



Baal Delupi\*

# Concealment of the face and new physiognomies

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**Abstract:** Facial recognition technology has enabled governments and private companies to have control of millions of faces in different countries around the world. This becomes dangerous since it threatens the privacy of citizens, which is why different activists demonstrate against this form of control and surveillance using different technological and aesthetic resources to prevent said recognition. This work aims at showing how face concealment can be a powerful semiotic device that can slow down or divert facial recognition technology, configuring new physiognomies. We begin by characterizing the forms of concealment of the face in the contemporary digital age, and then we analyze, from a semiotic perspective, a particular case: the different types of makeup that Adam Harvey proposes so that faces cannot be recognized. The results of the investigation show how this form of face concealment that generates new physiognomies builds political senses of resistance against advanced technology that aims to identify, monitor, and control human faces.

**Keywords:** activists; Adam Harvey; facial recognition; semiotic

## 1 Introduction

Neoliberalism – the current form of capitalism – operates not only from an economic logic, but also from an emotional one, instilling fear and terror sponsored by international and local organizations that promote control and surveillance of the body. In this sense, technology plays an essential role since it enables governments and companies to obtain data from millions of people, whether it is through the use of social media, which gathers information about our tastes and experiences, or through surveillance cameras being installed not only in the more significant avenues of wealthy cities, but also in almost every corner of our public activities. This is reshaping contemporary subjectivities and making us wonder about our privacy – if there is anything left of it.

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Over the last few years, famous series such as *Black Mirror* (2011) and *Years and Years* (2019) or older movies such as *V for Vendetta* (2005) have exposed the dystopian world that lies ahead – one in which we are in part already living – and promises little room for surprise and creativity because apparently it will all be controlled and designed by artificial intelligence. If we think about the outcomes of those audiovisual productions, one may wonder if there may not be a man in a mask who will hack the control system and inspire a community to try and topple the oppressive power, as in *V for Vendetta*, or if we will end up as in episode two of *Black Mirror*, where people live in 215 ft<sup>2</sup> and have to pedal on a bicycle for hours every day to get food, unable to speak against a government that subdues and isolates them using technological control. Maybe it is about both: on the one hand, extreme control and surveillance and, on the other hand, activists that want to overthrow the system creatively and create the crack for a potential escape.

One of the biggest issues we are facing nowadays – and that is dealt with in this paper – is facial recognition, defined as the process by which a person can be recognized using a digital image (Carrasco 2020). This identification links images with other preexisting ones using a refined technology that filters people into categories according to features such as gender, age, weight, and many other characteristics that are programmed by human beings that have their own opinions about what a person is or should be, causing prejudice, racial or of another kind, against which many people have been speaking out for years (Sánchez 2023). The implementation of a facial recognition system implies gathering and processing highly sensitive data. Our face is part of what is known as “biometric data,” a concept that includes all data referring to the body as an identifying sign. This data is particularly sensitive since, unlike other data such as address or name, it cannot be easily changed. In surveillance activities in the public space, its use entails the massive and indiscriminate gathering of highly sensitive information and potentially allows the creation of detailed profiles of our habits. When used for the verification of identity, for instance in the context of an administrative procedure, it can usually be replaced by other methods that are less invasive of our rights.

But before we reflect on the issues that this identification device causes in society, it is important to show a few examples of places in which facial recognition has served different purposes:

In the year 2019, during the protests held in Chile, Hong Kong, and India, to name a few examples, facial recognition systems were an essential tool used by the police to keep watch and capture activists protesting for various inequalities. Australia, for its part, was the first country to use that system as a containment strategy for COVID-19, monitoring sick people and their close contacts. The United States was a pioneer in this technology, which – as expressed in a report by *The New York Times* (Majoo 2019) – is being used by over 600 security agencies and private companies.

