritmiche delle reti neurali — in fondo devono sempre basarsi su volti biologici preesistenti in qualche tempo, in qualche spazio e in qualche modo. Al contempo, ognuna di queste facce biologiche presenta un fenotipo che è influenzato dal linguaggio, dalla cultura e dalla moda, a inclusione della stessa moda dei simulacri facciali. I nostri ritratti rimandano a volti naturali, ma questi si atteggiano spesso prendendo quelli a modello. Lo studio semiotico del volto non può però limitarsi a proclamare questo enigma. Deve anche sviscerarlo. Deve, per ogni categoria e caso di volto significante, delineare la soglia tra natura e cultura, trasmissione genetica e linguaggio.

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In copertina
Johnson Tsang. 2018. *Lucid Dream II: Here and There*.
Reproduction courtesy of the artist.

Volti artificiali / Artificial Faces

VOLTI
ARTIFICIALI
ARTIFICIAL FACES

a cura di
Massimo Leone

Aracne

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Elusive Masks: A Semiotic Approach of Contemporary Acts of Masking[1]

Federico Biggio and Victoria Dos Santos[*][2]

Titolo in italiano: *Maschere elusive: Un approccio semiotico ai mascheramenti contemporanei.*

Abstract: Elusive masks made by artists, designers, and creative citizens are more and more worn during urban protests in order to elude facial recognition software used for mass surveillance programs. The present article discusses some of the semiotic functioning of elusive masks, starting from a exploration of the concept of 'mask' and its ritualistic collective functions maintained in contemporaneity. This will allow to analysed some cases studies according to the first Peircean trichotomy, that of the sign in itself, with the aim of understanding how masks respond to facial recognition systems in urban contexts. The correlation between the natural and the artificial face is also considered, paying particular attention to the transformations originated by these masks, as an expression of resistance tactics against such computational surveillance tactics.

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[1]. This article is the product of an investigation carried on in the framework of the initiative "Doctoral Scholarships" of the Excellence Department, Philosophy and Educational Sciences, University of Turin, Italy, 2019-20.

[2]. Chapters 2 and 5 were written by Victoria Dos Santos; chapters 3, 4, and 6 were written by Federico Biggio. Introduction and conclusions were written by both authors.

1. Introduction

Facial recognition technologies are becoming more and more common, not only in preventing strangers from unlocking personal devices or acquiring users' private information — as in the technologies developed by companies such as Apple and Amazon[3] — but also in monitoring citizens, as commonly done by corporations and governmental agencies.

In the contemporary scenario, facial recognition is an emerging sharpening tool where a vast number of strategies are deployed by authorities against dissidents, protesters, terrorists or other possible threats to power maintenance. It works by capturing the images of people's faces, focusing on the formal traits characterizing them. Artificial intelligence algorithms then analyse such faces, combining biometric information with existing databases. In this context, where thousands of cameras are watching people and sending their data to be analysed and remitted, it is hard to underestimate both the power of such technologies and the complex systems of representation emerging from digital advances and from the incessant current sign production.

The massive use of these automated technologies led to the birth of anti-surveillance actions against authorities' strategies. In Hong Kong, for example, protests have arisen against the use of surveillance technologies by the central government. This and other similar scenarios coincide with the popularization of biometric art, allowing activists to perform and rewrite the act of recognition, in order to make visible such policies of control and "critically reflect upon the most advanced science and technology about the face today" (Schiller 2020).

In different cases, the work of such artists generates facial masks to be used during protests and which are able to *elude* surveillance software. For this reason, the analysis proposed by this contribution is focused on the description of the semiotic functioning of contemporary devices working as masks, which, instead of simply hiding the wearer's face, emphasize the act of concealment by making a political statement about governmental and corporate surveillance in public spaces.

These elusive masks, based on artistic writings of the natural face, are designed by simply adding objects or other elaborate mechanisms to the

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3. Specifically iPhone Face ID and Amazon Rekognition.

face, in order to prevent the identification by facial recognition software. Citizens who chose to wear them aim at transmitting a group idea: that of remaining unknown, but only to the surveilling computational interlocutor. Therefore, these masks allow subjects to protect themselves from "not being identified" rather than from "being seen" from other citizens.

In the first section of this paper, a brief analysis of the idea of ceremonial or theatrical masks — those holding a ritualistic scope — will be carried out. The goal is to offer a wider look of why, in contemporaneity, these objects still possess a ritual nature: that of transforming the wearer's face, as a common and collective act within a particular group of people. In a general way, a mask can be understood as a versatile cultural device, intimately connected to performances of artistic, theatrical and ritualistic natures (Turner 1982). Depending on the scope, a mask can have one or these three functions at once, possessing religious and social significances. Examples can be found in funerals, rituals of initiation, the invocation of a deity or the worship of an ancestor.

Masks in contemporary performances of elusion do not follow traditional cultural or religious aims. Instead, the ritual function of anti-surveillance protests is linked to the exhibition itself, which is close to the mask's theatrical background. We can refer to a ritualistic use of the mask, when it carries out aesthetical and symbolic contents in performative acts, and conceive it as an object whose make-believe nature becomes a means of transgressing boundaries (Napier 1986). Nowadays, however, the purpose of such artifacts is more correlated to remote viewing rather than for the benefits of subjective and transformational experiences (Merrill 2004).

