THE HYBRID FACE

PARADOXES OF THE VISAGE IN THE DIGITAL ERA

Edited by
Massimo Leone

The Hybrid Face

This original and interdisciplinary volume explores the contemporary semiotic dimensions of the face from both scientific and sociocultural perspectives, putting forward several traditions, aspects, and signs of the human utopia of creating a hybrid face.

The book semiotically delves into the multifaceted realm of the digital face, exploring its biological and social functions, the concept of masks, the impact of COVID-19, AI systems, digital portraiture, symbolic faces in films, viral communication, alien depictions, personhood in video games, online intimacy, and digital memorials. The human face is increasingly living a life that is not only that of the biological body but also that of its digital avatar, spread through a myriad of new channels and transformable through filters, post-productions, digital cosmetics, all the way to the creation of deepfakes. The digital face expresses new and largely unknown meanings, which this book explores and analyzes through an interdisciplinary but systematic approach.

The volume will interest researchers, scholars, and advanced students who are interested in digital humanities, communication studies, semiotics, visual studies, visual anthropology, cultural studies, and, broadly speaking, innovative approaches about the meaning of the face in present-day digital societies.

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Routledge/FACETS Advances in Face Studies
Series Editor: Massimo Leone

Routledge/FACETS Advances in Face Studies offers a pioneering interdisciplinary collection of research. The series responds to the changing meaning of the human face: through the invention and diffusion of new visual technologies (digital photography, visual filters, as well as software for automatic face recognition); through the creation and establishment of novel genres of face representation (the selfie); and through new approaches to face perception, reading, and memorization (the 'scrolling' of faces on Tinder).

Offering an interdisciplinary but focused approach in the fields of communication studies, visual history, semiotics, phenomenology, visual anthropology, but also face perception studies and collection, analysis, and social contextualization of big data, the series will concentrate on the cultural and technological causes of these changes and their effects in terms of alterations in self-perception and communicative interaction.

The series will appeal to scholars and advanced students in the fields of communication studies, digital cultures studies, digital humanities, visual communication, linguistic anthropology, semiotic anthropology, cognitive linguistics, semiotics, ethnomethodology, cultural theory, cultural studies, visual studies, performance studies, as well as philosophy of culture, hermeneutics, and ritual studies.

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The Hybrid Face

Paradoxes of the Visage
in the Digital Era

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Contributors

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relationship between body-perception-datafication, the new advent of artificial intelligence, and the languages of art in the contemporary era.

Elsa Soro is currently a professor at the CETT-UB: CETT Barcelona School of Tourism, Hospitality and Gastronomy, Escuela Universitaria de Hotelería y Turismo in Barcelona. Prior to this position, she served as a postdoctoral researcher at the University of Turin, Italy, where she was associated with the ERC Consolidator Project FACETS. Additionally, Elsa Soro has been actively involved with the Internet Interdisciplinary Institute (IN3) at the Open University of Catalonia, Spain, and is an esteemed member of the Digital Commons (DIMMONS) research group. Following the completion of her doctorate, she worked as a consultant for various private foundations and public institutions, both in Italy and internationally, while also dedicating herself to teaching in the fields of semiotics, events management, and tourism marketing. Her scholarly contributions, which span multiple languages including Italian, English, Spanish, and Catalan, have been published in various forms such as articles, book chapters, and edited volumes. Her research primarily focuses on exploring the intersection between spatial practices and digital self-representations. She participated as a speaker at numerous conferences held in Italy, Spain, Portugal, Denmark, Estonia, Argentina, and China.

Federico Bellentani is a postdoctoral researcher at the University of Turin within the ERC Consolidator Project FACETS. His research interests range from semiotics of culture, cultural geography, planning theory, national landscape imagery, and digital culture. He received his PhD from Cardiff University (2017), and he holds an MA in semiotics from the University of Bologna (2013). Today he also serves as the vice president of the International Association for the Semiotics of Space and Time and as a head of marketing and communications at Injenia, an Italian ICT company specialized in artificial intelligence with a strong background in semiotics. He teaches urban design at the University of Bologna and digital marketing at the University of Ferrara. He published a book and over fifteen articles and has presented his research at numerous international conferences. Among them, he delivered a keynote speech at a conference on hybrid security threats, sharing a panel with the president of Estonia, Kersti Kaljulaid.

Preface[1]

The naturalness or artificiality of faces exists on a continuum rather than as distinct categories. While biological faces are influenced by cultural and societal factors, face representations always maintain a connection to their underlying biological foundation. However, throughout history, humans have been fascinated by the concept of creating completely artificial faces, devoid of any human intervention. This enduring idea dates back to ancient times. Various manifestations of this concept include spontaneous depictions of faces in nature, now classified as instances of pareidolia, facial images perceived as originating from transcendence, and the artistic renditions of faces. Today, we are captivated by the utopian vision of photorealistic digital portraits, generated through the cutting-edge technologies of deep learning and artificial intelligence (AI). This interdisciplinary anthology comprises a collection of chapters that explore diverse traditions, facets, and indicators of humanity's utopian pursuit of the creation of an artificial face.

The proposed collection emerges from the interdisciplinary intersection of semiotics, neurophysiology, cognitive psychology, visual history, digital art, and AI. It stems from the extensive research conducted in the framework of the ERC Consolidator Grant project titled FACETS: "Face Aesthetics in Contemporary E-Technological Societies". Delving into the realm of artificial faces, the collection addresses a specific inquiry. The concept of nonhumanly crafted facial images dates back centuries. Firstly, human beings display a neurophysiological inclination toward pareidolia, which refers to the tendency to perceive faces in natural surroundings such as tree trunks and clouds. Additionally, ancient sources across various cultures chronicle prodigious appearances of facial images in stones, gems, landscapes, and more. Religious contexts often attribute these miraculous facial images, known as "acheiropoietai", to manifestations of deities. The collection comprehensively explores this captivating tradition while drawing comparisons to contemporary trends in the development of "transhuman portraits". This exploration encompasses the technological realm,

including generative adversarial networks and robotics, the medical field with a focus on aesthetic surgery and face transplantation, as well as the arts, particularly highlighting the thought-provoking creations of modern digital artists who delve into the realm of "artificial faces".

The face, being an immensely intricate and multifaceted entity, has consistently captivated the attention of societies and cultures, as evident in their texts, representations, customs, and laws. Its profound significance as a social and cultural cornerstone renders it impossible to fully encompass its complexity through a single overview. Consequently, the chapters contained within this collective volume have been carefully selected to focus on a more delimited theme. This theme explores the notion that the face, the visage, can be an outcome not only of natural creation but also of artificial creation ex nihilo. The roots of this idea can be traced back to ancient times, such as the biblical depiction of the human face, formed from shapeless clay, created in the image and likeness of the divine. Over the course of Western cultural history, this notion has branched out into intricate filiations, culminating in the contemporary aspiration to generate digital facial images autonomously through machines with no inherent need for biological or ontological correspondence to the face. Each chapter in this collective volume engages in thoughtful contemplation of this issue, which holds strong ethical implications. The detachment of a disruptive image like the face from its corporeal substratum, transforming it into a pure simulacrum constructed by machines, raises pertinent questions and calls for careful examination.

In the first chapter, Marco Viola studies the biological and social functions played by the face (or by the organ it hosts), tracing them back to their evolutionary history. The face turns out to be *functionally overcrowded*. Then, drawing on some notions from the philosophy of artifacts, the chapter sketches a theory and a taxonomy of masks. Masks are construed as artifacts whose function is to interact with some of the functions of the face. They are sorted into different categories, depending on which functions of the face they are intended to act upon. Viola also considers some interesting phenomena that complicate functional attributions. These considerations are then applied to a specific type of mask, namely the medical face mask.

In the second chapter, Gabriele Marino delves into the emotional state of frustration brought about by the outbreak of the new coronavirus/COVID-19 pandemic in December 2019. In particular, it examines the iconic Internet meme of Captain Picard from *Star Trek* performing a facepalm, wherein he covers his face with his left hand as a gesture of exasperation. This meme serves as a cultural sign that epitomizes the prevalent sentiment. The chapter adopts a semiotic perspective to explore the pandemic as a form of discourse, encompassing the concept of the "infodemic", the

dynamics of online virality, and the role of Internet memes. It also examines the transformative effect of the pandemic on two body parts traditionally considered 'natural': the face and hands. The notion of "parafaciality" is introduced, referring to the transformation of the face into a cultural interface through various accessories. Through the collaborative involvement of hands, the face's inherent naturalness is called into question, reshaping it into a semiotic mask capable of visually and haptically (through touch) embodying the spirit of the times (*Zeitgeist*). However, in the "time of the virus", one was compelled to refrain from touching one's face to prevent contagion, which means that one had to relinquish the iconic facepalm gesture. This deprivation would be doubly frustrating, as people were unable to express their frustrations as fully as they would wish.

In the third chapter, Cristina Voto delves into the intricate sociocultural dynamics of artificial intelligence (AI) systems and their role in conveying the concept of otherness. The focus is on the impact of automated facial images in shaping the sociocultural communication of otherness, as the face and its representation through visual artifacts serve as powerful tools for displaying and defining identities. To accomplish this goal, the chapter proposes a comprehensive exploration of Emmanuel Lévinas' seminal work on the phenomenology of the face (1961), complemented by Judith Butler's insightful interpretation of his ideas (2004). By bridging these philosophical perspectives with contemporary visual culture, Voto establishes an epistemic framework that enables one to navigate the realm of facial images. Within this framework, the chapter uncovers a range of processes that encode the notion of otherness, encompassing everything from media portrayals of adversaries to the proliferation of para-facial expressions in the modern era. Moreover, recognizing the arts as a privileged domain for reverse engineering and reconfiguring established patterns, the chapter focuses on the analysis of an artistic practice that sheds light on how otherness is effectively communicated within AI systems.

In the fourth chapter, Enzo D'Armenio introduces the concept of a "dramaturgy of the face" to elucidate the nature of images and videos shared on social networks. The analysis begins by examining the mechanisms underlying the construction of value, which involves the accumulation and transformation of quantitative appreciation expressed through actions such as likes, follows, and shares into monetary and reputational value. Subsequently, the focus shifts to the experiential and algorithmic pressures that shape identity, necessitating the management of these pressures through the use of image-based identity narratives. Lastly, the study explores the relationship between the semiotic qualities of the face and those of images by comparing two classical genres with two genres prevalent on social networks. On the one hand, it compares the artistic self-portrait canon to selfies and identity images shared on social platforms.

On the other hand, it contrasts the transformation of actors into fictional characters with the performances of streamers on Twitch.

In the fifth chapter, Maria Giulia Dondero explores five distinct theoretical attitudes toward portraiture, each representing a different historical period and artistic perspective. These attitudes include (i) the Renaissance painting tradition, (ii) the Baroque era tradition, (iii) Francis Bacon's approach to depicting heads in portraits, (iv) Roland Barthes' conception of photographic portraits as discussed in his seminars at the Collège de France, and (v) the utilization of contemporary facial images for creating deepfake videos. These theoretical attitudes serve as performative manifestations of different portraiture ideologies and are exemplified through renowned portraits. The main objective is to investigate the evolution of the figure-ground relationship over centuries and analyze how these five types of portraits mold and remodel the interplay between the entirety of visual composition and its individual elements. Through this analysis, insights are gained into the connection between portraits and diverse notions of individuality.

In the sixth chapter, Antonio Dante Santangelo focuses on analyzing the portrayal of the protagonists' faces in three films: *La vie d'Adèle – Chapitres 1 & 2* (Kechiche, 2013), *Jeune femme* (Serraille, 2017), and *Chiara Ferragni – Unposted* (Amoruso, 2019). These films serve as symbols reflecting the contemporary mindset, particularly within the Italian cultural context. Each of these works holds significance as they embody two contrasting cultural models: the vagabond and the self-made individual. The utilization of these cultural models and their implications shed light on the evolving strategies that are employed to attribute meaning to existence. Rather than perceiving meaning as a predetermined path or a life project to relentlessly pursue, it is now seen as something discovered retrospectively, interwoven within the multitude of experiences one encounters. To support this argument, the analysis extends beyond the films themselves to encompass their reviews and connections with other texts, providing a broader contextualization within the current cultural landscape.

In the seventh chapter, Bruno Surace delves into the concept of a unique type of degenerate face, characterized by its empty and vacant nature, devoid of any discernible features. The analysis begins by examining the phenomenon of Slender Man, an Internet-born urban legend that originated from a "creepypasta" and has evolved into a powerful digital imagery icon, spawning countless textual variations and even inspiring film adaptations. By studying Slender Man, whose face/non-face represents its most distinct attribute, one can analyse the significance of the face within the realm of viral and memetic communication. Despite being effectively nullified, Slender Man's face encompasses a multitude of disparate meanings. Drawing from this case study, the chapter outlines a specific theory

concerning the extreme limits of the face as an empty surface, drawing comparisons between Slender Man and similar figures in literature, such as Marcel Schwob's *Sans-gueules*, as well as exploring the presence of featureless faces in audiovisual and cinematic works. This analysis culminates in the development of an initial repertoire of films featuring characters with no discernible facial features, emphasizing the existence of significant cultures of the non-face alongside cultures of the face.

In the eighth chapter, Remo Gramigna wonders how aliens look like and whether they have a *face*. The chapter explores "imaginary faces" by unpacking a plethora of sources, from media studies to conspiracy theories, including cultural anthropology, as well as semiotic theory (sign-based theories of semiosis). The *topos* of the alien, thought of as a form of extraterrestrial life, has a long pedigree and an enigmatic status. This is a very complex and controversial subject, almost without limit. Today, Gramigna claims, the archetype of the alien has seen a reemergence through the widespread use of digital media and the massive proliferation of "conspiracy theories". Such matters are at the forefront of discussion, arousing interest among experts and ordinary people alike. In some of these theories, the existence of extraterrestrial entities is supported, and the present, past, and future role of alleged "alien races" in the evolution of human beings is discussed. These accounts pay attention to the outward characteristics of extraterrestrials and their physical appearance, including facial features, to identify them and distinguish one from the other. One could, therefore, speak of a phenomenology of the alien which is traceable in contemporary conspiracy discourse at a crossroads between ufology, alternative history, anthropology of aliens, and personal accounts of "abduction experiences".

In the ninth chapter, Gianmarco Thierry Giuliana focuses on the semiotic analysis of the video game *Nier: Automata*, specifically examining how the various occurrences and forms of digital faces attached to protagonist figures contribute to the attribution of personhood and even humanity to androids, robots, and drones. The central theme explored in the chapter is the contemporary trend of extending the semantic category of "human" to nonhuman agents with a particular emphasis on the rhetorical function of faces and digital technology in this process of transhumanist re-semantization and revalorization. By delving into Yoko Taro's transhumanist narratives and the rhetoric employed in the portrayal of digital faces, Giuliana uncovers how the contemporary inclusiveness of the human category reflects a transcendental understanding of the face, which in turn connects to a transcendental and supra-individual concept of subjectivity. Ultimately, the conclusion emphasizes the pivotal role of digitizing faces in acknowledging this transcendental dimension, highlighting the unique nature of digital faces in video games as both masks and prosthetic devices.

In the tenth chapter, Silvia Barbotto reflects on the contemporary experience of inhabiting as encompassing two distinct dimensions: firstly, the physical, ontological, and phenomenal aspects of existence; secondly, its extension into the digitized realm of e-society, where AI plays a vital role. Within this spectrum, a hybrid, pulsating, and creative world emerges. Semiotics, the study of signs and the establishment of fluid categories, becomes instrumental in navigating the relationship and transition between these two realms. It provides a foundation for the processes of reading, writing, translation, and transduction that occur as signification unfolds across intersecting spaces. The incorporation and unbundling of physical-algorithmic magnitudes, both individually and collectively, shape this dynamic interplay. The embedded face reflects the material substance it conveys while the virtual face speaks to a temporary dematerialization destined to exist within the ephemeral realm of binary language, occasionally slipping into oblivion. Digital images of faces persist, multiply, and are occasionally forgotten, albeit fleetingly. The associated data, however, remain a tangible and enduring element. Thus, the physical-algorithmic extension, influenced by AI, captures our attention due to its heterogeneous and multifaceted nature. The chapter seeks to comprehend the various gradients, intensities, and varieties of physical-algorithmic bodies, their origins and development, the forms of corporeality they embrace or exclude, and, most importantly, the spaces where this syncretism occurs. Barbotto explores how they integrate into the realms of reality and the digital sphere and how their habitability is constituted.