Many of them used algorithms that wrongly identified women of African descent 35 % of the time, but for white males, the error occurred in just 0.8 % of the cases. In Argentina, during the COVID-19 pandemic, people could perform a variety of administrative procedures and display their vaccination certificate using facial recognition with an app called Mi Argentina. One way or another, different governments from around the world are using this system to streamline bureaucratic procedures and capture fugitives from the law, but also to restrict the freedom of expression of protesters and imprison those who disagree with the dominant system.

The dangers of facial recognition are numerous, but on this occasion, it is relevant to mention a few of the most important ones: a) storage of citizens' data without their consent; b) racial and sexist bias – among others – which is ingrained in these identification systems; c) sale of data to companies or enterprises; d) control and surveillance that may be exerted by different governments against people who disagree with certain “rules”; and e) the high rates of false positives it produces incriminating innocent people.

These are the reasons for the emergence of pro-privacy movements and various activists and artists who use masks, ski masks, makeup, and other semiotic devices so as not to be recognized by the system. The most outstanding are the masks of Anonymous, Leonardo Selvaggio, and Gillian Wearing; the face projector by the artist Jing-Cai Lu, Adam Harvey's hair styling, the Juggalos' makeup, and the Privacy Visor glasses created by Japan's National Institute of Informatics, among many others. These people have in common the rejection of facial recognition and the creative use of design for the concealment of the face to escape the logic of the algorithm.

In this way, novel forms of face concealment by means of different devices propose new physiognomies. The results are heterogeneous faces that hide an identity and show another one. This is a way of transforming oneself, of configuring a presence-absence that not only avoids facial recognition, but also proposes new ways of exposing the face. What do they choose to show? Under which aesthetics? How are pro-privacy activists' masked faces presented? And perhaps what most interests us: what political meanings does that form of resistance construct? These are some of the questions that this paper tries to answer. With that aim, we consider recognized proposals about camouflage and concealment of the face by semiotic authors such as Fabbri (2012) and Bakhtin (1987) and more contemporary ones such as Benali (2020), Subirats (2011), Leone (2021), and Gramigna (2022).

According to what we have said, the purpose of this paper will be to show how face concealment as resistance to facial recognition creates new physiognomies in the current digital era. With that goal, we will characterize face concealment, mainly as a form of protest, and then focus on a particular case of analysis: the innovative hairstyling by Adam Harvey, who wanted to “hack” the main algorithms of facial recognition and turn faces into a set of pixels that are totally irrelevant to them.

We consider Harvey's looks as discourses ingrained in a particular state of society (Angenot 2010) in constant dialogue and friction with previous and simultaneous discourses (Bakhtin 2005). These signs-faces reveal topics (new looks) and world visions (the clear stance against social recognition) versus the dynamics of identification. Additionally, based on Deleuze and Guattari's proposal (2012), we understand that, under the concept of face, two fundamental axes of significance and subjectivity appear. These axes are interconnected in a device that alternates and brings together semiotic and stratification processes. In this way, faces, their structure, and their distribution become a policy, or rather a macro and micro policy, as a correlation between the molar and the molecular that are directly connected to the current capitalist production, to power, society, the State, and the media (Castro-Serrano y Fernández Ramírez 2016). If the system of face, or more precisely, the faciality, in effect carries out a whole policy, undoing it will also carry it out, as well as moving past the face, restructuring its organization, and creating becomings. That is exactly what Adam Harvey tries to do when he creates new physiognomies in the current digital era to deviate facial recognition. It is about faces that express a shift from the face of power that configures a standardized and homogenized subject norm (Angenot 2010) since “[d]ismantling the face is the same as breaking through the wall of the signifier and getting out of the black hole of subjectivity” (Deleuze and Guattari 2012: 192).