In the second section of the paper, the scope is towards the understanding of the dialogic function of masks worn by protesters. In our view, masks are not only to be considered as functional devices, responding to the wearers' need of not being recognized. They are rather communication artifacts through which it becomes possible to establish a polemical dialogue with the authorities. The third and fourth section will focus in the analysis of the semiotic functioning of elusive tactics, according with De Certeau's philosophy and, secondly, to analyze masks as dialogical devices able to establish a communicative space between wearers, and thus citizens, and the artificial interlocutor, the surveillance camera.

In the fifth section, some of the most outstanding anti-surveillance masks are analysed and categorized into three groups, proposed in the

frame of this article: masks that deform, masks that confuse and masks that invoke. This review is carried out through the semiotic categories of Charles Sanders Peirce, belonging to the first trichotomy of the sign in itself: Qualisign, Sinsign and Legisign and to the various ways in which masks can respond to surveillance technologies. The last part of the article will allow to visualise, by the use of Greimas' semiotic square, the opposition between human wearers and artificial cameras and also to draw, into a coherent structure, the elusive *tactics*. We can therefore understand the ways in which the natural face of the wearer is manipulated, concealed and artificialized, with the scope of hiding the identity through three ways: camouflage, protection and facial denial.

2. Contemporary masks

The mask, — in greek pròsopon[4], meaning in front of the other's eyes — can be understood as "a quintessential example of the psychological expression of the human being"[5] (Martin 2011, p. 722), serving several important purposes in ancient and mother societies, but with different meanings across cultures (Mack 2013). Donald Pollock suggests that the mask, as a powerful semiotic tool, is a technique "for transforming identity, either through the modification of the representation of identity, or through the temporary — and representational — extinction of identity" (Pollock 1995, p. 584). The mask works, according to Pollock, by concealing or modifying the conventionalized signs of the self, in order to present other values that would represent the "transformed" subject or a completely different entity.

Similar considerations are proposed by Anthony Sheppard, for whom masks are "double in function, signification, and experience, serving simultaneity as tools for disguise and as markers of identity" (Sheppard 2001, p. 25). Patrizia Magli (Magli 2013) argues that masks tend to delete the

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4. Etymologically, the word "pròsopon", for ancient Greeks, referred to "in front of the eyes" understanding the other's eyes. The word assigns a character, something that is to be seemed, that it is exposed (Magli 2013).

5. A quotation from the Italian version of The Book of Symbols (Il Libro dei Simboli), from Tachen editorial. Original quote: "(…) è un esempio quintessenziale dell'espressione psicologica dell'uomo". The translation was made by the authors.

face, erasing the individuality and proposing instead a social character, a membership, a ritualistic religious function. This shape-shift process operated through the act of masking is not only reduced to a ludic or strategic desire of hiding, but it can also allow, almost as a proxy agent, the entering into an alternative dynamic or enabling an outside presence to come.

Masks, then, produce an effect on people by operating on the face, transforming or simply avoiding to show the identity of the wearer by remaining hidden, so "whoever wears the mask can transform into the archetypal image that it evokes"[6] (Martin 2011, p. 722). In Sri Lanka, for example, grotesque demon masks were worn as a way to protect against diseases. In China, Africa, Oceania and North America, masks have been used to admonish, by presenting aggressive spirits of demonic nature[7].

According to the aforementioned statements, in those acts of covering the wearer's natural face and adopting a public or symbolic one (Kak 2004), the role of masks and rituals performances are intimately related. There, the scope is often related in manifesting and apprehending a mythical or sacred character, or in placing a specific moment into the domain of magic and mystery, or eventually in representing the Ethos of a culture (Turner 1982; Sheppard 2001; Belting 2017). In traditional celebrations, "the mask makes the disengagement from ordinary time and the connection to the ancient and repetitive, which is the heart of ritual" (Kak 2004, p. 1)[8].

However, since nowadays, since the act of masking has been readapted to an environment increasingly mediated by digital technologies, masks are not necessarily connected to rituals belonging to specific cultures or geographies. They are instead always related to the constitution of a sort of "ritual space"[9].

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6. Same as the previous note. Original quote, in Italian: "[…] colui che indossa la maschera può trasformarsi nell'immagine archetipica che essa evoca."

7. This information was taken from Encyclopedia Britannica. Article's name: "The Functions and Forms of Masks" (retrieved from: www.britannica.com/art/mask-face-covering/The-functions-and-forms-of-masks, accessed on 15 June 2020).

8. Ritual is, in its most typical cross-cultural expressions, a synchronization of many performative genres, and is often ordered by dramatic structure, a plot, frequently involving an act of sacrifice or self-sacrifice, which energizes and gives emotional coloring to the interdependent communicative codes which express in manifold ways the meaning inherent in the dramatic leitmotiv." (Turner 2003, p. 126).

9. If masks were popular, for example, in rites of passage, mediating structures or welcoming a supreme entity, in the present they could still be affirming its performance as ritualistic in, for example, a group performance of confrontation through evasion and collectively moved by the same motiva-

In this context, ritualistic masks do not communicate with a divine figure or an ancestor but, instead, they lead to the emersion of other meanings, by aesthetically rewriting the face through, for example, Instagram-like apps, selfie filters and self-design avatars. A fictionalization of the self occurs in some occasions, especially when adding fantasy or popular culture elements. This can be seen when protesters — as well as people involved in illegal acts — wear super hero or villain masks in order to transmit ideals of connotative order.