In the eleventh chapter, Elsa Soro deals with social networking services (SNS) as the primary platforms for the exhibition and portrayal of digital faces. The expansion of the digital face space has been significantly accelerated by the global pandemic caused by SARS-CoV-2, which has fundamentally reshaped the public spaces of social interactions and the private sphere of affectivity on a global scale. While social media platforms like Facebook and Instagram have been extensively examined for their impact on physical interactions and their role in shaping new aesthetic norms, dating sites, and applications have not received the same level of scrutiny. To address this gap, the chapter aims to explore the facial space generated by dating sites, specifically examining the "inter-face" of these platforms as a space that facilitates the reimagining and reenactment of intimate face-to-face interactions. The study does not intend to focus on a particular dating app or site. Instead, its objective is to comprehend online intimacy as a discourse constructed within the polyphonic landscape of various dating platforms and to contextualize it within the broader facialization of experiences facilitated by neoliberal models of digital platforms.

In the twelfth chapter, Federico Bellentani deals with digital memorials, which appeared in the late 1990s and developed since then due to the growing availability of digital technologies and the Internet. Commemorations and mourning have since diversified significantly in different digital memorial technologies: memorial websites, tribute pages, social networking sites, blogs, and virtual commemorations on video games. Faces are central elements in digital memorials and commemorative practices, being it both inter-faces providing access to the memories of the dead and texts constantly invested by multifaceted interpretations and practices. The face thus becomes a tool for commemoration and mourning, supporting users' experiences during the time surrounding death. Exploring the connection between memorialization, face, and digital technology, the chapter investigates digital memorials and commemorative practices and the meanings of faces within them. To do so, it first develops a semiotic-oriented framework for the design of digital memorials to ensure that digital technology remains centered on human needs and meanings. It then goes on applying this framework by analyzing three kinds of digital memorials and commemorative practices, especially focusing on face-based ones: (i) institutional digital memorials; (ii) open, creative, and playful solutions to reimagine contested monuments and memorials; and (iii) institutional and vernacular digital-native commemorative practices.

<div style="text-align: right">Massimo Leone</div>

Note

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1 Masked faces

A tale of functional redeployment between biology and material culture[1]

Marco Viola

1. The face

What is a face? Why does it have the shape it has in our species? Addressing such questions will require a detour across several disciplines. But before interrogating scientific disciplines, each coming with its own lexicons and ontologies, it seems safe to anchor our inquiry to a term coming from ordinary language.

1.1. The face as a seat of functional organs

According to the Cambridge Dictionary online, the first definition of "face" is "the front of the head, where the eyes, nose, and mouth are located".[2] Indeed, the human face hosts three of the five senses: taste, smell, and sight. Ears (for hearing) are not far. As for the skin (for touch), while it is spread all over the body, the density of mechanoreceptors (hence the sensory accuracy) of facial skin may be even superior to that of the fingertips (Connor and Abbs 1998). Thus, the honorary label of "sensory headquarter", which Adam Wilkins repeatedly employs in his monumental book on the evolution of the human face (2017), seems particularly fitting for the face.

Yet this is not the whole story. In fact, nasal and oral cavities are gates not only for sensory inputs but also for vital substances, that is, oxygen and nutrients. In sum, while relatively small compared to body size (at least in adult humans), the face hosts a lot of biologically relevant organs. To Wilkins, one reason for this *functional overcrowding* is that "it presumably is somewhat advantageous when seeking food to have sites of the three of the major senses grouped near the mouth and not far from the brain" (2017: 358). However, having a face is not a uniquely human asset. Nor is unique to primates. And even extending to all mammals is not enough. Actually,

> [i]n all ages and in all branches of the animal kingdom a face of some sort has been indispensable to all but sessile animals, just because a

face is concerned primarily with: The detection of desirable sources of energy; The direction of the locomotor machinery toward its goal; The capture and preliminary preparation of the energy-giving food.

<div align="right">(Gregory 1929: 3)</div>

At this point, a reader might be asking, "What is the starting point of the evolutionary history of the face?" A hint toward the answer is afforded by the title of the book from whose opening I draw the aforementioned quote, *Our face from fish to man* (Figure 1.1). More precisely, to the best of our present-day knowledge, the earliest documented species that ever developed a face (i.e., a face-like arrangement of sensory organs) was *Entelognathus primordialis* (roughly "primordial complete-jaw"), a 419 million years old fish whose fossil was recently found in China (Zhu *et al*. 2013).

But how come the classical prolonged faces of ancient fishes evolved to become the relatively flat faces distinctive of our species? The biologists who have addressed this question stress that this long evolutionary journey was not shaped by a single factor but rather by a complex interplay of different selective pressures that paved the way to the emergence and transmission of different traits. To appreciate how it might be happened, an epistemological caveat is in order. Namely, that evolution does not proceed exclusively through *adaptation*. An adaptation obtains when a trait T is selected because it enables or enhances a function X, where X-ing promotes the survival and reproduction of an organism that possesses T within its niche N. Sometimes, evolution also makes use of the so-called *exaptation* (Gould and Vrba 1982). An exaptation obtains when a trait T, originally adapted to perform a function X (or that played no function at all), is redeployed to produce or to enhance the production of an effect Y. Then, if Y-ing turns out to be particularly advantageous for an organism's survival and/or reproduction within its niche, selective pressure may favor the individuals that possess exapted trait – a case which some scholars call *secondary adaptation*. A moral to be drawn here is that evolution is not linear. And neither is the relationship between traits and their functions.

For the sake of the present discussion, the more relevant factors leading from the first mammals toward primate and eventually human facial shape were likely diet and brain expansion (Wilkins 2017; Lacruz *et al*. 2019). Differences in diet promoted adaptations of the jaws, indirectly affecting the mandible and the surrounding bones, whereas the increase in brain size had two main effects: firstly, the skull shifted forward to let more space to the braincase so that the to-be-human faces progressively acquired the vertical, almost flat arrangement distinctive of hominids (cf. the elongated *muzzle* of most other animals, which mostly develop horizontally). Secondly, larger brains permit more sophisticated behavioral and sensory processing, including enhancements in vision and neural machinery specialized for face

OUR FACE FROM FISH TO MAN.

1. Devonian shark; 2. Upper Devonian air-breathing, lobe-finned fish;
3. Lower Carboniferous amphibian; 4. Permo-Carboniferous reptile; 5. Triassic
mammal-like reptile; 6. Cretaceous mammal; 7. Lemuroid primate; 8. Recent
Old World monkey; 9. Chimpanzee; 10. Tasmanian; 11. Roman athlete.
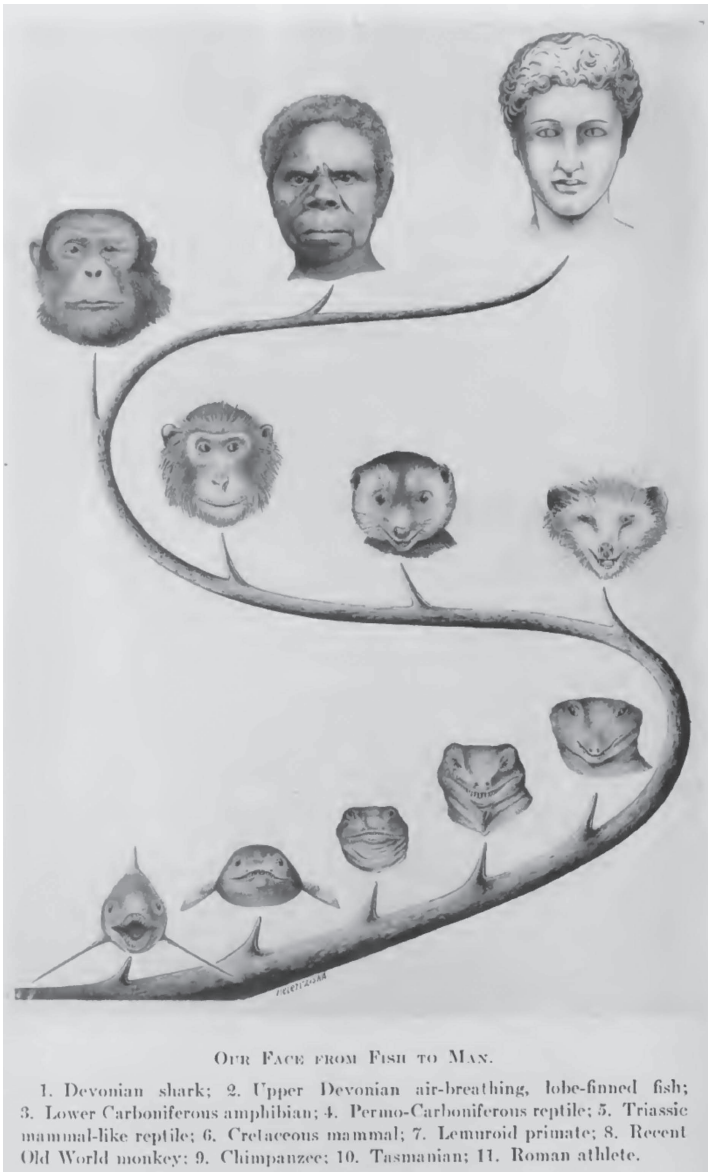
Figure 1.1 The illustration on the frontispiece of *Our face from fish to man* (Gregory 1929), summarizing the development of face throughout evolution. Freely available at www.biodiversitylibrary.org/item/41026. Copyright: No known copyright restrictions as determined by scanning institution.

perception. Compared to most other vertebrates, primate vision comes with three perks: (i) contrary to animals with more lateralized eyes (e.g., fishes), the visual fields of primates, whose eyes stand close and almost in parallel, overlap up to 120°. Evolutionary speaking, primates 'bargained' the amplitude of the visual field (fishes and most quadrupeds can see a wider portion of their surroundings) in favor of *stereopsis*, that is, the ability to estimate depth due to binocular vision. (ii) As larger brains permit more cortex dedicated to vision, primates develop a more acute vision for near objects. (iii) The structure and function of photoreceptors in primates' retinae allow for a good trichromatic vision (Wilkins 2017: 226–227). While the first evolutionary advantages fostering primates' vision were probably related to increased efficiency in gathering food and avoiding predators, it is reasonable to assume that such a perceptual enhancement allowed the exaptation of faces for social functions, enabling the fine-grained discrimination of different individuals within the same species and allowing to extract cues about these individuals' likely behavior.

1.2. The face as a social organ

The enhanced possibilities of social communication afforded by early hominids' faces have likely proved so advantageous that they themselves became a relevant flywheel for survival and reproduction – hence becoming secondary adaptations as they provided a virtually effortless means to read off cues about a conspecific's mental states or possible course of action. The final stage of this story is the *Homo sapiens*' face whose basic shape we can see in the mirror. Among other things, (i) it has little (if any) fur covering it; (ii) it has its distinctive and attention-grabbing white sclera, a color we do not find in other primates (Kobayashi and Kohshima 2001); (iii) it hosts a highly sophisticated network of facial muscles, whose movements can produce a host of facial expressions, not to mention (iv) lip muscles, regulating the articulation of spoken language. While the ability to perceive faces seems widespread in the animal kingdom, not only among mammals but even in distant species such as corvids (see Leopold and Rhodes [2010] for a beautiful review), human brains possess neural regions supporting very nuanced face processing within occipital and temporal lobes (Kanwisher *et al*. 1997; Grill-Spector *et al*. 2017).[3] This second, socially driven stage of the evolution of the face (and of a brain specialized in perceiving it) leads Wilkins to claim that

> [f]or the primates . . . and especially the anthropoid primates, and for the hominins most of all, the social face clearly has a unitary and integrated function – namely, that for sending and receiving signals (often complex ones in humans) about social behavior between individuals.

> The whole face participates both in such signaling and as an identifier of the individual.
>
> <div align="right">(Wilkins 2017: 358)</div>

Indeed, human faces are a powerful tool for communicating a vast amount of socially relevant information (Jack and Schyns 2015). When they are presented in our visual field (or even just subliminally perceived at its periphery), faces grab our attention (as well as the center of our visual field, thus enabling the more accurate foveal vision) and automatically trigger our decoding of social information conveyed by several cues (Palermo and Rhodes 2007). Some information is conveyed both by static aspects of the face such as shape and complexion. Other information is conveyed by dynamic cues, namely the movements of the eyes (revealing where the gaze is directed) and facial muscles. Given the number of muscular groups we can independently move, Lee and Anderson (2017: 175) estimate that by combining them, we can produce up to 3.7×10^{16} different expressions. Indeed, the second definition of 'face' to be found in the Cambridge Online Dictionary, "an expression on someone's face", alludes to this highly communicative function played by facial muscles dynamics.

The idea that faces convey socially relevant information by redeploying movements originally selected for other purposes was authoritatively proposed by Darwin in his pioneering book *The expression of emotion in man and animals* (Darwin 1872). Darwin aimed at contrasting Charles Bell's creationist explanation of the link between human facial muscles and emotional expressions. A profound connoisseur of facial muscles, Charles Bell (1824) held that such complex musculature must be a gift God made to humankind to enable us to express our emotions. To defend evolutionism, Darwin had to find another explanation for human facial movements, based on evolutionary rather than on creationist grounds. Supported by several observations, which he either made himself or collected from various sources, Darwin stresses how several patterns of facial (and bodily) movements related to emotional episodes are similar not only in humans of disparate cultures but also in several mammals. To explain these commonalities, he appealed to three principles: the principle of serviceable habits, that of antithesis, and that of the direct action of the nervous system. For the sake of brevity, I will only discuss the former, which is also the most relevant for the present discussion: the principle of serviceable habits.

To put it roughly, the principle of serviceable habit asserts that emotional expressions are a vestige of some movement that was useful in some phylogenetically old species, even if it does not serve any direct function anymore. Let me clarify with an example. In the chapter dedicated to expressions of hatred and anger, Darwin reports how, when human beings

across the world undergo an anger outburst, "the shape of the[ir] mouth wholly changes, and the teeth are exposed" (1872: ch. 10). He goes on noting how "[t]his retraction of the lips and uncovering of the teeth during paroxysms of rage, as if to bite the offender, is so remarkable, considering how seldom the teeth are used by men in fighting" (*ibidem*). Why then exposing the teeth? His hypothesis is that "our semi-human progenitors uncovered their canine teeth when prepared for battle" (*ibidem*). Hence, since this habit was useful for our progenitors, it got transmitted to their descendants, namely humans and apes. And while it stopped playing its original function, that is, unsheathing the bite for an upcoming fight, this action has gained a social function, that is, expressing anger or menacing someone.

The Darwinian idea that facial movements evolved twice – firstly to perform some action, secondly to express some emotion and/or intention – is still quite popular nowadays (see, for instance, Shariff and Tracy 2011). Lee and Anderson (2017) dub the first class of survival-related behaviors played by facial movements *egocentric functions* and the second one *allocentric functions*. For instance, they note how opposite sets of movements characterize fear and disgust expressions, the former opening and the latter closing facial cavities. Their egocentric functions are hypothesized to help the defense against large threats such as predators by enhancing visual field (for fear) and against small threats like pathogens by closing cavities (for disgust). But their allocentric functions are to inform conspecifics about these same threats. This communication does not need to be explicit or intentional. In effect, even when perceived unconsciously, facial movements seem capable of triggering facial mimicry, which is held to support emotional contagion and empathy, scaffolding social bonding in humans and in other primates (Palagi *et al.* 2020).