## **2 The – political and aesthetic – power of concealment of the face in the digital era**

Concealment of the face goes back to Greek comedy, together with the ideas of appearance, falsity, masking, and transformation, every time a different identity is assumed, whether it is human or divine. Aristotle (2006 [1963]) was aware of the fact that masks were artificial and satirical outfits, both in comedy and tragedy, against so-called inferior and ridiculous people, whether they were adversaries or heroes. Regarding the Middle Ages and the Renaissance, Bakhtin (1987) studies the configuration of carnivals in the works of François Rabelais and analyzes the concealment of the face using masks as an expression of transferences, metamorphoses, a transgression of the natural borders, mockery, and nicknames. Masks create a relationship between reality and the individual image. The re-masking, then, does not hide, but rather multiplies the subject, it reconnects it with other worlds, transforms it, and strengthens it. Fabbri (2012), in more recent times, analyzed the forms of concealment and camouflage in connection to the systems of representation, while Leone (2021) researched how countenances are also the somatic place where borders, which exist between emotions and their expressions, are manifested.

Gramigna (2022), on his part, delves into the meaning of costumes and deception in the history of ideas as coercive methods to manipulate and exercise power on others.

Beyond these references, and acknowledging the importance of Greek, mortuary, Middle Ages, and Renaissance carnival masks, among many others, this paper explores the forms of concealment of the face in the second decade of the twenty-first century with digital advances and technological-algorithmic control. In 2011, the cover of *Time* magazine recognized the “Protester” as Person of the year. It featured the masked face of a protester as a symbol of solidarity and resistance against the authoritarian powers. Global demonstrations have used masks as devices to hide and show identities that are essential for the construction of meaning in a collective cause. The proposal is to create a powerful image of demonstrations and avoid authoritarian persecution; masks often move away from the idea of individual identity.

Concealment of the face as a form of social protest in the digital society has been studied by different authors, among whom we highlight Benali (2020), who refers to the political and artistic power of the use of masks to avoid recognition, and Subirats’ (2011) research on identity and non-identity, which allows the use of masks to cover the eyes as a play of symbologies. Masks are considered, from these perspectives, a polyvalent entity that operates as a mismatch. Masks affirm and negate; they are a presence and an absence. Wearing a mask is a metamorphosis; it produces a physical transformation by creating a new “face,” as well as a semantic one by creating new meanings. Masks transform the way a person becomes visible or invisible, and they cause effects that go against intuition in political communication, leading to the spread of misinformation, ideological labels, collateral damages, and anarchism. That is where their political power for social protests and activism lies (Barroso 2023).

Beyond examining masks (such as the one worn by Anonymous), ski masks (as worn by Zapatistas), and masks that cover only the eye (as worn by many activist groups and artists in public spaces) as fundamental devices in the concealment of the face, this paper focuses on a particular form of face camouflage intended to avoid facial recognition: hairstyles and makeup that allow people to avoid being identified by algorithmic patterns, without covering the whole face.

Faces can be analyzed not only from a semiotic perspective, but also from a philosophical, anthropological, or performance studies perspective. It is about having an inter- and transdisciplinary approach to the social phenomena we experience, especially in a digital era, when technological advances require all our attention and tools. Hence, we will connect Angenot’s (2010) and Bakhtin’s (1987) semiotic theories with Deleuze and Guattari’s (2012) proposal. The first will allow us to understand the faces designed by Harvey as signs embedded in a given state of the social discourse in permanent tension and dialogue with other signs. Besides, Bakhtin’s research on masks makes it possible to analyze the concealment of the face as a mismatch and a double identity. Deleuze and Guattari, for their part, provide tools to analyze the dismantled

face in current capitalism, which will facilitate the identification – in relation to Angenot's theory – of these faces as counter-discourses against the prevailing hegemonic discourse.