Such conjunction between human body and technology has therefore allowed to highlight the performative aspects of collective spaces, since the practices of camouflaging, face swapping, digital transformation, among others, have become a constant of everyday relationship with digital technologies and social media platforms.

2.1 *The Ritual function of contemporary masks*

In the digital hyperconnected scenario, since many urban environments are submitted to computational strategies of surveillance, elusive acts of masking still keep some of the mask's original function[10]. Elusive masks configure a particular covering act: they do not hide the identity of the wearer to other human subjects; their objective is instead to elude and confuse facial recognition software installed in surveillance cameras. The elusive performance of masking by protesters also deals with conventional means linked to cultural narratives, allowing masks to generate other messages that can be efficiently received by a certain community.

Therefore, in nowadays' rituals of masking, the wearers continue to acquire something, while concealing their identities. When using or invoking other textual objects by providing resistance in not showing up, the functions of these elusive masks rely on not-random strategies to specifically perturb the surveillance system.

Artists, designers and resourceful citizens have been taking advantage

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tion. Visions as Giorgio Cipolletta's, nevertheless, could contrast with this premise. According to him: "The ritual power of masks is therefore lost. They no longer represent a synthesis of the self, but they bear the social functions, they are worn to turn oneself into something else" (Cipolletta 2020, p. 94).

10. However, as deepened later in the article, though these masks are not related to the transcendental or to a symbolical-continuous, they do not necessary enable a fictionalization of the wearer identity.

of social media and software programming as ways of acting and proceeding: they program, edit and design objects and masks with contestation objectives. This aspect highlights the function of entertaining of masks, which in many traditional culture was, indeed, indivisible from ritual performances (Napier 1986).

It is not a surprise that the human face (together with its set of expressions) is fundamentally important in the work of contemporary artists and designers. It is not only used to engage in constructing everyday objects with a human look — as for the anthropomorphism in industrial design — but also to achieve the contrary, that is to say, to disrupt the human look and, by means of technologies, to cancel its perception from surveillance devices rather than from other humans.

Which is, then, the connection between this "face hacking" through elusive masks and ritual masks? Considering the premise that "any alteration of the face can be understood as masking in the most general or metaphorical sense" (Sheppard 2001, p. 26) what differentiates an ordinary act of masking from the ritualistic one is that the latter generates a metaphor of transformation (Merrill 2004), creating a "privileged space of common belief and understanding" (*ibidem*, p. 16).

Elusive acts of masking can even be perceived as a ritual in and of itself. Merrill (2004) clearly exposes this matter when saying: "One's preoccupation with the superficial decorative features of a mask overlooks the mask maker's intention in choosing certain materials with which to construct not only the mask's aesthetic image but, more importantly, to properly align the medium of wood, leather, shell, etc." (2004, p. 18). This situation occurs as well in the current scenario, even if, as later shown in some cases, the software is providing the specific functions to the masks rather than physical and touchable materials.

The ritual of contemporary elusive mask becomes an answering-back since, instead of suppressing, covering or cancelling the identity of the wearer, these semiotic operations are focused on how to create confusion and how to manage the technologies crossing our spaces, highlighting the whole system. This has opened the possibilities for citizens to elude social recognition by working on the face which in a visual culture has been the synthesizer of the body (Cipolletta 2020).

What we are observing, then, is a sort of performative battle for the face, where the objective is the *agnition* — the recognition or discovery

of identity — by fighting technology with technology. That is because artists, activists or resourceful citizens are creating and proposing different alternatives to manipulate our faces and be able to disappear from the "machine's" recognition.

Consequently, within this producing faces nonstop (Cipolletta 2020), masks and faces are both confused when they are melted by the biometric systems of surveillance. "Faces are omnipresent, they are everywhere and they constantly produce new masks either of anonymous masses or dictators" (Cipolletta 2020, p. 98). In this scenario, other manifestations and uses of masks have been depicted, not only in the type of devices that can be found, but also in the motivations regarding the act of masking.

3. Elusive masks tactics

The main peculiarity of elusive masks is their ability to elude facial recognition software of surveillance cameras. This section will cover the analysis of the semiotic functioning of the elusive process carried out by elusive masks wearers.

In the seminal essay *The Practices of Everyday Life* (1980), Michel De Certeau deals with the concept of "resistance tactics", describing the set of actions — circumvention ones — and creative uses of *strategies* provided by an institutional entity with governmental purposes. Through these tactics, common subjects do not only reinvent their own reality and the space in which they live, but they rather free themselves from the process of individuation which reduce them to a mere computable element of the whole system in a creative and not-prescribed way. By referring to facial recognition, this process of individuation coincides with the ekphrastic description of the person's face — carried out by the biometrical analysis — that is being reduced to mathematical coordinates and information.

A history of ekphrastic techniques used by authorities to describe and reduce the natural body of the common subject — of which digital facial recognition technologies represent the latest form — can be identified starting from the long tradition of studies of physiognomy. Throughout the centuries, the best epistemological system for translating the natural face (or other body parts, as fingertips) into biometric data has been done by exercising a form of control on masses (Bertillon 1890; Galton 1892).

It is clear that these epistemological knowledges, elaborated within a semiosphere, have always been, in some way, determined and characterized by cultural bias. However, on the other hand, it is only through this semiotic translation that a face or a body can be referred to a subject and thus to an specific identity, by conferring ontological and social identity. The ekphrastic recognition of the subjects' faces is thus necessary to confer them a social existence.