Darwin was not the first scholar to propose hypotheses out on similarities between human and animal faces. Before him, several physiognomists across the centuries – from the Greek Polemon to the Arab al-Razi's with his Firāsa, to Renaissance thinkers like Giovanni Battista Della Porta up to Johann Kaspar Lavater in the XVIII – leveraged the similarity between the shapes of some humans' face and a given animal to conclude that those humans possess the mental traits that (allegedly) characterize that animal. Yet these authors are nowadays considered eminently pseudoscientific.[4] A relevant difference worth stressing between them and Darwin is that the former aimed at inferring *transient* mental states such as emotions (based on dynamical cues such as facial movements). In contrast, physiognomists also inferred *permanent* or *enduring* mental states such as personality traits (usually from static features of the face).

Pseudoscientific as it may sound, we *do* routinely infer personality traits and other information from facial first impressions, albeit very often subliminally. Like it or not, we are natural-born physiognomists: even a quick

look at a face suffice to form judgments about her bearer's attractiveness, race, age, healthiness, trustworthiness, and competence – to name but a few qualities that we form a first impression based on the face.[5] And these judgments tend to be consistent among different observers, at least as long as they are from the same cultural group. Also, they are often ill-founded (Smortchkova 2022).[6] And yet they relevantly bias subsequent social interactions (Todorov 2017).

Trivial as it may seem; another social information typically extracted from the face is its bearer's identity. While all human (and most animal) faces present a similar T-shape configuration, when it comes to details, human faces present much intraspecific diversity. Hence, if we are sufficiently familiar with somebody's face and we do not suffer from *prosopagnosia* (a clinical condition characterized by the inability or very poor ability to recognize facial identities, first described by Bodamer [1947]), seeing somebody's face automatically tells us who she is and prompts us to regulate our behavior toward her accordingly.

Interestingly, psychologists have long held that reading identities and emotions out of faces relies on cognitive processes that are largely distinct (Bruce and Young 1986), albeit scholars are still debating about how deeply this dissociation runs or whether it depends on different neural pathways (Haxby *et al*. 2000) or different information being diagnostic to identity and expression (Calder and Young 2005). This dissociation is highlighted by the fact that we seem still capable of ascribing emotional states to someone with above chance (but far from perfect) accuracy even if we are unable to detect their identity. Indeed, emotional expressions can be detected even by people suffering from prosopagnosia!

1.3. *Egocentric and allocentric functions of the human face*

Taking stock, in this section, I have discussed the double evolution of the face: firstly, as a collection of organs involved in (adopting Lee and Anderson's terminology) egocentric functions, comprising both sensory functions like seeing and survival functions like breathing. Secondly, as an attention-grabbing organ with an allocentric function, that is, for conveying socially useful information (e.g., about one's identity or emotional state). A few remarks are in order before passing to the next section. Firstly, the ability to extract socially relevant information from faces no longer pertains uniquely to human beings (or animals, to a lesser extent). We build machines (often employing neural networks) that are getting pretty good at recognizing identity (Taskiran et al. 2020) or emotions (Huang *et al*. 2019; but see Tcherkassof and Dupré 2020). Secondly, the flow of social information from an observed face toward an observer's eye does not always require deliberation from either side. On the one hand, people attribute

meaning to faces (and behave accordingly) regardless of their willingness or awareness. On the other hand, we cannot cease to possess the static features used as cues to infer our qualities or identity (although we may hide them, as discussed in the next section). And possibly, we neither have full control over our facial expressions of emotions.[7] Unless we are faking it, of course. This brings us to another issue: we can use facial dynamics to deceive. By reproducing a given pattern of facial movements associated with a given emotion or mental state, we can trick an observer into thinking that we are experiencing that emotion or entertaining that mental state. But more often, she tricks herself; that is, she makes wrong judgments about an observed subject's mental state, social categories, or identity, based on some observed face.

Thirdly, unlike egocentric functions, whose actual underlying structures are individual organs *within* the face, allocentric functions are realized more holistically. As Wilkins efficaciously puts it, "in its communicative aspects, the face *is* definitely more than the sum of its parts" (2017: 358, italics in the original). This is not to say that information can be extracted from a partial facial *Gestalt* – they can. More modestly, the social information conveyed by the face depends much more on spatial relations between individual elements of a face (and of their alterations due to muscular movements) than on specific details about these elements (e.g., the eyes being green or brown). In any case, if animal faces were already quite overcrowded with (organs implementing) egocentric functions, the emergence of allocentric functions exacerbates this functionally overcrowding. In the next section, we will see how this functional overcrowding affects the workings of a particular class of artifact that affects the face, namely the mask.

2. The mask

While in the previous section I have examined the face, offering an account (however sketchy) of its functions in the light of its evolutionary history, in this section I turn my attention toward the masks: tools whose functions are to act upon some function of the face. Thus, I will address questions like: what are masks? And what are they for? Again, let me start with ordinary language. The Cambridge Dictionary Online presents the mask as "a covering for all or part of the face that protects, hides, or decorates the person wearing it". Such a definition may misalign with some of our linguistic practices. On the one hand, it includes objects that we typically would not properly call "masks", such as sunglasses, makeup, or transparent face shields. On the other hand, it excludes some objects that some scholars call masks, such as the unwearable 90-foot-long Great Mask employed in religious ritual by the Dogon tribes (Grimes 1975) or the stimuli employed

in experimental psychology to cover a target stimulus in studies about unconscious perception. As this problem is unlikely to be solved simply by looking at another dictionary,[8] for now I settle for this provisional working definition, which will be further qualified (and slightly modified) as I will sketch an ontology and taxonomy of masks. To do so, a detour in some philosophical theorizing on artifacts is in order.

2.1. Artifacts and their functions

To begin with, masks are a kind of physical objects, namely artifacts. Starting (at least) from Aristotle, Western thought distinguishes physical objects between *natural* and *artificial*, that is, respectively those that exist as such by nature and those whose existence and properties depend upon an act of crafting.[9]

   Usually, but not necessarily, artificial objects are brought into existence by some author in order to play some *function* (or set of functions). This production typically entails modifying preexisting objects so that the final product acquires some *intended properties*, namely the properties that enable them to be used for a given function. For instance, early hominids produced rudimentary weapons by knapping stones to grant them the property of sharpness because sharpness enhanced their function: harming prey or enemies. When this process of crafting succeeds, the resulting product is an *artifact* (Hilpinen 1992).

   It is worth mentioning that not all objects that exist by virtue of someone's action are artifacts: indeed, some may be unintentional products or by-products of something else – in short, *scarps*. Moreover, and more relevantly for the present discussion, not all the properties of an artifact are intended properties. Indeed, some of its properties are unrelated to the purpose it was created for – let me dub them *unintended properties*. To recap some salient points, artifacts can be defined as (i) physical objects that (ii) have been created by some author so that (iii) they embed some properties that (iv) allow them to play a given function (or a set of functions). Thus, the intended function of an artifact works as a sort of teleological attractor that, provided that the crafter has the right skills and materials, leads toward a certain endpoint of the craft. Functions are so central in artifacts that some of them are named after the function they play – think about potato-peelers, screwdrivers, and can openers. Moreover, when we need to categorize artifacts – either for intellectual purposes or for more mundane scopes, like organizing the shelves of a supermarket – we place much more weight on their functions rather than on non-functional properties like their color. Yet the relation between artifacts and functions is all but straightforward. As highlighted by Preston (2009), artifact functions are *multiply realizable*; that is, they can be performed by artifacts of several

shapes and materials, provided that some basic constraints are met. On the other hand, artifacts are often *multiply utilizable* (or *multifunctional*):

> [T]ypically they are designed to serve several [functions], often simultaneously. Uniforms, for instance, serve the functions of ordinary clothing – keeping the wearer warm, dry and modest – but they also serve identification functions with regard to telling friends apart from enemies, displaying rank, and so on.
>
> (Preston 2009: 215)

An interesting aspect of multiple usability is that artifacts may be employed to subserve functions they were not produced for. For instance, imagine that you receive an urgent Zoom call while reading these very words (assuming that you are reading them on a physical copy of the book). Your table is slightly too low so that your face does not fit in the camera embedded in your laptop. So you take this very book and put it under your laptop. Admittedly, this was not the function that the publisher or the authors of this volume had in mind when they worked to produce the book. Notice that "[t]hese alternate functions sometimes become standardized or routine" (*ibidem*), either for a single individual or for a collectivity. The chair in my bedroom, originally designed to host my buttocks, is more often employed to host some of my clothes.

Sometimes, alternate functions become so prominent that they take over the privileged status of intended functions when further tokens of that given artifact are produced. The history of technology abounds with such cases. A curious example from pharmaceutics concerns the molecule Sildenafil. Initially created by Pfizer to cure *angina pectoris*, the drug proved inefficacious with respect to its intended function. However, it turned out to have an unexpected side effect in fighting erectile dysfunction. When it got commercialized as Viagra, it became a source of much income (and charges of disease-mongering) for Pfizer and a model case of *drug repositioning* for the chemical industry (Ashburn and Thor 2004). Since the functional properties that subserved the once-intended function may misalign with those that best subserved the new-intended functions, new versions of that artifact are modified to privilege this newly interesting set of functions, even at the expense of others. When the function(s) of the new artifact differs sufficiently from that of its 'progenitors', we tend to perceive the new artifact as not only a new *token* of the same artifact type but a *different type of artifact* altogether. If this story sounds familiar, it is because, in many respects, it reflects the dual biological evolution of the face presented in the previous section.

Before coming back to our topic – the mask – I want to emphasize another feature of artifacts that has received relatively little attention thus

far: their unintended effects. When I wake up in the middle of the night and walk through the bathroom, I might stumble upon my chair and fall on the floor. Unintended effects are best kept distinct from alternate functions because they are not the product of anyone's intention. Arguably, my fall is not due to some nasty pixie's intention to exploit the chair to make me fall. It occurs independently from anyone's will in virtue of some of the properties of the chair (e.g., it does not glow at night, it stands between the bathroom and my bed, and so on). As we will see, in designing artifacts, avoiding the properties yielding undesirable unintended effects can be as important as implementing the intended properties.

2.2. *Masks as artifacts*

This brief detour in the philosophy of artifacts affords a more nuanced answer to the question "what are masks?". *Masks are artifacts whose function is to interact with the functions of the face.* To stay as close as possible to linguistic intuitions, this definition needs to be enriched by two additional constraints: (i) *covering condition*: masks ought to be placed upon (at least some part of) the face. As such, they must be physical objects, or at least they need to be able to interact with at least one sensory modality (a hologram can still count as mask). (ii) *reversibility condition*: donning a mask must be easily reversible. While makeups can be washed easily, removing ink tattoos is far harder; only the former shall count as mask. Recall from the previous section that the face (or the organs it hosts) has been associated with two classes of functions: egocentric functions, that is, sensory and vital functions; and allocentric functions, that is (voluntary or involuntary) broadcasting of social information to other living beings. Building on this distinction, we can sort masks into two broad categories, depending on which functions of the face they are meant to act upon.

On the one hand, we have what I shall dub *protective masks*. They can be distinguished into two sub-classes. Firstly, we have *bodily-generic protective masks*, that is, artifacts built to protect the face *qua bodily part*, preventing or mitigating physical harm or other environmental hazards (e.g., cold) that would equally affect any part of the body. Secondly, we have *face-specific protective masks*, that is, artifacts that specifically act upon some of the exchanges of sensory information (e.g., light) or vital substances (e.g., oxygen) occurring between a subject and the environment, and that are gated by face organs. The former category might include hockey masks and balaclavas (ski masks). The second might include antigas or surgical masks, as well as artifacts that we would not commonly call masks, such as nose filters (protecting from some particles in the air) and sunglasses (protecting from the light); or even blindfolds (preventing

from sight) – after all, nobody told that protective mask must be in the best interest of the wearer!

On the other hand, we have what I shall dub *social masks*: artifacts built to modify some function of the face *qua* social organ. This includes numerous religious and secular masks, ranging from those employed by ancient religious ceremonies to those employed in contemporary swinger clubs (for a comprehensive review, see Inglis 2018). Moreover, other objects befall in this category despite probably not counting as mask for ordinary language: for instance, various sorts of *hijabs*, the veils employed by Muslim women (Leone 2010), or various sorts of *make-ups*, such as the emotional make-up employed in theater (Magli 2013, §4.8).[10]

To laypeople, social masks are arguably more prototypical than protective masks. Whereas to many social scientists, only social masks count as masks *in a proper sense* (cf. Lynteris' quote in §3). This may be because, for many of anthropology and semioticians, the real phenomenon of interest is not the mask *per se*, but rather the function (or better, set of functions; see later) afforded by social masks, that we can call *masking*: altering someone's display of identity or mental states (Pollock 1995). The focus of interest of these thinkers is not totally aligned with that of the present discussion, because there exist masks whose intended function is not masking (namely, protective masks), and because masking is possible even without a mask (recall Preston on the multi-realizability of functions). For instance, Grimes (1975) construes dance as a means for embodied masking.

Yet, as anticipated, 'masking' is best understood not as a single function, but rather as a *set* of functions: (i) *concealing* some properties that carry social information; (ii) *altering* them; and finally (iii) the *addition* of new properties that afford further social information.[11] Admittedly, as soon as we move from theory to practice, the conceptual distinction between altering and adding immediately becomes blurry. Nonetheless, I think it is worth preserving it at least in principle, also by making the following qualification: while alteration modifies the social information conveyed by the face by modifying some of its existing traits (e.g., by enhancing or reducing the saliency of some organs or by modifying skin pigmentation), addition adds new social information by adding features that the original face did not possess (e.g., fox-shaped Venice Carnival masks evokes cunning without appealing to any feature of the wearer's face).

Moreover, each of these three functions can differ with respect to the specific social information it targets: for instance, if you plan to go to a swinger club, you might want both to don a mask on your eyes to conceal your identity and perhaps to use an anti-age make-up to conceal your wrinkles. Both are concealing masks, although they are meant to hide different aspects of social information. The combinations between the three masking functions and specific social information targeted is constrained by several considerations. Most prominently, it is worth noting how the

rigidity that characterizes most masks disallows the possibility to add anything to expressions, which would require some technological analog of facial muscle dynamics. In fact, neutral masks (white and expressionless – cf. Beato 2022) were introduced by LeCoq's school to train actors, so that they learn to "de-centralize" their expression to the remainder of the body since the body is arguably easier to see than the face in the last row of a theater. Of course, a mask can *represent* some expression, but only statically and abstractly, possibly engendering a feeling of uncanny and disallowing facial mimicry. Hence, arguably a mask can be used to conceal one's expression, but not to deceive about it.

Thus, additive masks typically target identity. The reason why masks seem more prominent for playing social roles of identification than other clothing artifacts targeting different part of the bodies is likely that faces has historically been, and will likely be in the future,[12] the more relevant source of information about one's identity. This explains why wearing masks in public without reason is illegal in many countries. In most cases, whoever we meet, we first look at their face. And even when a mask covers the attention-grabbing features of the face, for example, the white sclera, it capitalizes on our habit, whenever we meet someone, to look at her face first. From religious rituals to contemporary cosplaying, many masks are produced with the aim of letting the wearer assume the identity of some*one* – a specific person or character – or some*thing* – a generic social role or natural entity.

While hyper-realistic masks, which proved capable of fooling people most times (Sanders *et al.* 2017), do add a layer of identity, their intended function is likely that of concealing: adding someone else's identity is just because displaying no identity at all (as it would happen wearing a balaclava) would raise way too many suspicions (cf. Gramigna 2022a). Quite on the contrary, those masks that are produced to *add* a layer of identity do not explicitly seek to conceal the wearer's identity but only so to speak to temporarily "suspend it". It should be noted that several anthropological reports suggest that, in some cases, the surplus identity afforded by masks does not only affect the behavior of the observers: it somehow seems to 'sink' into wearers' own mind, affecting their phenomenology and behavior (Honigmann 1977).[13]

Interestingly, some masks may serve the purpose of granting anonymity not in virtue of their concealing function so much as by means of their additive function, that is, by positively representing the desire to stay anonymous. For instance, in describing the rising popularities of vizard masks in eighteenth-century London, Heyl (2001: 119) notes that

> it was still relatively easy to recognize the wearer of such a mask which . . . just covered the upper half of the face. But even this must have been more than sufficient to introduce the idea of anonymity and therefore to modify the behaviour of the wearer.