### 3 Creation of new physiognomies with Adam Harvey's hair styling and makeup

Adam Harvey is an artist and applied researcher born in the United States and based in Berlin, Germany. His works are focused on computer-based vision, privacy, and surveillance technologies. He graduated from the Interactive Telecommunications Program at New York University (2010) and from Pennsylvania State University (2001). Since then, he has published in several media such as *The New York Times*, *Allgemeine, Nature*, *New Yorker*, *Washington Post*, *Le Monde*, *The Guardian*, and on the BBC, among others. His exhibitions have been displayed in museums around the world, from the USA to the United Kingdom, Seoul, Istanbul, and even Brazil. He is considered one of the most prestigious researchers today; and in this work, we focus on his computer vision camouflage project, CV Dazzle, which the author developed for his thesis in the Interactive Telecommunications Program published in 2010.

This project uses patterns to separate the expected features searched for by facial recognition algorithms and proves that faces can exist in a state of dual perception: visible for humans, but invisible for machines. It works by altering the expected light and dark areas of faces, and also certain objects, exploiting the vulnerability of a computer vision algorithm (Harvey 2020). It all comes to diverting recognition of the patterns installed in different face detection programs. However, it is worth clarifying that CV Dazzle is not a specific pattern, but rather a camouflage strategy to evade the evolving computer vision systems, which is why it is important that also the concealing devices are updated and the methods and strategies of deviation are modified so they can adapt to the new algorithms.

The designs are created using makeup, hair styling, and fashion accessories that can be customized according to the style of each user, and, maybe most importantly, they are low-cost or free, i.e., affordable for most people.

In this way, new physiognomies are created to divert specific facial recognition systems, looks that must be adapted to the technology they are trying to avoid and require being attentive to the updates made by the algorithmic pattern. The same holds for avoiding other kinds of technology, for which the concealment strategy would have to be modified to achieve algorithmic vulnerabilities based on probabilities, i.e., finding the right appearance and showing up one step below the detection threshold (Figure 1).

The images show the physiognomies created by the activist artist. You can see faces covered by parts of the hair, which are dyed in different colors, and a few



**Figure 1:** Two looks created by Harvey (2020).

accessories complement the new image displayed by the models. Brown goes with certain accessories, and blue with others, thus making strategic combinations to deconstruct the face that may be captured by facial recognition using the image storage that it has on every person.

In other examples, basic everyday items are used, such as a hairpin. The goal – at least in these first looks – is to make the face alteration as “adaptable” as possible to the legitimized and recognizable cultural signs. Its intent is not to create a face outside the standards, but rather to create a carefully crafted physiognomy that allows people to walk in public without being recognized. However, there is no doubt that these looks may draw attention, especially in more conservative cities; and even though they may not have the same effect as a mask that completely covers the face, they are far from what “is expected” in a face in a public space (Figure 2).

One way to analyze the effectiveness of this creation is the heat map that shows which areas of the face region are overlooked or activated with the face detection algorithm: “The saliency map is generated separating each stage of the Haar cascade classifier and measuring the confidence score calculated for that stage, then merging the regions of the sliding window to produce a heat map” (Harvey 2020: n.p.).

You can do a basic face concealment schema to avoid Viola-Jones facial recognition following the pieces of advice of the Harvey Project: 1) makeup: apply makeup that contrasts with skin color – light colors over dark skin and vice versa; 2) nasal bridge: it is important to hide the nasal bridge area; 3) eyes: partially hide one or both eye regions; 4) masks: instead of hiding the face completely, modify the contrast using makeup and accessories; 5) head: darken the elliptical shape of the head.



**Figure 2:** Heat map (Harvey 2020).

Going back to the semiotic considerations of Angenot, Adam Harvey's faces are positioned as counter-discursive signs in that they resist the dominant power to survive. They are competing for meaning with other signs, i.e., acceptable and legitimized faces in a given state of social discourse where algorithm technology seems to control all areas of social life. In a "controllable" world where everything must be standardized as a result of strict surveillance, creating makeup and accessories for shaping a face that departs from the epochal subject norm (Angenot 2010) becomes a counter-discourse.