What is, then, the reason driving elusive masks wearers to disguise themselves, and to deny their own identity to surveillance cameras? What is the object of the anti-surveillance discourse advocated through these urban performances?

As aforementioned, on one hand, we have the natural face, biologically constituted, and, on the other, the biometric one, artificially constructed, where the positioning of an in-between *interface* (the elusive mask) has the goal to hide the natural face of the wearer. This process can be defined as a visual interruption of the surveillance action which sabotage the biometric writing of the citizen's natural face.

The elusive act can be configured in different ways and it can has different motivations, like for instance the denouncement of racial or gender prejudices in facial recognition software, or the claim for privacy rights. In this way, during the protests, citizens deny their own identities by covering their faces and refusing to submit themselves to a surveillance system which reduces them to a set of mathematical coordinates but, at the same time, they declare their own belonging to another ideology, by advocating to a specific counter-discourse.

However, according to De Certeau, the act of resistance is not connoted by violence and repulsion, and does not have the destruction of devices (such as the physical infrastructures of video surveillance) as the target. Instead, the act of resistance is a circumvention one, through which the subjects learn to creatively *use* such devices in order to satisfy their own purposes: "although they remain dependent upon the possibilities offered by circumstances, these transverse tactics do not obey the law of the place, for they are not defined or identified by it" (De Certeau 1980, p. 29).

Through the production of elusive masks, these tactics become explicit and express themselves in protests. It is exactly in this perspective that it is possible to conceive elusive masks as dialogical interfaces and communicative tools, which do not aim to erase the controversial situation, but

to *stay within the system*. This, by "speaking" and supporting a counter-discourse with the objective to adjust the social condition of citizens which, in democratic societies, is usually defined in a collective way.

4. The mask as a dialogical entity

It may be useful to recall the difference between *face* and *interface* proposed by Branden Hookway (2014) in order to understand in which way elusive masks work as devices for concealing the identity and entering in a space of dialog and protest with the surveillance cameras.

Firstly, he defines the interface as an entity "between the faces", through which a user carries out an activity within a circumscribed field, such as the screen of a device. Secondly, the term interface is referred to as an act of "interfacing with". This would suggest that the interface constitutes both a boundary and a place of encounter that actively extends between social subjects, by separating them from what lies beyond the interface: "the interface is both an interiority confined by its bounding entities and a means of accessing, confronting, or projecting into an exteriority" (Hookway 2014, p. 9). The same shared definition of digital interface is the communication device that allows the polemical dialog between the human user and the computational and artificial machine.

Conceiving elusive masks as *dialogical interfaces* means therefore highlighting their agentive nature, the communicative intentionality that is implied in their production as well as in their wearing act during an urban protest. From a semiotic standpoint, it is precisely this agency, as it is expressed in the production and wearing of the mask, which produces sense.

For instance, it is clear that wearing a mask representing the face of Guy Fawkes during a protest is radically different — and not only from an ideological point of view — from the use of make-up techniques able to confuse facial recognition software. Whereas the former inherits the symbolic universe of the hacker's imaginary which has been established from the cinematographic text, the latter is an act of original production and an artistic political action.

Understanding these masks as dialogical entities could also mean to lead the facial recognition to enunciate itself, according to subversive objectives. For instance, the Data-Masks series by Sterling Crisping, analysed

in the next section, are essentially based on the inverse re-enunciation of the facial detection process; it is an artistic research which has led to the printing of a series of masks which reproduce the detected forms in a face by facial recognition software.

Finally, it is interesting to observe that, from an etymological point of view, a synonymous of the verb "to report" is "to denunciate", which is composed by the negative particle "de" and by the verb "enunciate": the most interesting artistic texts in this field are, in fact, the ones that lead the facial recognition software to *enunciate* itself, in a negative sense, by making this operation the central object of the artistic discourse.

5. A Peircean approximation: Cases Studies of Anti-surveillance Masks

Following the abovementioned a deeper analysis about how such devices develop their functions — semiotically speaking — is considered mandatory. Starting from the classification of signs proposed by Charles Sanders Peirce, it is possible to examine the case studies exposed as follows, in order to understand the mask as a sign and its relation with itself. According to Peirce's theory, all signs are organized into three trichotomies:

> First, according as the sign in itself is a mere quality, is an actual existent, or is a general law; secondly, according as the relation of the sign to its object consists in the sign's having some character in itself, or in some existential relation to that object, or in its relation to an interpretant; thirdly, according as its Interpretant represents it as a sign of possibility or as a sign of fact or a sign of reason.
> (Peirce 1998, p. 291)

For the purposes of this article, the focus will be on the first trichotomy, that of sign in itself as a quality, an actual existence or a general law, in order to offer a first approximation of the reasons why these contemporary masks, understood as signs, are motivated. The sign as a quality, what Peirce called a *Qualisign*, "is a quality which is a sign" (1998, p. 291). The *Qualisign* answers to the global situation of things as qualities, what is as it is without considering any other thing, simply the quality that it embodies. It is a feeling, a sensation, the first impression. For example, the color yellow.

Next, comes the sign as an actual existent, the *Sinsign*: a thing or event

that does not consider any law. It implies two things acting on one another, in the here and now, and for that reason it possesses the syllable "sin" meant to mean "existing only once" (idem). A *Sinsign* also possesses several *Qualisigns*. It is the reaction of one thing against another, independently of any reason. For example, a yellow fallen leaf.