Examples of altering functions of the masks include the amplification and distortion of voices, which was common in theater masks (Twycross and Carpenter 2017: 8), or the aforementioned uses of makeups to alter perceived age, or its use in theatre actors to emphasize certain features of the face expressing emotions. However, I find it hard to conceive identity-altering masks because identity, unlike expression or other facial features, does not admit degrees or variations: you are either someone (or something) or not.

Figure 1.2 provides a schematic summary of the conceptual articulation of masks' functions. As anticipated, like most conceptual boundaries, they often blur when applied to real world. This is partly due to the aforementioned property of artifacts to be often multi-usable, be it due to the authors themselves producing the artifact with multiple functions in mind, be it due to the users' choice to exploit them in unexpected ways. Moreover, due to some unintended effects, artifacts can have effects that transcend both the author's and the user's intentions. But when it comes to the mask, the implications of multi-usability and unintended effects are complicated by a further fact: namely, that the face is functionally overcrowded, as discussed at the end of §1. Taken jointly, these features bring about several interesting consequences, some of which will be dealt with in the next subsection.

2.3. Redeploying mask

In the popular Spanish TV series *Money heist* (*La casa de Papel*), a group of robbers coordinated by the brilliant mastermind known as "The Professor" penetrates the state mint in Madrid to print billions of euros. The robbers could have been easily killed by police snipers, were not for a clever
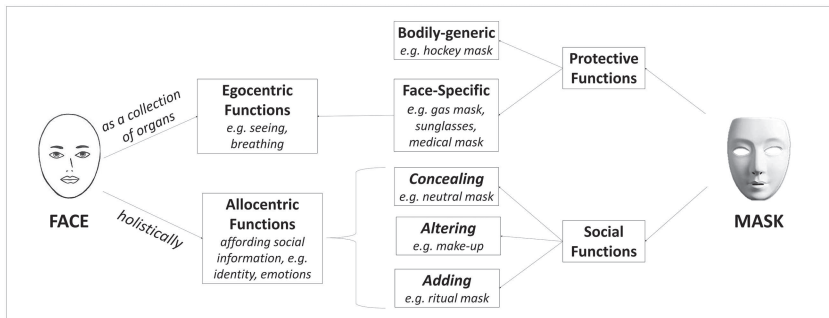
Figure 1.2 A schematic representation of the taxonomy of masks based on their (intended) function, depending on how they interact with the functions of the face. Copyright: Image created by the author.

stratagem: they took hostages and get them wearing the very same face mask wore by the Professor's team, representing the iconic face of Salvador Dalí – along with a red jumpsuit and occasionally fake weapons. By so doing, they prevented the snipers from shooting: they cannot gamble when the hostage lives are at stake! However, at some point the policewoman in charge of arresting the robbers decided to exploit their same strategy of anonymity: a rescue squad wearing the same masks and suits was sent infiltrating into the mint through a secret tunnel. Yet pretty soon the police realizes that the Professor predicted and countered this move by having everybody (hostages and robbers) switching the Dalí mask with another representing the Scream of Munch. The infiltrators thus had to abort the mission. In fact, if they entered the mint with the 'old' mask, they would have been easily recognized and captured. In this implausible case, while the author that produced those masks has likely conceived them as amusing identity-adding artifacts, the identity-concealing or the identity-adding function of the mask was equally crucial for the Professor when he elaborated the plan.

Real-life cases can be even more interesting for the present discussion. In actual heists, rather than a mask recalling some artist's face, robbers are more likely to wear impersonal black balaclavas to hide their facial features. Obviously, balaclavas are not originally produced or commercialized to conceal identities: instead, they are intended as a protection of the facial region from cold temperature. A similar redeployment of a protective mask seems to have occurred with vizard masks in XVIII England: "[t]he main practical reason for wearing these winter masks . . . seem to have been the desire to protect the delicate skin of the face from the cold" (Heyl 2001: 118–119). However, as people were beginning to feel the urge for privacy, the ability of these masks to warrant anonymity (or at least to signal the desire to be anonymous) became prominent:

> [T]he more utilitarian aspects of wearing a mask became a mere pretext. What had been the mask's side-effect (the price a woman had to pay for "guarding her complexion" was that it temporarily rendered at least part of her face invisible) now became its main attraction.
>
> (*Ibidem*)

Now consider sunglasses. While the first proto-sunglasses might have been originally conceived to protect from excessive light, nowadays they are often worn for shielding one's spontaneous emotional expression from the onlookers' gaze, as well as for avoiding social-inviting eye contact (Viola 2022). Moreover, the history of sunglasses throughout the twentieth century shows that they have been imbued by social meaning of coolness (Brown 2015). Sometimes, the social meanings of facial adornments

are subverted for the sake of political appropriation, as in the case of gas masks becoming a symbol of rave culture (Voto and Soro 2022).

It is worth noting that masks are not the only kind of artifact playing both protective and social functions. Recall that, in introducing multiple usability, Preston discussed the case of a uniform (§2.1). Later on, she points out that "the example of uniforms illustrates [that] multiple functionality is often a matter of serving social or communicative functions in addition to purely technical ones" (Preston 2009: 215). The point might probably be pushed further by claiming that any cloth, and possibly any artifact, unwittingly or not, always adds some sort of social information, whose decoding can be affected by cultural and idiosyncratic factors (Leone 2010). Consider balaclavas: their association with criminals has become so iconic that, unless we find ourselves in a very cold environment, merely seeing a person wearing one balaclava we would likely think that he or she is a robber.

Yet the case of masks presents further peculiarities because faces are *functionally overcrowded*. Since various important vital and social processes occur on the human face, choosing the best materials and shape for conferring the intended properties to a mask is only half of the job for a good mask crafter (or mask designer). The other half consists in avoiding unintended properties that would interfere with other functions of the face. It does not matter if a brand-new model of balaclava does a perfect job in preserving bodily heat, if this comes at the expense of not letting holes in the eyes, or if its material prevents breathing. Possibly, it would be equally hard to sell sunglasses that protect from the light but that make the wearer look ugly. Trivial as it may sound, this issue has a host of implications that should be taken extensively into account by mask designers.

Building on all these premises, in the next and final section I will try to see how these considerations fit with a specific case study, namely that of medical face masks.

3. Some remarks for a case study: the medical face mask

In 2020, the COVID-19 pandemic changed the face of the world as well as the look of faces around us. Indeed, as many governments and institutions encouraged or enforced the use of medical face masks in public spaces, they became almost ubiquitous. From the point of view of the taxonomy sketched earlier, medical face masks are face-specific protective masks: they are produced to interact with the wearer's breathing, filtering droplets that may carry the infection. In a sense, they might be thought of as an artefactual analog of disgust. Traditionally, disgust is conceived as "a guardian of the temple of the body, responding to direct threats of contagion or

infection to parts other than the mouth" (Rozin *et al*. 2008: 764). Just like any good guardian shuts the doors of the temple if she senses a threat, spotting a possible pathogen triggers a contraction of facial cavities (mouth, nostrils, and eyes), shaping the face into the emblematic expression of disgust (Lee and Anderson 2017). As it helps the immune system by preventing infections, disgust is held to play an important role in the so-called *behavioral immune system* (Schaller and Park 2011). Yet useful as they may have been in some evolutionary tasks, our innate emotions are insufficient to cope with all possible challenges that the world confronts us with – especially when invisible pathogens are involved. Fortunately, culture and technology can help us in dealing with more complex threats. Thus, as the role that face masks play in avoiding infection presents some suggestive parallelism with that played by disgust, I propose that they (along with other similar measures) are part of our *technological immune system*. An interesting difference is that, while disgust protects oneself, most face masks are predominantly meant to protect the community from the pathogens that the wearer may spread.

But given the relevance of the social functions of the face, face masks turned out to have a lot of unintended social effects too. Since 2020, experimental psychologists have delved deeper into the exploration of such effects. In the slogan of the psychologist Erez Freud, "We are participating in the biggest experiment in human history in terms of face perception. All of us are wearing masks all day long, and we need to recognize different people around us".[14] A plethora of psychological experiments have now established that face masks interfere with identity and emotion recognition (for a review, see Pavlova and Sokolov 2021). By doing so, they also interfere with emotional mimicry, thus possibly dampening empathy and social bonding (Kastendieck *et al*. 2022).

Moreover, face masks impair verbal communication, both because they impede lipreading, which implicitly helps in decoding oral language (McGurk and MacDonald 1976), and because they dampen some acoustic signal, depending on its frequency and on the type of mask (Corey *et al*. 2020; Magee *et al*. 2020). The larger discomfort, however, was reported by people with hearing impairments due to their greater reliance on lipreading (Saunders *et al*. 2020). Not to mention that mouth movements are part of many sign languages. This is why many masks were invented that are totally or partially made of plastic materials, so as to uncover the face or at least the mouth region. While some such masks were already available even before the pandemic (e.g., the ClearMask™), many more were designed in 2020, either by firms or by single sewers.

Transparent masks for the hearing-impaired provide some food for thought for philosophers of technology. A variant of traditional masks,

transparent masks pose the challenge of preserving the intended protective function, while at the same time eschewing (or minimizing) the unintended effect of concealing verbal communication based on lipreading and sign language. In facing this challenge, given that the face is functionally overcrowded, designers must pay attention not to interfere with other functions. For instance, while the prototype depicted in Figure 1.3 was particularly efficacious in its role as an artificial immune system by virtue of a very thick filter, this very filter had the side effect of hampering the passage of oxygen, making it unserviceable! At the same time, one unintended but potentially positive effect of transparent masks is that they restore the readability of emotional expression: as we have shown (Marini *et al.* 2021), face masks with transparent windows on the mouth restore the possibility to correctly judge the emotional expression on a face.

Moreover, while experimental psychology has cleverly documented how face masks subtract social information (concealing), other social sciences are more suited to investigate how face masks also add a layer of symbolic meaning (adding). The medical anthropologist Lynteris documented it with

Figure 1.3 A picture of myself wearing a prototype of transparent face mask taken in late 2020. The prototype that never made it to industrial production. Copyright: Image created by the author.

respect to the use of medical face masks to contrast the 1910–1911 plague outbreak in Manchuria:

> [W]hile being a practical, and in some cases effective, prophylactic technology, its material application has always already been tied to a symbolic function [that] renders these devices into *masks*, in the proper sense of the term [i.e. social masks].
>
> (Lynteris 2018: 448, italics in the original)

Similarly, at the onset of the pandemics Leone (2020d: 47) noted that "as the medical face mask becomes the most diffused facial device throughout the entire planet, even more than glasses, it ceases to be a mere functional object and acquires a more and more complex anthropological and semiotic status". As he correctly stresses, the meaning of face masks is modulated by cultural and historical coordinates: while more eagerly accepted in Eastern countries (possibly also due to the experience of the first SARS outbreak), initially they met resistance in Western countries, possibly due to a "deep-seated semiotic ideology, according to which human beings must show their face bare, with their mouth and nose and eyes visible" (Leone 2020d: 53). However, this situation evolved in the following years. Psychological evidence suggests that even in Western countries face masks may be associated with an increase in trustworthiness, possibly because they are associated with compliance with social norms and care for others (Olivera-La Rosa *et al*. 2020). But even within the same cultural group, this meaning is not immutable. Interviewing a sample of Chinese Hong Kong inhabitants, Siu (2016) finds out how wearing face masks was taken as a positive social norm *during* the SARS outbreak, whereas after the outbreak mask-wearers were stigmatized.

In Western countries, wearing face masks – or ostensibly omitting to wear it contravening social norms – was sometimes imbued with political meaning (Inglis and Almila 2020). While in pre-COVID era *not* wearing a mask was simply the normality, during the 2021 lockdown it did signal either some disbelief about the received wisdom about the virus or a political stance of boycotting the sanitary measurements introduced or endorsed by some political group (and often both). Finally, just like other masks, we should expect that face masks somehow affect the wearer's sense of self and behavior. Due to space constraints and limited evidence, documenting these effects must be postponed to another day.

In sum, as they cover the most functionally overcrowded surface of the human body, namely the face, face masks are doomed to play some social role regardless of their intended use. Given that nowadays, after about three years from the onset of the pandemic, face masks appear to have become a relatively stable and 'normal' piece of clothing, social scientists

should join forces in order to fully comprehend their complex, contextually variable and multilayered set of social functions and unintended effects.

Notes

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2 https://dictionary.cambridge.org/dictionary/english/face

3 While no scholar denies that some brain areas, and especially the so-called fusiform face area (FFA; Kanwisher *et al*. 1997), have a crucial role in processing faces, the exact etiology of this specialization is currently under debate. On the one hand, some claim that the FFA is involved in the holistic recognition of several stimuli categories, provided that the observer has sufficient expertise with it, and consider that all sighted humans perceive many faces. On the other hand, evidence about face-specificity of FFA in blind people and newborns seems to testify that ontogeny may not be necessary.

4 See Khalidi and Khalidi (2018) for some interesting epistemological considerations about the (pseudo)scientific status of Arab al-Razi's Firāsa.

5 The belief that we may extract several information from others' face has met alternate fortunes across centuries and cultures. For instance, in XVII England "[i]t was a common notion that looking closely at someone's face enabled one to 'read' this face and thus to find out about a person's abilities, inclinations and motivation" (Heyl 2001: 121). Different cultures, however, regard different parts of the face as more or less expressive. Western thought conceived the eyes as a mirror of the soul at least since Aristotle (Synnott 1989), whereas "[f] or Kwakiutl, it was the mouth that gave access to the soul and which served as the link between the exterior identity and the interior soul" (Pollock 1995: 587–588).

6 It has been proposed that some personality judgments may depend on a process of *overgeneralization*: when some face's shape slightly resembles some specific facial quality (e.g., a face with hairy brows recalls the typical anger expression, characterized by furrowed brows), that very quality gets reified as if it pertains to the essence of the face-bearer (see Zebrowitz 2017).

7 See Glazer (2019) for an interesting proposal concerning the automaticity/deliberateness of facial expression.

8 The meaning of the terms of the natural language and the underlying conceptual schemes are whimsical, and their evolution unpredictable, resulting from the random encounters of several contingencies. In a slogan, they are a second Wittgenstein affair, and no first Wittgenstein formal definition can ever hope to capture them.

9 The boundaries between natural and artificial objects may be sloppy as well as deceitful. For instance, while dogs and seedless grapes may strike as intuitively as natural, they may well qualify as biological artifacts as their existence and characteristics depend upon human intervention (see Sperber 2007).

10 Magli (2013, §1.3) is skeptical about subsuming makeup within the category of masks because the latter are traditionally taken to hide the face, the former

to modify it, for example, by enhancing the salience of some of its traits. This concern shall not bother us inasmuch as the notion of mask stipulated in the present discussion does not require hiding the face as a necessary condition.

11 Is addition distinct from alteration? While the distinction is blurry, I think it is worth preserving it, also by making the following qualification: while alteration modifies the social information conveyed by the face by modifying some of its existing traits (e.g., by enhancing or reducing the saliency of some organs or by modifying skin pigmentation), addition adds new social information by adding features that the original face did not possess (e.g., fox-shaped Venice Carnival masks evoke cunning without appealing to any feature of the wearer's face).

12 Interestingly, the diffusion of face recognition technology spurred the development of ingenious social masks meant to conceal the wearer's identity not from human eyes but rather from cameras (Biggio and Dos Santos 2020).

13 Does the capacity of masks to affect the wearers themselves depends merely on their beliefs and self-suggestion and on the actual or conventional anonymity afforded by the mask? Or does it also depend on congruent responses of the other people accepting this pretense plays? The issue is still unsettled. Despite some suggestive findings, for example, that some children ceased to stutter while wearing a mask (Pollaczek and Homefield 1954), psychological investigations on the wearer-transforming potential of masks are scant and unsystematic. This kind of investigation could however nicely fit within a recent strand of psychological research on the so-called "enclothed cognition", whose core theoretical bet can be summarized as the attempt to *dis*prove the saying "the cowl does not make the monk" (Adam and Galinsky 2012). However, a recent replication failure of Adam and Galinsky's pioneering experiment suggests caution in interpreting the earlier results (Burns *et al*. 2019).