It thematizes a look and expresses a vision of the world that we call "pro-privacy" against the identification pattern. Regarding Deleuze and Guattari's ideas, it is relevant to observe the result of the faces proposed by Harvey as a deviation and a deterritorialization that is territorialized to work under other conditions.

From these perspectives, it is possible to reflect on the face as a politics that disputes meaning and stands outside of social discourse. The forbidden face that reincarnates to escape surveillance devices.

Harvey's faces allow us to think about new forms of concealment and exposure in the digital era: the face is hidden to avoid detection, while a particular aesthetic device that can vary according to the possibilities of algorithmic alteration is shown. These are epochal signs that are in communication and in competition with other signs – faces that are legitimized by the system, but are also deviated and dismantled.

This poses several questions: What will faces be like in the future? From what other forms of control and surveillance will we have to hide? And what mechanisms will allow us to deviate from such devices?

Harvey's faces are a means of resisting and insisting against facial recognition mechanisms. Their performative character does not constitute a fight for future worlds; these are signs that convey their fight as they are fighting for it, using new physiognomies. They are a becoming-other (Deleuze and Guattari 2012), representing the possibility of becoming in the present, saying that, even if they do not have an accurate configuration or a specific endpoint, they still function as a semiotic connectivity in that they constitute a means of action that is in dialogue with others. In Bakhtin's words, these faces convey transferences, metamorphosis, the breaking of natural borders, and intelligibilities. Therein lie their political and artistic power. Harvey's works are permanently connected to other artists and activists who look for various methods of concealment of the face. This creates resistance as an emancipatory policy of non-exclusion, since identities are created without intending to exclude others. Harvey's faces, then, are signs which connect to others in a counter-discursive semiotic becoming.

These faces as a becoming-other displace typical cognitive maps to propose a utopia in action, a future that is already here and that insists on repressive forms. Artists like Harvey know that it is very difficult to stop facial recognition. In fact, he is constantly saying that technology precedes his designs, but what is relevant about his models is precisely the persistence as resistance. We should also point out that double identity is manifested through the concealment of the biological identity characteristics of people while exposing other characteristics designed by the artist-activist.

The models we analyze show different uses of hair and placement of the cheekbones, eyebrows, and mouths, which are transformed with makeup and accessories. Let us imagine that one day we could see many of these models on the streets, people who are tired of their faces being data for the market and governments and who decide to come out to the public space with new physiognomies. Suddenly, we could see four or five people with these looks in a coffee shop, boarding a plane, or maybe on television. And it does not seem weird to imagine this, since one of the advantages of Harvey's designs is their low cost, which makes them affordable for many people, making it clear that data privacy is a right and that no technological-algorithmic system should violate it.

## 4 Conclusion

This paper is a mere approximation to the issue of facial recognition and the concealment of the face as a form of protest. We aimed, firstly, at making a brief contextualization and characterization of the technological-algorithmic use of facial

recognition as part of the state of the social discourse of the times. Then, as a deviation and a shift proposal, we analyzed a particular case: makeup and hairstyles created by the activist artist Adam Harvey that construct political and aesthetic meanings as facialities that disrespect the norm, thus denouncing the dangers of facial recognition systems.

Concealment of the face is not something new. As we have said, it dates back to Greek times, from the Middle and Modern Ages to the digital era. Art and activism have always been at the forefront of the creation of semiotic devices of camouflage and concealment, so it is not surprising that an activist like Harvey was able to create, using his technical knowledge, such powerful designs that deterritorialize the face itself.

Harvey's faces construct political and aesthetic resistance meanings against the status quo. These are faces that escape what is known and accepted to search for new horizons. They shift to reterritorialize themselves under certain conditions. They are counter-discourses that allow us to continue dreaming about another world of possibilities, a world where not all faces can be identified under the facial identifier.

Concealment of the face in the digital era creates new physiognomies, heterogeneous countenances that hide an identity while showing another one. It is a way of transforming, of configuring a presence-absence that not only avoids facial recognition, but also proposes new forms of exposing the face.