Finally, the general law, that Peirce defined as *Legisign*, is a "law that is a sign [...] usually established by men" (idem) so according to this, all conventional signs are a *Legisign*. This category requires *Sinsigns*, that is to say, every "*Legisign* signifies through an instance of its application, which may be termed a Replica of it" (idem). It could be said that this typology of sign is a regular and a universal. For example, many yellow fallen leaves in the ground can be a sign of a specific season, Autumn.

In order to carry out such an analysis, this contribution proposes three categories of masks: masks that deform, correlated to *Qualisigns*, masks that confuse, correlated to *Sinsigns*, and masks that invoke, correlated to *Legisigns*. It is important to clarify that these categories do not intend to analyse the direct action that these masks have on the users' faces, but rather the *effects* that they generate on the surveillance mechanisms, for which they are targeted.

5.1. *Masks that deform (Qualisign)*

They are basically a set of forms and reliefs that do not follow any significant patron, but only pictorial sensations. The masks entering into this group act as *Qualisigns* because they do not give any other information besides what can be perceived in the moment: a shape or a colour. Any device portraying an abstract or unidentifiable object to the recognition system will enter into this category.

This can be appreciated in The Surveillance Exclusion Mask (Fig. 1) designed by Jip van Leeuwenstein, "a lens-shaped mask", similar to a helmet, that eludes the algorithmic recognition while still allowing humans to read facial expressions and to identify the wearer. The dispositions of random objects blur any biometric result, offering to the camera a non-coherent image, unable to transmit anything since any potential face is portrayed.

Figure 1. J. van Leeuwenstein (2016) *The Surveillance Exclusion Mask*.

Figure 2. A. Harvey (2010) *CV Dazzle*.

A similar case is given by the London-based artists CV Dazzle[11] (Fig. 2), a facial make-up technique firstly pioneered by Adam Harvey, involving the design of irregular geometric shapes and of strong aesthetic impact, able to blind the facial recognition software but leaving the face visible to the human eyes. The combination of hair extensions, accessories and gems, disrupts people's faces, creating fake contours and obscuring its features. The artist and activist's motivation is not to make the process of recognition difficult for another individual, but rather to sabotage the biometric analysis carried out by facial recognition software.

In another case, Isao Echizen, a professor at the National Institute of In-

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11.   www.cvdazzle.com (accessed on 15 June 2020).

formative in Tokyo, created the Privacy Visor[12] (Fig. 3), a safeguard against security cameras capturing someone's face without permission. Here, LED lights act as a shield in the procedures of detection. Once again, faces could be easily recognised by other humans. The evasion is achieved "by the photographed subject wearing a wearable device — a privacy visor — equipped with a near-infrared LED that appends noise to photographed images without affecting human visibility" (Echizen 2012, p. 2).

Similar functions can be found in the Reflectacles Privacy Eyewear. This device blinds CCTV security cameras that rely on infrared for the night vision. The glasses block the biometrical software by reflecting a full-light and unrecognizable shape, which is not even a face, whereas a human wouldn't have any problem in recognizing the wearer.

Figure 3. I. Echizen (2013) *Privacy Visor*.

5.2. *Masks that confuse (Sinsign)*

In order to avoid facial recognition, these masks show a face which is not the right one. The category of *Sinsign* is perceived since a range of shapes allow the software to perceive a face. It is a real, effective fact, associated with the experience of seeing all the elements and relating them, all together. The cumulus of qualities, then, reveals a face, but it does not have any legal record and it cannot be tracked, since that face is randomly placed as a device to distract the surveillance software.

12.   http://research.nii.ac.jp/~iechizen/official/research-e.html (accessed on 15 June 2020).

The Wearable Face Projector[13] (Fig. 4), presented by the designer Jing-cai Liu, is part of a research project called Dystopian Future, where she and other students created different prototypes about privacy and identity. The aim was to propose different products, offering the possibility of staying anonymous in a fictional and futuristic world where facial recognition is something to be serious about. This mask works providing a completely new appearance, shifting "rapidly between faces being projected"[14]. The result is that there is no law: the face does not correspond to the civil identity of the person, making detection practically impossible.

Figure 4. Jing-cai Liu (2017) *Wearable Face Projector mask*.

These types of masks are not only found in expositions rooms. URME (Fig. 5), by Leo Selvaggio, has been a very innovative resource already used and reproduced — within similar projects — by many people. This 3D scan mask replicates Selvaggio's face, eluding any attempt of facial recognition by making the camera system track only one face — himself — worn, simultaneously, by other people in many places. As he clearly explains, this prosthetic device attributes every single action made by whomever is wearing this mask, to him:

13. http://jingcailiu.com/wearable-face-projector/ (accessed on 15 June 2020).
14. Retrieved from Jing-cai Liu's personal webpage.

With facial recognition technology being widely used nowadays, rather than try to hide or obscure one's face from the camera, these devices allow you to present a different, alternative identity to the camera, my own. When you wear these devices the cameras will track me instead of you and your actions in public space will be attributed as mine because it will be me the cameras see.

(Selvaggio, 2014)[15]

Figure 5. L. Selvaggio (2014) *URME mask.*

5.3. *Masks that invoke (Legisign)*

We can finally refer to this category of masks when the strategy to elude surveillance comes from a cultural recognizable object or by something that can be categorized. In this case, Lévi-Strauss' perspective (1975) resonates, when assuring that masks play a central role in creating myths because they illustrate narratives.