14 https://research2reality.com/health-medicine/visual-perception-pathways-vision-facial-recognition-covid-pandemic/.

2 Contagious faces

Coping digitally with the pandemic by means of memes[1]

Gabriele Marino

1. Introduction: the facepalm

Star Trek: The Next Generation season 3, episode 13, titled "Déjà Q", first aired in the United States on February 5, 1990. The plot is typical: the crew of the starship Enterprise has to solve a problem (planet Bre'el IV's moon is about to go out of its orbit), and the solution is complicated by an unexpected event as an old enemy named Q (portrayed by John de Lancie) suddenly reappears—the déjà vu alluded to by the pun in the title. "Déjà Q" is not particularly memorable, but it shows a moment made memorable by the strange mechanisms of the Internet. Captain Picard (iconically portrayed by Patrick Stewart) sits in his armchair, legs crossed, elbows propped on the armrests; reluctantly convinced to help his nemesis ("In all the universe, you're the closest thing I have to a friend, Jean – Luc", Q tells him, surprisingly), he tilts his head slightly forward and, left thumb at his temple, covers his eyes, nose, and part of his sullen mouth with the other fingers of his left hand. The sequence lasts only a fraction of a second, but it has been frozen as a cult.

"The physical gesture of placing one's hand across one's face or lowering one's face into one's hand or hands, covering or closing one's eyes" (Wikipedia)[2] was obviously not invented by *Star Trek* (think, for instance, of the famous sculpture *Cain* by Henri Vidal exhibited in the Tuileries in Paris since 1896), nor is it exclusive to humans (apes such as the Mandrills have it too, say ethologists) but has been baptized more recently: the neologism "facepalm" was coined on Usenet (the proto-forum where emoticons were created in 1982) around 1996, according to the *Oxford English Dictionary*, and has been widely used on the Internet since at least 2007 when its prototypical visual token, Picard's, was first uploaded on YouTube as a short video fragment.[3]

Picard's facepalm has become an Internet classic: it entered our online communication habits by virtue of its expressive synthesis, its ability to capture an entire pathemic—that is, passional, emotional—state in one essential visual configuration. In this respect, the facepalm does participate

in the same process of digital "writing of the face" (faces turning into writing characters) or "facialization of writing" (writing becoming face-like tokens) initiated by emoticons.[4] Picard's facepalm functions both as an Internet cliché, a ready-made means of commenting on something (just like the cartooned faces of Nicolas Cage, Jackie Chan, and Barney Stinson or the Microsoft Paint-designed "rage comics" of 4chan),[5] and as an icon, a figure that we can potentially paste onto anything (like the faces of Chuck Norris or Kim Jong-Un).

The facepalm is interesting to us for at least three reasons: (i) it is an Internet meme, (ii) it shows a face but not only that, and (iii) we use it to express a certain mood – frustration.

2. Pandemic frustration

During the new coronavirus/COVID-19 pandemic we have all been locked up, so that our most important object of value—what we aspire to as subjects—was literally outside the window, outside the door: we just wanted to go out whenever we wanted, as it was before.[6] All the people who lived in such a situation were dismayed and upset because they had to do something that was quite difficult to accomplish suddenly: radically change their habits and move out of the realm of normality. Trapped inside their homes, people were sitting in front of their computers, tablets, and smartphones, trying to grasp the unexpected, to understand something they had never experienced before, something beyond human comprehension—a "hyper object", as English philosopher Timothy Morton (2013) puts it. In confronting this uncanny the only interpretative framework available came from the fictional world: books, films, comics, and songs, all posted as Cliff Notes-like lists onto social media with a preference for the catastrophic, the post-apocalyptical, the dystopian—the epidemical: Steven Soderbergh's thriller *Contagion*, 2011, and David Quammen's popular science essay *Spillover*, 2012, became the favorites to many. We tried to understand what we went through by putting it in a framework that addressed thematized it.[7] We all experienced "the feeling of being upset or annoyed as a result of being unable to change or achieve something" (Google Dictionary)[8]; in a word, we were all frustrated.

Frustration is a tensive pathemic state that implies a projection toward something where the intended action can remain only an attempt: you can see and almost touch the desired object of value, and yet you cannot grasp it; you lean forward to it, but the narrative program centered upon it (i.e., getting the object) is destined to remain unfulfilled.[9] Normality seems to be just outside the window, outside the door, but it is not. Frustration has a durative aspectuality; in other words, dissatisfaction (in many ways a synonym for frustration) is not episodic but rather long-lasting.[10] We have been waiting (e.g., for new dispositions from the government, for

a vaccine, for a cure, and so on); we had to "Keep Calm and Carry On" (as the famous 1939 prewar British motivational poster reads); at first it seemed to be only "a moment" but soon became "a period": a new "age of anxiety",[11] a stasis and silence reminiscent of the Cold War, a war of attrition. The clock beats a "time out of joint"[12]: every day is a Groundhog Day, an endless Sunday of work where any micro-variation becomes an event. We have been wedged between a present perfect that seemed to be a simple past and that we longed for as if it were a perfect past ("do you remember how nice it was to be crammed in the subway?") and a near future that no longer seemed a future perfect and that we did not know when it would actually become present ("we will be back to normal", "everything will change", "we will have to get used to medical face masks, like in Japan and China"). Frustration has become our semiotic state of mind.[13]

3. The virality of the virus

Recent history has already provided communication scholars with events that have taken place and been reported, lived, and appropriated on social media, to such an extent that the corresponding hashtags have set the global agenda for the last decade: #ArabSpring (2010), #OccupyWallStreet (2011), #BlackLivesMatter (2013), #JeSuisCharlie and #LoveWins (2015), #Brexit and #MakeAmericaGreatAgain (2016), #MeToo (2017), and #ClimateStrike (2018). None of these events, however, had the truly global scale of the pandemic that, as far as we are concerned, began in Wuhan, China, in December 2019. This is perhaps the first time, as Slovenian philosopher and pop icon Slavoj Žižek, among others, pointed out,[14] that the whole world feels like it is "in the same boat", in the same frame, and participating in the same narrative that is happening, being shown, and told in real time. The pandemic—the use of this not-so-common word has increased by more than 57,000% in 2020 (Rajan 2020)—naturally has its own hashtags: #StayAtHome and #StaySafe.

Indeed, the keywords of the virus are more complex, so much so that, for the first time, the *Oxford English Dictionary* did not choose a single "word of the year" but produced a report on the many words—including mottos, mantras, and other linguistic tokens such as "bushfires, COVID-19, WFH, lockdown, circuit-breaker, support bubbles, keyworkers, furlough, Black Lives Matter and moonshot" (*ibidem*)—that marked the "unprecedented" year 2020. We were barraged with numbers, data, bulletins, maps, charts (with their curves that were never flat enough), and decrees (with their idiosyncratic interpretations).[15] Despite all the appeals for an anti-panic, anti-alarmistic tone in communications, we had the media screaming the news. Conflicting opinions proliferated with "experts" commenting on all the numbers, the data, and the news, trying to interpret them in the

only possible way: by *forcing* them, by making them say more than they could. Having difficulty reading the present, we projected ourselves into the future in a paradoxical accordance with the pragmatic semiotics of American philosopher Charles S. Peirce, according to which the meaning of something lies in its consequences[16]; opinions thus became predictions, forecasts, and prophecies—a particularly successful literary genre in times of crisis.

We know the limitations of the metaphor of contagion when applied outside the biological realm, yet we know that the virus is not merely the virus itself but rather its discourse: an object and the words that gather around it and define it in the first place.[17] The virus is not only an RNA nucleus whose sole function is to replicate itself but also a semantic monad (a revolving core of meaning) that affects meaning-making; the virality of the virus is twofold, both biological and cultural. The pandemic was overlaid with the so-called infodemic: the hypertrophic, spasmodic spread of conflicting information that eventually poisons the communication ecology and creates total "semiotic confusion".[18] More than any other viral content that can spread online, the virus polarizes; it was downplayed or even rejected and denied; it was judged as a turning point in human history, the final signal of the capitalistic apocalypse. It triggered conspiracy theories (via private groups on instant messaging applications such as WhatsApp or Telegram—the next frontier of communication studies) as well as accurate yet unverifiable etiologies (the virus would have been caused by wildlife exploitation, deforestation, anthropization, climate change, and so on). To wear the mask, or not to wear the mask, that is the question: the virus and the ways to deal with it turned out to be a reagent, an axiological (i.e., related to values and evaluation criteria) identity swab. Everyone confronts the virus with their own semiotic resources, including humor. It is easy to make fun of how the virus radically changed the lives of millions; a trivial example: for months, Tinder users were deprived of their object of value as the dating app was forced to transform into a simple chat. At the same time, it is just as easy to see the cases when, paradoxically, nothing changed: doctors in hospitals, truck drivers on their vehicles, and freelance graphic designers who have always worked from home on their MacBooks have always been exactly where they were before the pandemic, though certainly not under the same conditions.

4. Viral memes

Every discursive wave, and especially the ones so invasive that monopolize the public sphere, generates Internet memes: pieces of media content—mostly catchphrases, captioned pictures, and videos (cut-and-paste,

mashups, remixes, and re-enactments)—designed according to a template or formula so that they can be appropriated and re-semanticized *ad libitum* (their meaning can be adapted according to context and need), usually with a playful, funny, humorous, parodic, or satirical connotation. We create and share memes to talk about ourselves under the guise of talking about current events: when something happens and turns out to be big, it becomes memes and every community has its own way.[19] The pandemic produced not only the infodemic already mentioned but also a true "memedemic"; it has never happened before that a single event has been the focus of such extensive memetic production on a global scale.[20] We have seen similar images pop up everywhere, on every feed of social media, from everywhere; a case in point is the images of the war-like scenario of empty supermarket shelves with peculiar diatopic variations (i.e., differences due to geographical variation) that should be scrutinized by sociologists and psychologists (while eggs disappeared in Bologna, Italy, toilet paper ran out in the United States). And this is exactly what is happening. Such a vast semiotic production centered on the virus as a global unifying isotopy—that is, semantic recurrence (the virus is the common thread of all these media tokens)—offers scholars a unique opportunity to study communication, culture, and contemporary mythologies in a transcultural perspective.

4.1. Two early researches on "coronamemes"

Giselinde Kuipers, a sociologist and humor studies specialist based at the Catholic University of Leuven, Belgium, and Mark Boukes, who teaches communication sciences at the University of Amsterdam, Netherlands, have launched a study on "Humor during the global Corona Crisis", with the goal to investigate the social value of what we may call pandemic humor within the wider framework of the so-called disaster humor: not all of us would readily accept and positively respond to a joke about 9/11 and Twin Towers (especially not in the immediate aftermath of the event), but some might benefit or might experience a kind of relief by addressing the tragedy in this way. The two scholars have set up a webpage through which they collect spontaneous submissions of jokes, images, and memes about the coronavirus ("coronamemes"). According to Kuipers, as of April 2020, 1,357 users from about 50 countries have contributed to this research[21]; as stated in the only publication to date (as of September 2023) resulting from the research (Kuipers and Boukes 2021; a popular science short paper), more than 12,000 humor samples from 81 countries had been collected by July 2020 with the participation of researchers—including myself—from 25 countries. The researchers identified five phases of pandemic meme production that can likely be called the "first global humor cycle". "Although

the timing is somewhat different across countries, we see the same phases around the world" (*ibidem*):

- The Chinese virus (where the pandemic is seen as something external, affecting only "the others" and accompanied by racism and xenophobia);
- Classic disaster humor (where the situation is connoted as movie-like and, thus, surreal, and online users exploit the possible cultural associations with the fictional world);
- The virus hits home (where the pandemic becomes an internal affair spreading "panic and fear, expressed through consumption"—as is the case of the aforementioned eggs and toilet paper—and, at the same time, panic and fear are being mocked and ridiculed);
- The quarantine and lockdown (where people have to deal with physical limitations, smart working, routine, boredom, and frustration);
- What I would call "the normalization of the abnormal" or, as many did, "the new normal" (where alienation and isolation make their way, leading to a persistent and "general sense of doom").

By June 2020, Kuipers and Boukes note, "[O]ther events made the headlines—notably the Black Lives Matter protests" (an identity, political, and discursive comeback) so that the "attention had dispersed, and the period of strong, undivided global focus was over. And with it, the first global humor cycle".

A group of researchers at the IUSS (School for Advanced Studies in Pavia, Italy), at the intersection of cognitive science and linguistics, coordinated by Luca Bischetti, Paolo Canal, and Valentina Bambini, has launched a study on "viral humor" based on a questionnaire, whose participants are asked to rate jokes, cartoons, and actual memes with both coronavirus and normal themes.[22] The aim is to investigate the limits of humor in situations such as the pandemic and to explore the possible mechanisms that make a certain content be considered funny or, on the contrary, disturbing (in Internet jargon, we would say, LOL versus cringe, i.e., laughing out loud versus "a feeling of embarrassment or awkwardness"). The research has so far produced two very similar publications, one in English and one in Italian (Bischetti *et al.* 2021a, 2021b), based on the participation of 1,751 Italian compilers reached between March 18 and March 30, 2020 (namely, shortly after the first nationwide lockdown issued by the Italian government, which occurred on March 8). According to the researchers, "COVID-19 humor is not rated as funnier than humor forms paying on heterogenous themes", as it seems to lack "a 'signature' of funniness", while it "displays a mark of aversiveness"; in other words, "not everybody enjoys COVID-19 humor" and, as a matter of fact, "with increasing age and in women, COVID-19 humor was judged as more aversive".[23]

The virus spread, and so did humor as it is today: posted online and made of memes. On the one hand, as we have seen, a kind of shared global feeling emerged, reflected in the use of meme characters that embody the same narrative patterns (De Saint Laurent *et al*. 2021); on the other hand, we could simultaneously observe a proliferation of micro-contextual humor, that is, humor related to geographically and culturally specific topics and issues. This trend has been explored in depth in several papers (e.g., Sebba-Elran 2021 for the Israeli context; Chłopicki and Brzozowska 2021 for Poland; Bracciale 2020; Barile and Panarari 2021; Murru and Vicari 2021 for Italy) and, for example, in edited volume (Mpofu 2021) focusing on how social media humor mediated the pandemic in the so-called Global South (countries such as Brazil, India, Kenya, Nigeria, South Africa, and Zimbabwe).[24] Social media users all responded to the virus together and in similar ways but made the most of the cultural specifics they had at their disposal.

5. Laughing or smiling?

It may seem paradoxical that such a terrible moment in history generated so much playful digital buzz; in fact, this would fit a strategy of coping with the virus and its aftermath, such as that early reported in China (Koetse and Barnes 2020). Psychological studies would show how "Internet memes related to the current COVID-19 pandemic may tentatively serve as coping mechanism for individuals experiencing severe symptoms of anxiety" (Akram *et al*. 2021).[25] Paralyzed by the lockdowns, we were left with few semiotic resources to express ourselves; in this framework, memes are of particular importance precisely because of their stupidity; they are perhaps necessary precisely because of their ephemerality as they represent the most widespread means through which a particular (more or less globalized) culture realizes its own homeostasis: the metabolization and negotiation of contents and meanings in discourse. To better scrutiny, memes do not merely perpetuate the virality but rather put it between "quotation marks"; likewise, the so-called coronamemes do not talk about the virus but about our obsession with it: they are not the means to semiotically propagate the virus further but the parody of its Internet renditions. Whereas virality is broadcasted and monolithic, memeticity may be fractal and polyvocal. Memes, in this perspective, can be understood as what French Jesuit anthropologist Michel de Certeau (1980) would call digital "practices of everyday resistance" and French philosopher Michel Foucault (1984) would call digital "technologies of the self". While history always repeats itself twice, according to the famous Marxist adage, we can front *tragedy* and turn it into *farce* through silly tokens like memes: we can create meta-structural descriptions (grammars, according to Russian semiotician Yuri

Lotman)[26] in which we are not the passive extras but the active directors of the bad movie we are living in.