Finally, it is important to highlight the importance of comparing this case with other strategies of camouflage and concealment of the face, as well as delving into the advances of facial recognition going into the future. This topic, as we can see, far from having an expiration date, is having more and more impact on the current digital era, a fateful moment when power is becoming even more centralized, but the forms of resistance are also multiplying.

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## References

- Angenot, Marc. 2010. *El discurso social. Los límites históricos de lo decible y lo pensable* [Social discourse: The historical boundaries of the sayable and the thinkable]. Buenos Aires: Siglo XXI.
- Aristotle. 2006 [1963]. *Poética* [Poetics]. Buenos Aires: Alianza.
- Bakhtin, Mikhail. 1987. *La cultura popular en la Edad Media y el Renacimiento* [The popular culture of the Middle Ages and the Renaissance]. Buenos Aires: Alianza.

- Bakhtin, Mikhail. 2005. *Estética de la creación verbal* [Toward the aesthetics of the word]. Buenos Aires: Siglo XXI.
- Barroso, Paulo. 2023. The semiotics of the mask: To reveal by concealing and conceal by revealing. In Luísa Magalhães & Cândido Oliveira Martins (eds.), *Masks and human connections. Disruptive meanings and cultural challenges*, 101–113. London: Palgrave Macmillan.
- Benali, Sofia. 2020. *El uso de la máscara en las manifestaciones. Un proyecto pictórico. Trabajo final de grado* [The use of masks in protests. A pictorial project. Final dissertation]. Barcelona: Facultat de Belles Arts de Sant Carles.
- Carrasco, Manuel Izquierdo. 2020. La utilización policial de los sistemas de reconocimiento facial automático [Police use of automatic facial recognition systems]. *Revista IUS ET VERITAS* 60. 86–103.
- Castro-Serrano, Borja & Cristian Fernández Ramírez. 2016. Rostro deshecho. Por un arte menor y sus alcances políticos en Deleuze [Mismantled face. Towards a low art and its political scopes in Deleuze]. *Revista de Humanidades* 36. 41–68.
- Deleuze, Gilles & Félix Guattari. 2012. *Mil mesetas. Capitalismo y esquizofrenia* [A thousand plateaus: Capitalism and schizophrenia]. Valencia: Pre-textos.
- Fabbri, Paolo. 2012. Semiótica y camuflaje [Semiotics and camouflage]. *deSignis* 20. 37–43.
- Gramigna, Remo. 2022. Faces in disguise. Masks, concealment, and deceit. *Topoi* 41. 741–753.
- Harvey, Adam. 2020. CV DAZZLE. <https://adam.harvey.studio/cvdazzle/> (accessed 20 February 2023).
- Leone, Massimo. 2021. *Mala cara: normalidad y alteridad en la percepción y en la representación del rostro humano* [Bad face: Normality and alterity in the perception and representation of the human face]. *Revista Signa* 30. 191–211.
- Majoo, Farhad. 2019. *El reconocimiento facial debe postergarse* [San Francisco is right: Facial recognition must be put on hold]. *The New York Times*. <https://www.nytimes.com/es/2019/05/21/espanol/opinion/reconocimiento-facial-privacidad.html> (accessed 24 February 2023).
- Sánchez, Eduardo. 2023. *Inteligencia artificial, los peligros del reconocimiento facial* [Artificial intelligence, the dangers of facial recognition]. *Cambio Colombia*. <https://cambio colombia.com/articulo/tecnologia/inteligencia-artificial-los-peligros-del-reconocimiento-facial> (accessed 24 February 2023).
- Subirats, Joan. 2011. *La no identidad como identidad* [Non-identity as identity]. *El País*. [https://elpais.com/diario/2011/07/10/catalunya/1310260042\\_850215.html](https://elpais.com/diario/2011/07/10/catalunya/1310260042_850215.html) (accessed 27 February 2023).

## Bionote

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