Such devices respond to *Legisigns* because the association made between the mask and an object represents a law. That is to say, after carefully examining the mask, the interpretant of that sign links it to a specific *figure*, an operation or some cultural narrative. Here, then, the observer gives it a character of law, even if by doing so the mask acquires new meanings, losing part of the initial content.

This can be seen with one of the most characteristic protest devices in contemporaneity: The Guy Fawkes' mask. It became a global mainstream

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15.   This quotation comes directly from Indiegogo, where Leo Selvaggio describes his product: www.indiegogo.com/projects/urme-surveillance-developing-devices-to-protect-the-public#/ (accessed on 15 June 2020).

in 1988 — almost 400 years after the real Fawkes died — when Anonymous used it as a personal mask because of the Epic Fail Guy meme. Its popularity was also due to Alan Moore and David Lloyd's movie "V for Vendetta" (2005). However, this mask has become a cultural artefact because it generally communicates a social cause or an act of rebellion. Therefore, besides hiding an identity, an implicit message unfolds. Similar cases can be found in the Joker's and Money Heist masks.

The Data-Masks series[16] (Fig. 6), created by Sterling Crispin, possesses an innovative strategy: it brings transparency to surveillance and biometric techniques used today. These masks, although abstracts, are not random forms. On the contrary, there are complex reasoning and operations in them. The Data Masks have a message inscribed, as the result of a biometrical analysis already carried out on people's faces. The way these masks work is by confusing facial recognition with its own language. Although unreadable to the human eye, they represent a recognition already developed.
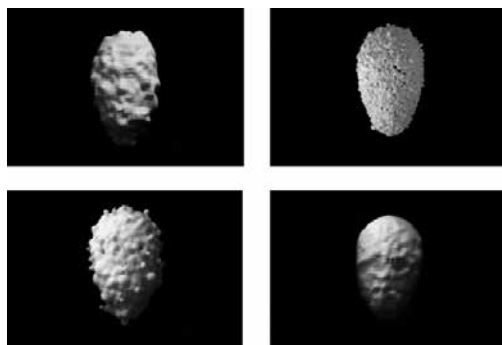
Figure 6. S. Crispin (2015) *Data-Masks series*.

The last example provided, the Facial Weaponization Suite designed by Zach Blas[17], denounces biometric facial recognition by making "collective masks", modelled from the aggregated facial data of diverse participants, resulting in amorphous devices that, as the Data Mask, cannot be detected as human faces by biometric facial recognition technologies.

16. www.sterlingcrispin.com/data-masks.html (accessed on 15 June 2020).
17. https://zachblas.info/works/facial-weaponization-suite/ (accessed on 15 June 2020).

They also put into evidence the inequalities and cultural bias these technologies contain. For example, the pink one, called the Fag Face Mask, is generated from the biometric facial data of many queer men's faces. As well, the black mask manifests the inability of biometric technologies to detect dark skin.
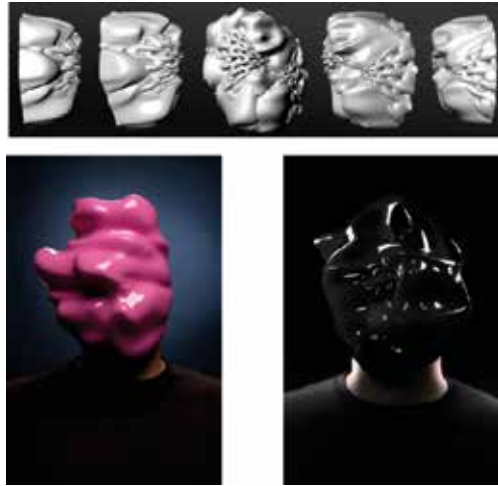
Figure 7. Z. Blas (2012) *Facial Weaponization Suite*.

6. Socio-semiotic trajectories of elusive tactics

In order to map the socio-semiotic trajectories that are articulated in tactics of elusion, in practices of masks' production and in their collective and performative uses, the construction of a semiotic square will help us to focus on the semantic opposition between the natural face and the artificial one, produced through biometric analysis. Through such processes, the wearer's agency is expressed on a formal level through the manipulation of the natural face.

On one hand, the subject who perceives to be watched claims for the irreducibility of the natural face and he does so by denying his own face and rejecting the ekphrastic description carried out by facial recognition software. However, each elusive tactic configures different formal manipulations of the face, by establishing different polemical relations with the authoritative entity.

natural   ◄────────────────────►   artificial

not-artificial   ◄────────────────────►   not-natural
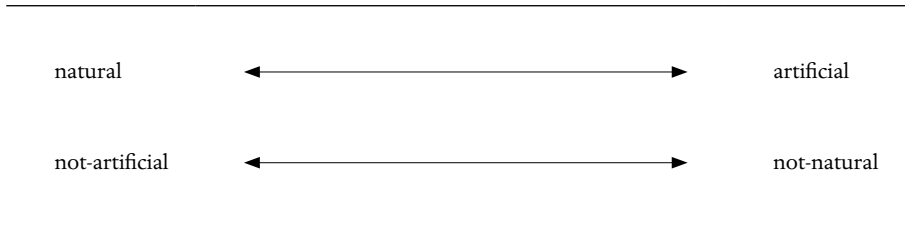
The semiotic square to trace the manipulation tactics of the natural face.