In one way or another, we have asked ourselves: can we already laugh at COVID-19? Is it still much *too soon*? Some believe that we *must* laugh at the virus as soon as possible precisely because it would *not* be the case: in this way we can to some extent reduce its scale; we can try to normalize such an overwhelming phenomenon. To avoid our global semiotic silence, we can try—some suggest—to laugh about the virus and fill any possible meme template. Controversial musician and media personality Kanye West, proverbial for his erratic laughter as well as for the complete lack of facial expression at public events, appears in a five-panel meme from March 2020 that rearranges some old pictures of him for the occasion: under the headline "Laughing at corona memes like" we see five different pictures of West; he is always smiling, even though his facial expression is less and less amused over time, from "February" to "March 1" to "last week" to "this morning" and, finally, to "a little later this morning".[27] Thanks to the semiotic act of artificially altering reality, pictures, bodies, and faces, we may find a temporary, vicarious digital way out: we can laugh less, maybe just smile, to cover up a situation that is getting worse. German philosopher Helmut Plessner (1950), founder of philosophical anthropology along with Max Scheler and Arnold Gehlen, has written extensively on the difference between "laughing" (Germ. *Lachen*) and "smiling" (*Lächeln*), two expressions that can easily be confused (or reduced one to the other). While "laughing" would manifest the uniquely human "eccentric positionality" in the respect of being an extreme limit – case of behavior, expressing the brokenness of human beings' relation to their body ("crying" would function in the same way), "smiling" would embody such "eccentricity" in a much more subtle way: it is an ambivalent mark of awareness that can be either positive or negative, as it is not strictly tied to a particular emotion. In other words, for Plessner, every smile is always the ambiguous smile of Gioconda.

6. Face and face mask

As we have seen, the pandemic reconfigured our habits, our proxemics (i.e., our use of space), and our kinesics (our body movements in space). It also "disfigured" us: we could not go to barber shops or hairdressers (since they were closed), and yet we were told to keep hair short and cut mustaches and beards (since they were potential vehicles of contagion). Above all, the pandemic forced us to always wear the medical face mask, which became a true collective and global obsession, both positive and negative. The mask was appropriated in the most diverse ways, with people "wearing rather peculiar items on their faces" and parodic imitations of

them "done for fun by individuals stranded at home" or "dressed in most peculiar, attention-grabbing attire" (Dynel 2020: 184–185).[28] The term "mask shaming" spread from early 2020 to denote social deprecation for wearing or for *not* wearing the medical face mask in public spaces—a case of polysemy, which linguists define as enantiosemy, where the same word means its own antonym (a word with the opposite meaning) depending on context (Corbolante 2020).[29]

The mask is a thin layer of fabric and yet a powerful device, physical and semiotic at the same time; it would prevent contagion as much as it would invalidate face-to-face communication as we know it by getting in the way of our facial expressions. It would dismantle the idea of the face as "the epiphany of the Other" proposed by Lithuanian-French philosopher Emmanuel Lévinas (1961) and revisited by contemporary thinkers such as Italian Giorgio Agamben (2020), who not coincidentally happens to be a fierce opponent of masks and social distancing.[30] The mask testifies the "faciality" (Fr. *visagéité*) theorized by French psychoanalyst Félix Guattari (1979)[31] as a means of imposing control over our bodily social life—something that Foucault (1976) would call "biopolitics". This small piece of fabric that people in the West were forced to wear in order to cover their mouth and nose, for the very first time, revealed the existence of at least two opposing ideologies of the face: one ontological and essentialist (and conservative; the face is being obtruded and disrupted by the mask, and, without their full face, human beings are no longer fully human) and the other semiotic and constructivist (and transhumanist, since the mask is just an appendage of the biological face and human nature is defined by the need to go beyond the mere biological level).[32]

6.1. *Pandemic meme faces*

After the virus, new memes were created. And the old ones were revamped to fit the Zeitgeist; Google Trends shows an almost perfect homomorphism and synchronicity between the global popularity peak of search terms like "coronavirus" and "facepalm" around mid-March 2020.[33] Correlation does not imply causation, says the old adage; nevertheless, the facepalm "in the time of virus" shows us how—to put it with Italian satirist Ennio Flaiano—"the situation is grave but never serious" so that its cartoonish and yet realistic digital mimicry has been capable to thematize the surreal, dramatic scenario. Due to the widespread World Health Organization prescription not to touch one's eyes, nose, or mouth to prevent infection, the facepalm has been forced to give up hands to convey its message. So its message changed.

Many meme formats rely on comparisons, and this is also the case with a picture posted in April 2020 on Imgflip, a website for creating and sharing

images (specialized in memes and animated GIFs) launched in 2008, where the traditional facepalm is updated "in the time of virus".[34] Picard's face-palm is crossed by a red "No entry" sign and introduced by the follow-ing text: "ATTENTION IMGLIP COMMUNITY: UNTIL FURTHER NOTICE, USE OF PICARD FACEPALM TEMPLATE IS SUSPENDED". The new pandemic-compliant facepalm is directly below and palm-free; it is identified by a green check mark ("Yes, this is ok") and is introduced by the text "ALTERNATE NO FACE TOUCHING TEMPLATE", with the final prompt "PLEASE USE THE ABOVE IMAGE AS AN ALTERNATE UNTIL THIS CRISIS PASSES. THANK YOU FOR YOU COOPERA-TION". The meme is a meta-meme (a meme about memes), and it is play-ful, but it is nevertheless evidence of a change in collective behavior IRL (in real life) through a change in collective digital behavior. Post-pandemic Picard just frowns without touching his face in the slightest.

Another meme that surfaced on Twitter in March 2020 depicts Sla-voj Žižek, who is known to suffer from tics that cause him to constantly touch his face when he speaks, being appalled by the anti-contagion pre-scriptions; again, the meme is based upon comparison: Žižek reacts to the "*Coronavirus outbreak*" (and the resulting invitation "*in order to prevent the infection do not touch your nose, eyes or mouth with your hands*") with a typical exaggerated facial expression of his.[35] Another Imgflip meme shows a generic little guy in front of their computer engag-ing in a desperate double facepalm; the top caption reads, "SERIOUSLY STOP MAKING CORONAVIRUS MEMES" and the bottom one, "IT'S NOT FUNNY!".[36] We have created way too many COVID-19 memes to make all of them hilarious; we may be still smiling but in the same way of *good ol'* Kanye.

The facepalm, which in Western culture is considered the figure of frustration par excellence,[37] shows us that not only the face but the *whole body* is involved in such a pathemic state. The face is a powerful catalyst of meaning, but it owes this capacity to its synecdochic (the part for the whole) and metonymic (the concrete for the abstract) nature: it stands for the body and, thus, for the persona. Semiotics knows that meaning is always relational and that any subject of research is relative and mobile, just like the perspectives that the researcher must adopt to do their job—without condoning nor condemning them. In other words, to study the face as a sociocultural entity is not to study the face as a part of the body or only from a visual perspective. The face is just the tip of the iceberg, the screen onto which we project the form of life to which we adhere, and the facepalm, with the hand covering the face only to uncover its haptic dimension (i.e., the dimension related to the sense of touch), reveals the semiotic mask of frustration—a passion that deeply affects our form of life.[38]

7. Hands

The pandemic did not mutilate us, but it disabled our hands as if they were wounded. We could not touch other people. We were instructed not to touch our own noses, eyes, and mouths. And to wash, sanitize, cover, and hide our hands (with disposable gloves). We have been told this over and over to the point where repetition may have caused quite a loss of meaning; this surreal meaninglessness has been attested by memes that synthesize the new rituality by, for instance, associating it with OCD – like behaviors previously practiced only by literature's most famous killers: the classic Shakespearean scene in which Lady Macbeth frantically washes her hands after having committed murder became a surreal, memetic guide to hand-washing (see Smith 2020).

By the time of the pandemic, TikTok, launched in 2018, had already become a pivotal social and viral platform, which did nothing but "extending the Internet meme" logic (Zulli and Zulli 2020); in early January 2020, fears of the outbreak of a Third World War due to the escalating tension between the United States (with Donald Trump) and North Korea (with Kim Jong-Un) were greeted by themed videos with hashtags such as #WW3. After that, TikTok became the social media reference par excellence for the pandemic; Khaby Lame, the most followed creator on the platform (since June 2022), started his own career, based on a signature hand gesture mocking the so-called life hacks videos that spread virally due to their entertaining complicatedness, during the first Italian lockdown. Among the TikTok trending fads we find the infamous handwashing routine:

> Vietnamese officials created a TikTok dance demonstrating the proper way to wash hands and engage in social distancing. . . . The dance launched a "challenge" where users imitated the hand-washing procedure, presumably for increased visibility, but incidentally promoting/ spreading safe behaviors.
>
> (*ivi*, 13)

In Michelangelo's frescoes of the Sistine Chapel in Rome, God extends his hand toward Adam to give him life; "in the time of virus", Instagramer Shusaku Takaoka photoshopped the scene so that God, wearing disposable gloves, would sanitize Adam's hand.[39] Without our hands we have trouble doing, making, interacting—being ourselves. We shake hands and hold hands, identifying two distinct regimes of relationality: superficial acquaintance and intimate relationship. The hand defines us as active subjects: metaphors and language in general suggest this by means of etymology (from the Latin *manus* to "manufacture", from the English "hand" to

"handle", and so on), outlining the semantics of a metonymy of our own agency—we can do things because we have hands. In the incipit of French art historian Henri Focillon's *In praise of hands* (1934) this "poetry of action" is described in vivid terms; hands are underappreciated longtime friends that play a leading role far from the vicariousness to which they have been historically reduced within a Cartesian framework that juxtaposes mind and body. A leading role that in Focillon's words transforms them, not surprisingly, into faces:

> I undertake this essay in praise of hands as if in fulfillment of a duty to a friend. Even as I begin to write, I see my own hands calling out to my mind and inciting it. Here, facing me, are these tireless companions who for so many years have served me well, one holding the paper steady, the other peopling the white page with hurried, dark, active little marks. Through his hands man establishes contact with the austerity of thought. They quarry its rough mass. Upon it they impose form, outline and, in the very act of writing, style. Hands are almost living beings. Only servants? Possibly. Servants, then, endowed with a vigorous free spirit, with a physiognomy. Eyeless and voiceless faces which nonetheless see and speak.

We know that the opposable thumb is one of the traits that make us biologically and phylogenetically unique. Some scientific theories place the origin of language in the gestures of the hands, meant as the "original signs" (Armstrong 1999). Among the earliest examples of visual expression are the negatives—the stencils—of the hands in the caves: indexical (marks of physical intervention), iconic (they represent the object they stand for), and symbolic (concrete figures standing for abstract qualities) signs at the same time, thematizing their own manufacture. There are systematic studies of the hands when their use is codified, explicitly linguistic: think of sign language (and its idiosyncratic variations, such as those collected in Munari 1963). There are protosemiotic fields of study that deal with the signs of the hand (chiromancy) and parasemiotic fields of study devoted to the signs left by the hand (calligraphy and graphology). Hands are the subject of iconological studies. In general, though, precisely because of their importance, precisely because of their prominence, precisely because we cannot do without them, we tend to forget about hands—we take them for granted. We think of our hands when we are forced to *rethink* them: when they become a problem, when we cannot use them, when we have to pay attention to them, when they are denied to us, and when they cease to be "natural". Just like when they get hurt or wounded. Just like during the pandemic.

8. Hands and faces

During the pandemic, pictures of exhausted doctors, nurses, and other medical professionals after hours of work went viral, showing the signs of medical face masks on their faces and how their hands were abraded from continuous handwashing and sanitizing (see Leone 2020d). In order to protect them we have to hurt both the face and the hands: they are being damaged by a virus that primarily affects the respiratory system—the umpteenth proof of the systemic nature of any phenomenon, biological and semiotic at the same time. Hands and face seem to be only the different parts of one and the same circuit.

Famous are the passages of French semiotician Roland Barthes (1980) about the face immortalized by the photographic act. Some romantic "fragments" of his (1977) describing hands and fingers are equally memorable. Less well known are perhaps the reflections in his *Variations on Writing*—an essay commissioned by the Academic Institute in Rome in 1971, written in 1973 and published posthumously only in 1994—in which Barthes talks about the hands and the face.

> When the graphic sign first appeared, a new equilibrium emerged between the hand and the face (they were liberated simultaneously, one with the help of the other): the face acquired its own language (that of hearing and speaking) and the hand also acquired its own language (that of grasping vision through gestural tracing) [p. 20]. . . . Finally, after freeing themselves thanks to each other, from one side, we got the hand (the gesture) and its manufacturing functions and, from the other side, the face (the word) and its functions of phonation. And what about writing? It is undoubtedly a return to the hand. . . . Language returns to that part of the body whose liberation had made possible its birth: a great dialectical process comes to its closure. Writing is *always* on the side of the gesture, *never* on the side of the face: it is tactile, not oral.
>
> [p. 63][40]

The particular sensibility of Barthes, who here proposes something that has been called the "physics of writing" (Lo Feudo 2017), helps us draw a micro-map of the complex relationship between face and hands, according to a complementarity that is functional and substantial: language becomes words through the face; language becomes gestures through the hands in writing.

Italian semiotician Massimo Leone (1999) devotes the last part of his analysis of representations of religious ecstasy to hands and, thus, to the sense of touch: an "uncomfortable subject", something difficult to explore without first having accumulated an adequate "memory of images", yet

something that also represents "the culmination of many paths of ecstasy" (p. 252), especially in the figuration of the "hand on the chest". As the site of contact, of physical contiguity between subject and object, the hands are the site of relationality: by playing the role of the enunciational informer–actant par excellence (the one who indicates, who makes it visible, who draws attention to something),[41] the hands increase their "semiotic versatility" in "conjunction with other equally flexible elements, such as the face" (p. 257), becoming a powerful "instrument of ostension" (p. 255). In other words: when these deictic "figures of the body"[42] point to something, they would like to touch it, and even when they actually touch something, the hands are pointing to it. Leone (2021b) returns to this ongoing dialectic between hands (and especially fingers) and faces to address the issue of recognition and identity in the age of "digital AI forensics": "modern forensics realizes that the face can mislead and, inspired by eastern models (China, Japan, India), adopts fingerprinting. In the digital era, however, fingerprinting first goes digital, then it is increasingly replaced by facial recognition" (*ivi*, 579).

9. Conclusions: parafaciality and frustration to the square

Hands can "speak" on their own. Quite often they speak along with the face, amplifying or silencing it, by making it explicit, reinforcing its communicative attitude. Without them, the face still signifies, but without them it often simply communicates weaklier. The face can be enriched and detailed by a variety of complementary elements—we can talk of "parafaciality" (paratextual faciality, from Ancient Greek preposition παρά, "beside, in adjacency"). Some elements can be defined as peritextual regarding the face since they are characterized by spatial continuity with the face; think of cosmetics, jewelry, tattoos, headpieces, and, of course, masks—we can speak of "perifaciality" (peritextual faciality, from περί, "around, near, about"). The face can also be epitextualized (from ἐπί, "in addition"), that is, provided with complements that intervene on it but do not have direct continuity with it[43]—we can speak of "epifaciality" (epitextual faciality). This is the case with the hands. They are autonomous, they are far from the face, and yet we cannot help but put them onto it: through them we can manipulate the face; we can make this physical part of the body a powerful means to express and show our emotions, our complex pathemic states. Thanks to the hands we can appropriate the face and turn this biological surface into our semiotic mask.[44] With our hands we shut our mouth, plug our ears and nose, and shield our eyes or the entire face; we do so even when the meaning of our expressions is perfectly readable in itself.[45] Still, it is not enough. We may be "desperate", and this may already be conveyed through our grimace, but we are telling those who look at us that we are

desperate only when we "tear our hair out", whether it is intentional or not, whether we have hair or not—as in the case of the bald Captain Picard.

A small piece of digital media content like an old Internet meme manages to make us aware that we are forced to radically rethink our idea of how our persona coheres in the public sphere: the facepalm proposes to us a surprising redefinition of what our face was and can or cannot be. The amplifying epifaciality of the hands is perfectly visualized in action, albeit *in absentia*, within the facepalm meme modified "in the time of virus": the prototype, censored from any possible use of the hand, is profoundly weakened. Picard is now frustrated to the square: frustrated by its own frustration. Without his hand, the Captain looks frustrated by the fact that he cannot be frustrated *enough*. Indeed, during the pandemic, we are not even allowed to be as frustrated as we would like to be. Yet we can choose to keep our semiotic élan alive: we can hijack language and divert it from our hands back to our face. And laugh about it.

Notes

1 This chapter results from a project that has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program (Grant Agreement No 819649-FACETS; PI: Massimo LEONE).
2 "Facepalm", Wikipedia, https://en.wikipedia.org/wiki/Facepalm (entry created in 2008).
3 "Mortal Q", YouTube, May 22, 2007, https://youtu.be/x012BnKWi3g?t=57 (at 00:57 seconds c.ca).
4 For a semiotic approach to emoticons and emojis, see (Marino 2022a).
5 4chan (www.4chan.org/) is the best-known image board in Western Internet culture, founded in 2003 by then 15-year-old American nerd Christopher Pool aka moot; it is generally considered the "factory of Internet memes" par excellence.
6 For the semiotic notion of "object of value", see Greimas and Courtés (1979, *ad vocem*, 216–217). Note: in-text and footnote page numbers refer to the translation when included in the list of references.
7 For the semiotic notion of "thematization", see Greimas and Courtés (1979, *ad vocem*, 344).
8 As of September 2023, the definition in Google's Search Engine Results Page (SERP) is provided by Oxford Languages; http://bit.ly/3oZ7GD3.
9 For "tensive semiotics", see Fontanille and Zilberberg (1998). For the semiotic notion of "narrative program", see Greimas and Courtés (1979, *ad vocem* ["program, narrative"], 245–246).
10 For the semiotic notion of "aspectualization", see Greimas and Courtés (1979, *ad vocem*, 18–19).
11 The proverbial title of a 1947 poem by British–American modernist poet W. H. Auden.
12 Title of American science fiction writer Philip K. Dick's 1959 novel (in which the fifties are recounted as if they were a distant time, idealized and stereotyped

while deformed through the lens of SF narrative), inspired by a verse from William Shakespeare's *Hamlet* (1600 c.ca).

13 The classic reference for the "semiotics of passions" is Greimas and Fontanille (1991). See also Greimas' seminal work on the lexical semantics of nostalgia (1986).

14 In an interview with RT News, uploaded on YouTube on March 15, 2020 (https://youtu.be/HabyJi66l0w, search via WebArchive).

15 A case in point is Italy, where the vagueness and ambiguity of government decrees have become proverbial (TheLocal.it 2020).

16 The famous passage by Peirce on the relation between meaning, action, and future is CP 2.86 (from 1902).

17 For the semiotic notion of "discourse", see Greimas (1966).

18 The term is not used here in the same sense as in language contact studies (e.g., Caunce 2013).

19 For a semiotic approach to viral contents and Internet memes, see Marino (2015, 2022b). The best introduction to the topic of "memes in digital culture" is still by Shifman (2013), who was involved in the research of Kuipers and Boukes.

20 It is impossible to provide even a selection or glimpse of such material here; as a rough guide, take a look at the Know Your Meme entry (the wiki encyclopedia of viral phenomena and Internet memes, launched in 2007) dedicated to the COVID-19 pandemic: https://knowyourmeme.com/memes/events/covid-19-pandemic.

21 Personal communication, via email, March 23, 2020. The URL of the submission webpage (still active as of January 2023) is https://uvacommscience.eu.qualtrics.com/jfe/form/SV_eOGzCgEHtNW5PZX.

22 The URL to access the questionnaire (https://scuolaiuss2019.limequery.com/635545) was active only during the data-collecting period (i.e., March 18–30, 2020); see Pattarini (2020) for a description of the project.

23 Researchers suggest that "individuals using humor to cope with uneasy circumstances judged COVID-19 humor as funnier and less aversive", whereas one could reverse the perspective and claim that individuals who found COVID-19 humor funny do use humor to cope with uneasy circumstances.

24 For a synthetic review of "humor in the age of coronavirus" from an Anglophone perspective, see Olah and Hempelmann (2021).

25 The study is based upon the response of 160 individuals to coronavirus-related memes, 80 with clinical anxiety, and 80 as a control group (i.e., without clinical anxiety).

26 Lotman (1971).

27 "Laughing at corona memes like", a Kanye West pandemic meme circulated in March 2020, an instance of which is displayed at "Covid-19 Archive. A Journal of the Plague Year" (https://covid-19archive.org/s/archive/item/9716), a non-profit website aimed to "document, curate, and preserve experiences of the Covid-19 pandemic for the historical record". Original West photographs date back to at least 2015.

28 Italian semiotician Bruno Surace's chapter in this same collection addresses disfigurement from a semiotic perspective, focusing on horror films and digital urban legends (such as the so-called Creepypasta stories and the infamous character called Slender Man); see also Surace (2021a).

29 See also the entry "Mask Shamed" in Urban Dictionary, October 1, 2020, www.urbandictionary.com/define.php?term=Mask+Shamed.

30 Agamben's philosophy of the face is also deeply indebted to that of Martin Heidegger.
31 Guattari later developed this concept further in his writings with French philosopher Gilles Deleuze.
32 To define themselves, human beings have always *redefined* themselves. The earliest depiction of humans trying to *go beyond* their biological nature is perhaps to be found in the Bible, Genesis 3, where Adam and Eve finally reveal their sinful nature. God allows a kind of "improvement" (he gives them clothes) but still sets an insurmountable limit for them: death because they were never meant to be immortal.
33 Google Trends results for "coronavirus" and "facepalm" between November 2019 and June 2020: https://trends.google.it/trends/explore?date=2019-11-01%20 2020-06-30&q=coronavirus, https://trends.google.it/trends/explore?date=2019-11-01%202020-06-30&q=facepalm.
34 The facepalm "in the time of virus", a meta-meme uploaded on "Imgflip" (https://imgflip.com/i/3v2pvx) in April 2020 that has been viewed 71,000 times as of September 2023.
35 https://twitter.com/dubravka/status/1240027570663546880.
36 https://imgflip.com/i/3sobtl.
37 https://en.wikipedia.org/wiki/Facepalm#Popular_culture.
38 For the semiotic notion of "form of life" (a philosophical term introduced by Austrian philosopher Ludwig Wittgenstein), see Fontanille (2015).
39 @shusaku1977, Instagram, March 16, 2020, www.instagram.com/p/B9yd-WnpeI9/.
40 Page numbers refer to the Italian edition; the translation is mine (see list of references).
41 For the semiotic notion of "actant", see Greimas and Courtés (1979, *ad vocem*, 5–6).
42 Fontanille's theory was thoroughly presented in his 2004 book in French; for an English summary, see Fontanille (2013).
43 The terms "paratext", "peritext", and "epitext" are drawn from the theory of transtextuality proposed by French narratologist Gérard Genette (1982).
44 What we simply call "the face" is in fact a threefold semiotic apparatus: we have the biological part of the body (Lat. *facies*, Eng. face), which may or may not show our emotions through physiognomy (*vultus*, facial expression), just as it may or may not be clearly visible to the public (*visus*, visage). For such a semiotic framing of the face, see Magli (1995) and Marino (2021).
45 See the classic triptych of emojis showing the so-called three wise monkeys, respectively, meaning "see no evil, hear no evil, speak no evil", as a call to discretion, willful ignorance, or self-censorship. In Munari's visual dictionary (*op. cit.*) we do find facial expressions reinforced by hand gestures but not the facepalm.

3 Uncertain faces

An investigation into visual forms for communicating otherness[1]

Cristina Voto

1. Introduction: How to do things with facial images

The performativity of the artificial face when communicating the meaning of otherness is at the core of these pages. Before starting, I consider it appropriate to establish a few premises. In what follows, speaking of performativity implies considering those social exchanges that transmit knowledge and memory, as in the case of the sense of identity and otherness, through repeated actions or "twice behaved-behavior" (Schechner 2002: 29). In a dialogue with the proposals that performance studies (Diana Taylor 2016; Schechner 2002) have introduced into humanities, performativity is here understood as an epistemic lens, an efficient framework for the analysis of effects of meaning such as the process of identification, the fixing of identity normativity, or the exercising of practices of resistance. Understanding these processes as performances suggests that the performative nature of things can also function as an epistemology: as an embodied practice, the identification of performativity always offers a certain form of situated knowledge.

Stuart Hall's reflections (1996) on cultural identity as a dynamic process resonate with this perspective: he refutes existentialist conceptions of identity while making strategic and positional, thus performative, use of it. Based on this background, I also refer to identity as the result, whether by acceptance or rejection, of the load of meanings that collective writings deposit on the skin of each of us. Identity, then, is not to be thought of as a fixed ontology but as a performative space of tension that results from the intersection of different aspects – such as those related to ethnicity, class, gender, and so on – through which to understand the process of identification. Retrieving the lesson of intersectional feminism (Crenshaw 2017), thinking in terms of intersectionality allows us, in fact, to recognize the performative nature of identity, turning this category into a useful tool for mapping out how each identity experience is the result of situated effects of oppression and/or privilege. Within this perspective, thinking of the process of identity construction

means not so much referring to individuation according to subjectivity but to a dynamic of identification by means of which the subject relates to others, producing a sense of belonging to a community.

During identity performances, the Other – the alter – emerges and so does the ideological apparatus that shapes otherness. In our culture, one of the greatest areas of conflict in this confrontation has been the reproduction of facial images as visual artifacts where identity, and thus otherness, can be portrayed and communicated. For this reason, in what follows, I consider the visual reproduction of the face as a commutative project capable of conveying meaning effects concerning the identification process and that of othering. Within this viewpoint, it is possible to affirm that even though our every face is unique, it is precisely on the frontal surface of the head that facial trends can be established, also based on the sociocultural expectations which shape aesthetic models in accordance with parameters of belonging to a community (Leone 2021c). Maybe this is the reason why, as a visual artifact, the face has always been meaningful throughout history: "making one's or others' face(s) present in a distant space or in a distant time through visual simulacra is an old habit of the species" (Leone 2020a *Digital Cosmetics*: 551). Nevertheless, the introduction of photography and the possibility of the mechanical visual reproduction of the face significantly changed the meanings and uses of the surface par excellence of identification in both an honorific and a repressive way. As affirmed by Allan Sekula in his fundamental essay "The body and the archive":

> On the one hand, the photographic portrait extends, accelerates, popularizes, and degrades a traditional function . . . that of providing for the ceremonial presentation of the bourgeois *self*. At the same time, photographic portraiture began to perform a role no painted portrait could have performed in the same thorough and rigorous fashion. . . . [P]hotography came to establish and delimit the terrain of the other, to define both the *generalized look* – the typology – and the *contingent instance* of deviance.
>
> (Sekula 1986: 6–7, italic in the original)

Nowadays, two hundred years after the invention of photography, our "iconosphere" is more than ever replenished with visual facial artifacts that translate ideological discourses into typification and deviance. At the same time, the mechanical nature of images has been updated with automated forms of re-producing the face. These automated facial images derive from the "automatization of the labor of looking" (Lee-Morrison 2019: 18), a labor that outstrips the human faculties, and the massive amounts of data that digital society produces.

   From a historiographical point of view, photography before all other images assured adherence to the referent by means of the mechanical dimension of the device, its distinguishing feature. The referentiality promised by the photographic image created a unique link, an indexical one – that is, a spatiotemporal connection – between mechanically generated images and the realm of veracity. However, our present confronts us with a media ecology capable of challenging the epistemological paradigm of visuality using images that look like photography or, should we say, that activate meaning effects which inscribe them in the domain of the photographic. In an iconosphere of computer-generated images, artificial vision, and virtual reality, photographic images are increasingly in contact with and contaminated by digital practices. This change in the mediascape entails a new focus on the discursive aspect of the image: asserting that an image is a referent of something has become a rhetorical mechanism based on context rather than a feature guaranteed by the technical genesis of the image. So how are we to approach this visual horizon?

   Some interpreters have already acknowledged the performativity of the face as an interface of communication and visual support in the sociocultural processes of identification. On the one hand, Ervin Goffman has investigated the ritual character of face-to-face interaction: from his perspective, as rituals are constitutive parts of everyday life, it can be said that our daily social fabric is made up of ritualizations that order our facial acts. In this sense, interactive rituals appear as embodied on faces whose expression is the mastery of gesture, the manifestation of emotions, and the ability to present convincing performances before society. For Goffman, people show their positions on the scale of prestige and power through a social face, an expressive mask that has been lent and attributed by society: those people interested in maintaining this social face must take care that a certain expressive order is preserved (Goffman 1956). On the other hand, it is possible to peruse a whole strand of studies attentive to recognizing those sociocultural writings that make the face a fertile medium for the recognition of otherness. Examples of this perspective are Joan Riviere's proposal to consider womanliness a mask to be worn (1929), Roland Barthes' interpretation of Greta Garbo's *face-as-object* (1957), and Laura Mulvey's feminist reflections on the facial close-up in classic Hollywood cinema (1975). In all these proposals, the facial image performs a sense of otherness according to gender bias through the media reification of what Simone de Beauvoir (1949) defined as the second sex. With these studies as background, in the next sections, I turn my attention to the sociocultural effects of facial images when produced through a nonhuman agency, taking into consideration the capacity of artificial intelligence systems to communicate otherness.

2. The semiotics of a precarious form of communicating otherness

After the terrorist attack at the World Trade Centre in New York in September 2001, the war in Afghanistan, and the circulation of automated devices for the detection and recognition of the enemy, the philosopher Judith Butler responds to the impacted media environment with a series of reflections concerning the conditions of representations of otherness. In *Precarious Life: The Power of Mourning and Violence* (2004) they revise the theoretical proposals of Emmanuel Lévinas through a perspective aimed at problematizing an ethic of the precarious condition of human life represented in their contemporary mediascape. In particular, they dedicate an entire chapter to the representations of faces during the war in Afghanistan since: "all of these images seem to suspend the precariousness of life. . . . *They are the spoils of war, or they are the targets of war*" (2004: 143, italics in the original). In Butler's philosophical production (1990, 1993, 1997), the body has already been analyzed as precarious matter negotiated in space and time by a constitutive vulnerability. Public life, physical proximity, and exposure to the gaze of others always modulate the body. From this standpoint, and in the warfare that inaugurates the Third Millennium, Butler identifies in the openness that marks the body a porosity shaped by precarity. The philosopher introduces the latter term to indicate those conditions of protection and threat that are maximized or minimized by the differential distribution of exposure to damage. Recognizing the precariousness of the human ontological condition prompts Butler to investigate the ethical obligations arising from it in dialogue with the arguments presented in *Totalité et Infini: essai sur l'extériorité* ["Totality and Infinity: An Essay on Exteriority", 1961) by Emmanuel Lévinas.

In the essay, the Lithuanian philosopher proposes that to conceive subjectivity, it is necessary to abandon the category of totality and introduce that of infinity as a category to encompass the self and otherness in the same space-time. Infinity opens the possibility of a subjectivity that in itself contains the impossibility of fully embracing it and that comes from absolute exteriority. From this viewpoint, Lévinas indicates in the human face the communicative form of the infinity of otherness. The face is, under his perspective, never fully graspable and always ineffable because of its transitivity: it allows us to recognize the infinity of humanity as regards those not only in whom it has been recognized but also in whoever is performing the recognition. With the experience of the Jewish Holocaust at the core of his reflections, Lévinas considers the impossibility of looking at someone's face and not recognizing a human being since it is the face that communicates the infinity of what is human. Embracing this perspective, Butler also recognizes in the representations of the faces of the war in Afghanistan

diffused throughout their mediascape those of enemies, of heroes, and of victims too: "*dominant forms of representation* [that] can and must be disrupted for something about the precariousness of life to be apprehended" (Butler 2004: XVIII, italics mine).