A silicone mask like the one used by Clauvino da Silva — the Brazilian criminal who in 2019 tried to escape from Rio de Janeiro's prison, wearing a mask of his sister's face — can be associated with a practice of circumvention, configured as a *camouflage*, to the extent that the natural face has been hidden and replaced by another one, which has been *produced*. In this case, the elusion marks a transition from a *natural* face to an *artificial* one.

The masks created by Leo Selvaggio as part of the URME project can also be referred to as the same idea. Likewise, it is the *artificial* face of the artist, transformed into a mask, the one that replaces and camouflages the citizen identity.

A second elusive practice may be constituted by the one that is configured as a manipulation of the natural face with the intent of claiming its irreducibility to the biometric description: for this reason we have chosen to conceive it as a production of a *not-artificial* face.

Unlike the type of previous practice, in CV Dazzle the face is not denied or hidden, instead it remains visible and recognizable by the human subject as a manipulated face. That is to say, it is not a camouflage practice. Rather, the irregular geometric shapes which constitute formal traits of the mask are significant insofar as it identifies with a sort of idiolect, and therefore it is addressed to a specific interlocutor: the video-surveillance camera. The face is *protected* from the gaze of the machine but, at the same time, it is enhanced, declared, exalted for the human gaze.

The group of artists who designed the make-up technique has also promoted, a series of site-specific and silent walk performances (defined in such terms by associating the sonic dimension, or rather the silence, to the visual one, in order to indicate the people invisibility in front of the facial recognition systems).

It is clear that, in the light of these facts, the manipulative acts of the

face cannot be reduced to a mere practice of camouflage and elusion, but they are inscribed in a more complex and articulated semiotic process, in which collective and urban participation is associated with an ideology of artistic resistance against a governmental system.

Finally, a third type of elusive practice can be constituted from all the set of urban protests, violent or peaceful ones, in which the natural face of the protester is covered and *denied*, but not replaced with another one.

For instance, when the members of the activist group Fight For Future[18] were protesting in front of the United States Capitol in Washington against the massive adoption of facial recognition technologies, they wore wearing white overalls, sunglasses and headgears. The essential point here is that the protester's natural face is not recognizable because it has been denied and covered.

The same is true for the protesters who chose to cover their face with scarves or ski masks: the face, in these cases, is not reinvented, recreated or artistically produced. It is denied and the dialog is interrupted, since this practice shatters the Western cultural rule where the face must be shown in public places.

In this sense, this type of manipulation takes the form of a transition from the *natural* face to a *not-natural* face. Referring to De Certeau, unlike previous typologies, this is the only one that is not configured as a tactic of resistance; rather it is a mere compliant one, to the extent that it constituted a rejection and a negation of the face itself, and therefore of the system of biometric writing represented by facial recognition technologies.

7. Conclusions

The categories of masks analysed in the present article provide a different point of view on the entire spectrum of surveillance systems. They have been conceived as activators of collective urban rituals, able to lead citizens and protesters to show their masked faces in order to elude facial recognition software. These masks still work as meaningful devices allowing the wearer to reach other levels of experience by means of the dialogical relation experienced with the mask itself. However, such elusions do not

18. www.banfacialrecognition.com (accessed on 15 June 2020).

simply occur by suppressing, covering or cancelling the wearer's identity: the semiotic operations are rather concerned in understanding and managing the ubiquitous technological artefacts.

Although the present article does not consider the socio-cultural context in which the phenomena related to the use of these masks occur, it would however be important to take into account the relationship between these masks with the work of artists and conceptual researchers.

Art and design are the privileged fields of experimentation of this type of masks; however, in these cases, such practices are not strictly oriented to the fictionalization of the self, or to the creation of another identity, as in the case of traditional ritual or theatrical masks. They are rather oriented to the spectacularizing of the denunciation act, which is enriched with aesthetic qualities and performative values, and to the enunciation, understood as a visible feedback to an invisible communicative process — that of the surveillance — which, through the artistic act, becomes visible and therefore aware and questionable.

Underlining the subversive potential of masking, this article aimed at inquiring about the current processes in which shape-shifting is no longer an act reserved to extraordinary events but a strategy based in aesthetical, performative and ritualistic operations, in order to preserve one identity while projecting symbolical cultural artifacts. This, however, opens a variety of questions: could this represent a shift from Macho's facial society into a mask(ed) society? Or is the fate of the face, in the age of hypermedia, irremediably connected to masks?

In critical reflections regarding the massive adoption of artificial intelligence and facial recognition for governmental purposes, the social actors mostly involved in elaborating a response to these phenomena are conceptual artists, academics and activists. Through their own creations, they do not only make the social and technological processes of mass surveillance explicit, but they also enable effective responses to the governmental strategies.

McLuhan's suggestion indicates that "the ability of the artist to side-step the bully blow of new technology of any age, and to parry such violence with full awareness, is age-old […] The artist can correct the sense ratios before the blow of new technology has numbed conscious procedures. He can correct them before numbness and subliminal groping and reaction begin" (McLuhan 1964, p. 66).

Several artists — as in the case of Jing Cai Liu, the creator of the Wear-

able Face Projector — started from the assumption that facial recognition software is fallible. For her, it is up to art to examine the technical and social functioning of these technologies and to make them visible for society[19]. As seen in other case studies, clothing can "dazzle" the software with misleading shapes that stop the AI from knowing what it is looking at. At the same time, they support a demystifying discourse, aimed at making citizens and digital media users aware of the role of surveillance in contemporary societies.

The combination between these devices and the conceptual artistic sphere is however particular, considering that what used by governments or corporations is the artist's own expressive instrument to face technology with technology itself.

Such a motivation is very important when referring to the ritual aspect of the contemporary elusive acts of masking. There, art and ritual should not be considered as separated since artists' work is an "attempted expression of transformation" (Merril 2004, p. 18) and "there is the hope that the symbolism and meaning it conveys will generate a sustained alteration of consciousness in which the realization of some higher meaning will make itself known" (*ibidem*).

Bibliographic references

BELTING H. (2017) *Face and Masks*, Princeton University Press, Princeton, NJ.

BERTILLON A. (1890) *La photographie judiciaire : Avec un appendice sur la classification et l'identification anthropométriques. Bibliothèque photographique*, Gauthier-Villars, Paris.

CIPOLLETTA G. (2020) "Ubiquitous Self: From Self-Portrait to Selfie", in G. Guazzaroni and A. Pillai (eds), *Virtual and Augmented Reality in Education, Art, and Museums*, IGI Global, Hershey, PA, 93-115.

DE CERTEAU M. (1980) *The Practice of Everyday Life*, University of California Press, Berkeley, CA.

ECHIZEN I. (2012) *Privacy Protection Techniques Using Differences in Human and Device Sensitivity: Protecting Photographed Subjects against Invasion of Privacy Caused by Unintentional Capture in Camera Images*, NII Press Release,

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19. Jing Cai Liu's comments were part of an interview developed by the authors of this article.

National Institute of Informatics; available at the website https://www.nii.ac.jp/userimg/press_20121212e.pdf (last accessed 15 June 2020).

Galton F. (1892) *Finger Prints,* Macmillan & Co, London.

Hébert L. (2019) *An Introduction to Applied Semiotics: Tools for Text and Image Analysis*, Routledge, London and New York, NY.

Hookway B. (2014) *Interface*, MIT Press, Cambridge, MA.

Holmes A. (2020) *These Clothes Use Outlandish Designs to Trick Facial Recognition Software into Thinking You're Not Human*, "Business Insider"; available at the website https://www.businessinsider.com/clothes-accessories-that-outsmart-facial-recognition-tech-2019-10?IR=T (last accessed 15 June 2020).

Kak S. (2004) *Ritual, Masks, and Sacrifice*, "Studies in Humanities and Social Sciences", 11: 29-44.

Magli P. (2013) *Pitturare il volto: Il Trucco, l'Arte, la Moda,* Marsilio Editori, Venice.

Manovich L. (2013) *Software Takes Command,* Bloomsbury Academic, New York, NY.

Martin E. (2011) *Il Libro dei Simboli*, Taschen, Köln.

McLuhan M. (1964) *Understanding Media*, MIT Press, Cambridge, MA.

Merrill M. (2004) *Masks, Metaphor and Transformation: The Communication of Belief in Ritual Performance*, "Journal of Ritual Studies", 18, 1: 16-33.

Napier D. (1986) *Masks, Transformation, and Paradox*, University of California Press, Berekeley, CA and London.

Pinotti A. (2019) "Procuratori del Sé: Dall'avatar all'avatarizzazione", in T. Gatti and D. Maini (eds), Visual Studies*: L'avvento di Nuovi Paradigmi.* Mimesis, Milan.

Pollock D. (1995) *Masks and the Semiotics of Identity*, "The Journal of the Royal Anthropological Institute", 1, 3: 581-97.

Ponzio A. (2016) *A Mente: Processi cognitivi e formazione linguistica,* Guerra Edizione, Perugia.

Savin-Baden M. and D. Burden (2019) *Digital Immortality and Virtual Humans*, "Postdigital Science and Education", 1: 87-103.

Schiller D. (2020) *On the Basis of Face: Biometric Art as Critical Practice, its History and Politics*, Network Cultures, Institute of Network Cultures; available at the website https://networkcultures.org/longform/2020/06/22/on-the-basis-of-face-biometric-art-as-critical-practice-its-history-and-politics (last accessed 15 September 2020).

Şengün S. (2014) *A Semiotic Reading of Digital Avatars and Their Role of Uncertainty Reduction in Digital Communication*, "Journal of Media Critiques", 1(3): 149-62.

Sheppard S. (2001) *Revealing Masks: Exotic Influences and Ritualized Performance in Modernist Music Theater*, University of California Press, Berkeley, CA and London.

The Peirce Edition Project (ed.) (1998) *The Essential Peirce*, Volume 2: *Selected Philosophical Writings (1893-1913)*, Indiana University Press, Bloomington, IN.

Turner V. (2003) "Social Dramas and Stories About Them", in P. Auslander (ed.) *Performance: Critical Concepts in Literary and Cultural Studies*, vol. 3, Routledge, New York and London, 108-3.

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Enunciation in Contemporary French Prose (Moscow, 2019, in Russian; 2020, in French; winner of the "Pushkin" program of the French Institute in Moscow); in April 2020, she created an International Online discussion platform on her university's website, "Semiotics and Pandemic: conceptualizing major challenges", with the participation and publication in Russian of semioticians from Europe, Middle East, Latin America, Australia. The multilingual book under her editorship, *New normality, new life forms: semiotics in the era of crises* (Moscow, 2021), summed up the discussion.

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