In the preface to their *Precarious Life*, the feminist philosopher writes that Lévinas makes use of the face "as a figure that communicates both the precariousness of life and the interdiction on violence" (*ibidem*). From this viewpoint, they reinforce the conceptualization of the primacy of otherness sustained by the formulation of a face-oriented structure in an ethical relationship. The face offers, in Butler's words, the infinite unspeakable message of precariousness, a porosity effect of constant sociocultural vulnerability and the limitation of linguistic articulations: "the face of the Other, and so the ethical demand made by the Other, is that vocalization of agony that is not yet language or no longer language" (*ibidem*: 139).

Butler places ethics within the public sphere, which implies understanding ethics not as pre-political but rather as an imperative interest for the collectivity (Loizidou 2007). In these pages, I am interested in the same ethical concern, which has at its core the capacity of automated facial images to socioculturally communicate otherness. This is why I suggest a cross-reading of Butler's and Lévinas' theses to detect, through a semiotic framework, which forms of communication of otherness artificial intelligence systems may enable. My proposal, thus, is to discern the performativity of the face as a communicative form of otherness based on Charles S. Pierce's theories. I suggest recognizing three facial effects that make otherness socioculturally communicable:

- a *surface effect* that concerns the qualities of otherness (like a Firstness in Peircean theory, CP.1.418)[2];
- an *interface effect* which interests the material actualization of otherness (like a Secondness CP. 1.419)[3]; and
- a *meta-face effec*t that corresponds to sociocultural laws and values of otherness (like a Thirdness CP. 1.420).[4]

The basting of this schema for the recognition of facial effects finds its basis in the validation of a pragmatic perspective. Continuing within Peirce (CP. 5.400), it is about considering what effects the communication of otherness through the face could conceivably have, and these effects, which Peirce defines as *habits*[5] (CP 5.538), are the conceptions of the object under analysis. In other words, the facial effects have practical consequences on the designing of the forms of communication of otherness. According to Peirce, the entire function of thought is to produce habits understood as cultural dispositions to action since to understand the meaning of a thing is to determine what habits it produces, for what a thing means is simply

what habits it involves. This is why it is possible to state that there is no distinction of meaning that does not consist of a possible practical difference. Meaning is to be sought in the effects and performativity that shape our sociocultural life. Consequently, if we wish to understand the meaning-effects that automated facial images produce within our culture, it is worth starting with the habits spread.

If we consider the global processes of broad diffusion of facial recognition technologies that started exactly after the terrorist attack of September 2001(Gates 2011) and the general resignification of the private sphere in favor of public security that occurred at the time – as testified by the dissemination of Paul Ekman's theories of emotion analysis and recognition[6] – in addition to the appearance of surveillance studies (Lyon 2007; Bauman and Lyon 2013; Browne 2015), today facial effects seem to differentially permeate the porosity of otherness. To understand these new habits, I refer once more to Butler:

> We may have to think of different ways that violence can happen: one is precisely *through* the production of the face, the face of Osama bin Laden, the face of Yasser Arafat, the face of Saddam Hussein. What has been done with these faces in the media? They are framed, surely, but they are also playing to the frame. And the result is invariably tendentious. These are media portraits that are often marshaled in the service of war, as if bin Laden's face were the face of terror itself, as if Arafat were the face of deception, as if Hussein's face were the face of contemporary tyranny.
>
> (2004: 141, italics in the original)

In this passage, we find a question of the utmost importance, which is also formally evidenced in the original text. It deals with the processes of the production of faces that are the protagonists of war and the effects – the context that has been played out – that those processes have on the sociocultural reception of otherness. How do technologies endow the image of otherness? The faces of the Other become habits when they encounter screens which have a reactive function and the power to arrange lights according to ideological gazes and discourses. The encounter with the faces of the war and the manner of communicating them depend on the techno-ideologies diffused in the media context. In this sense, those reproduced faces embody the discursive sociocultural processes of identifying a particular type of othering: the enemy.

As Butler writes, those images are framed by a general visual grammar that makes them communicative forms for the embedding of otherness. The faces of Osama bin Laden, Yasser Arafat, Saddam Hussein, and

Afghan girls are all presented in the media as portraying a general process of identification. Through a formal enunciative *locus*, the portrait genre, those images set up a relationship in a figurative dialogue with the spectators. But how is this dialogue shaped and how does it function? It works within a visual re-assemblage at the service of war, as if these faces were synecdoches standing for the effects of the terrorist attack itself.

Just from these observations, we can say that each of those facial images of the war is deprived of the phenomenological infinite described by Lévinas and recuperated by Butler; there is no precariousness of life or interdiction on violence, nor is there transitivity: these faces are completely graspable, completely framed. This condition is defined by a scopic regime that intertwines the facial images with the semiotic forms allowed by warfare: they are the whole of the war. Thanks to a precise aesthetics of identification that guarantees the condition of production of an effect of verisimilitude of the enemy, through a peculiar surface effect in those interfaces of the war, the infinite unspeakable message of precariousness is canceled. The erasure, the *meta-face effect*, makes those faces the surface of violence itself, allowing habits that intervene in the interpretation of the images reproduced by the media, rendering the facial artifact disconnected from the precariousness of the human condition.

Following a historical path that from Lévinas' times passes through the conflicts in Afghanistan up to the present, when those hostilities have ceased after twenty years of combat and when, meanwhile, other wars have started, it can be observed that the faces of war are still pervasive as forms of communication of otherness in our iconosphere. What is more, today there is the spread of automated portraying of the enemy. Facing this contingency, in global warfare that shows no sign of coming to a halt, how are we to look at the contemporary flood of automated facial images?

3. The resemblance of the iconic face of otherness

Throughout Western history, facial images have always been considered sensitive forms ready for the communication of identity. Let us just think of the story that comes to us from Pliny the Elder about Butades, the ancient sculptor who executed the first relief portrait, and his daughter Kora. Since his daughter had outlined on a wall the shadow of her lover before he left for war, Butades filled that silhouette with clay, obtaining an artifact capable of easing his daughter's grief at the departure of her beloved (*Nat. Hist.*, XXXV). In this chronicle, too, the face is indeed considered "a figure that communicates", as stated by Butler (*ibidem*: XVIII), a figure on and thanks to which a number of significant interactions take form from practices of identification to decodifications of both physiological and cultural

readings. These readings, for example, are those that we find in physiognomy, the pseudo-scientific gaze for interpreting what is invisible through the visible features of the face. This process of decodification has been enormously successful in different times and cultures, as attested by Chinese physiognomy and similar fields of study that have also been diffused in Arabic culture.

If the idea that from the external look of things it is possible to understand their nature is already present in Aristotle, it is with Johann Caspar Lavater's physiognomy during the second half of the eighteenth century that an attempt is made to free the human face from the typifying tendency that, in antiquity, provided a biased key to interpreting observed phenomena. From a gaze that refers to a cultural model, depending on situated values and ideologies, Lavater updates traditional physiognomic reasoning with a vision of the face as a unique and individualized window through which to understand human character. Within this same discipline and a few years later, while Lavater examines the motionless features of a face, Georg Christoph Lichtenberg concentrates on those signs that make the face changeable and express its emotional state. From fixed and genetic facial features, we move on to an increasingly pronounced focus on emotional impulses. Lichtenberg's intention is to avoid the popular misuse of physiognomy and, in response to his warning physiognomy, expands its domain to encompass the dimension of temporality, an interpretation that opens to the world and moves away from the human being, transferring its attention to different types of expression.

Since antiquity, thus, and through an always-situated reading of what naturalistic determinism might be, according to physiognomy the face can be interpreted through visible data to translate them into cultural outputs. In line with this approach, also thanks to the diffusion of technologies for the mechanic reproduction of facial images, such as the chair designed by Lavater for taking silhouettes and latterly photography, the face has undergone a progressive disembodiment leading to the diffusion of forms of codification that circulate independently from physical bodies and that can be codified through an equally disembodied form. This trajectory is constantly being updated and leads to what we can now think of in terms of an algorithmic physiognomy. In all these efforts to decompose and recompose the face we can recognize attempts to re-create a sense of identity. However, the progressive disembodiment that digital society confronts us with seems to mark a point of no return in the relationship between the face and its bearer: a progressive massification of data such that the decomposition and re-composition operations to which the physiognomic tradition had accustomed us cannot but be carried out by an intelligence capable of automatizing the processing of such a large mass of data that it escapes human cognition.

A turning point in the conception of our relationship with the face as a communicative form has been the development of cities and the dense network of mass media that is to be found in every metropolis. The urban dimension and the intricate social network that city fabrics weave lead to new discourse effects regarding processes of identification and practices for the attachment or resistance to a given community. Two good examples for grasping the status of this process are the two face archiving methods that began to spread in the late nineteenth century in scientific and forensic discourses, namely, Francis Galton's *composite portrait*[7] and the *portrait parleé* of the French police officer Alphonse Bertillon,[8] developed to identify, in the context of what would later become the media society, genetic and criminal deviances. In this regard, it may not be inappropriate to acknowledge that the media society has produced an epoch-making impact on the visual representation and reproduction of identity and, therefore, of otherness. This shift has resulted in the unbridled production of facial icons: the faces of propaganda, the faces of celebrities, the faces of the oppressors, and the faces of the oppressed. As suggested by Thomas Macho (1996), the modern *facial society* emerged from the diffusion of media representations that would take the humanized presence away from the face by detaching perceptive habits, eliminating local physiognomies, and affirming icons.

The phenomenon of the dissemination of facial icons is also at the center of one of the chapters of *A Thousand Plateaus: Capitalism and Schizophrenia* (1980). In the essay, Gilles Deleuze and Félix Guattari propose considering the fortune of the icon of the human face in Western culture as a biopolitical heritage. The authors recognize in Christian Europe an *abstract machine* that projects its power onto the face: *faciality*. This machine does not function to represent a particular token of humanity but rather to construct a type of human. Deleuze and Guattari assert that certain sociocultural apparatuses need the abstract machine of faciality to be effective and to construct a reality through the configuration of a specific face-type. As they write:

> The face is produced only when the head ceases to be a part of the body, when it ceases to be coded by the body, when it ceases to have a multi-dimensional, polyvocal corporeal code – when the body, head included, has been decoded and has to be *overcoded* by something we shall call the Face.
>
> ([1980b] 2005: 170, italics in the original)

The term "overcoded," used by the authors since *The Anti-Oedipus* (1972), indicates a second-level coding process, a codification operated by a language capable of assigning new expressive codes. Concerning the abstract machine of faciality, this overcoding operates for the benefit of a semiotics

of subjectivation where the polyvocal corporeal code is minimized and materialized in a specific biopolitical environment. This faciality codifies the message of the precariousness of humanity through expressive values that commute the vulnerability of life into a type, as in the iconic faces represented on coins that signify the commutation of a peculiar human-type into a value. In this sense, according to Deleuze and Guattari, the abstract machine of faciality is by no means universal but is what emerges from the forms of expression of the type of the white man, from his development that originates with the iconic face of Christ, with the coding that makes it possible to produce all the coherent units of the face and all the rejections of deviation, all that is proper and improper.

The process of iconization within Western visual culture is also at the core of *Face and Mask: A Double History* (2013) by Hans Belting. In his book, the result of years of investigations, the art historian questions the common Western approach that idealizes the authenticity of the face while discrediting the mask as an illusion. On the contrary, from his viewpoint, both the face and the mask can be understood as images that manifest themselves through certain artifacts which have become visible thanks to an iconic figuration. Belting's research starts from the recognition of a very complex plot that links the face and the mask as two phenomena expressed in many cultural histories, such as the history of art, the history of scientific representations, and the history of media. His main hypothesis can be thus resumed: since antiquity, Western culture has made the human face into a semantic-expressive form that has assumed the social figuration of the mask. From this standpoint, Belting proposes a consideration of the genre of portraiture, and particularly portraits from the fifteenth to the seventeenth century, as well as the European mask itself. Like masks, portraits are characterized by a certain compactness and durability (Dondero 2020a), while they raise a series of questions about the design of visual identity. Belting's thesis opens up a whole series of very rich reflections, first of all on the bio-cultural criteria of relevance and selection of the effects of resemblance.

Although today we tend to regard portraits as symbolic works of art, they were once artifacts that fulfilled certain social functions, ranging from being commodities of exchange to inherited goods, from objects of social affirmation to heirlooms. In this sense, already from the Renaissance on, portraits were widespread insofar as they served a proxy function – namely, in circumstances where the person depicted was absent but still wanted to assert his or her presence. Particularly in Flemish portraiture, it is possible to notice the transition from the depiction of a presence to the artifact existence of a portable object, a painted panel, which endowed the subject of the portrait with a symbolic presence and related state of

rights or authority. As pointed out by Belting, the European portrait can be considered a particular type of mask since it can replace the face with an icon. It presents the resembling face as a sign that invites the viewer to communicate with it. Portraits show the necessity of the sociocultural face to be represented; thus, in addition to the physiognomy that revealed the uniqueness of the person, they revealed the codified mask with which the person sought to assert his or her position in the social context.

Building upon the lessons of Macho, Deleuze, Guattari, and Belting, to comprehend the spread of facial images in our iconosphere, it becomes pivotal to understand its iconic nature. Once more, the philosophical proposals of Peirce can be of help to us. In *An Elementary Account of the Logic of Relatives*, Peirce writes (1886):

> The icon represents its object by virtue of resembling it. It thus depends upon simple feeling. Mental association has nothing to do with it. The icon has no generality, because it does not analyze the character it exhibits. There is thus no more generality in the icon than there is in its object. Nor has the icon anything to do with the sense of contact with the world, nor with the actual existence of its object. It is a mere dream. Icons comprehend all pictures, imitations, diagrams, and examples.
>
> (MS 585: 380)

According to Peirce, the icon entails a relationship with a referent that may very well not exist. This relationship is not general but concerns a precise object because it does not pass through conceptual meanings. The representation of a human face in a picture, for example, will have a certain type of hair or a particular nose. These objects are generated by the iconic signs that activate them: even when we know that an image is impossible, as in the case of pareidolia,[9] we can still see it as a representation based on the functioning of our perceptions. Neurophysiological and cognitive research suggests, in fact, that humans are biologically predisposed to recognizing visual matrices with meaning in reality and, what is more, to believing that they emanate an intentional agency. Pareidolia confirms this perspective: our neurophysiology drives us to recognize communicative images so insistently that we sometimes identify them even though these images do not result from any intentionality.

Within this perspective we can say, as Umberto Eco affirms in *A Theory of Semiotics* (1976), that the iconic sign does not have the same physical properties as the referent but stimulates a perceptual structure like that which would be stimulated by the referent. Thus, recovering Peirce's proposals through Eco's lesson implies being able, firstly, to identify what resemblance the icon stimulates and, secondly, to analyze how these iconic

stimuli operate in the production of habits. As in the faces of war observed by Butler, the facial icons prompt synecdochic forms of communication that intervene directly in the perception of otherness: those iconic faces are the war itself.

From the conflict in Afghanistan to the present day, artificial intelligence systems have played an increasingly prominent role in every domain of our lives. In this respect, there is a thin red line connecting technological developments, particularly those related to the visual realm, with the demands of war. As I write, after all, the media are announcing the news that the use of facial recognition systems is ongoing in the conflict between Russia and Ukraine, a novelty that makes me ask: what sense of otherness can be communicated in those facial images?

4. Interpreting the para-faciality of otherness

Every epoch disposes of several apparatuses that configure ways of seeing capable of shaping the perception of otherness. For example, the works of Susan Sontag (1977), Teresa de Lauretis (1987), and Jonathan Crary (1990), among many others, have exhaustively analyzed the specificity of the optic apparatus in modeling modern and postmodern society. Today, in times when the progressive reconstruction of reality based on a binary standardization is re-ontologizing our world, new habits arise. The circulation and diffusion of technologies like software for facial recognition, the creation and establishment of digital portraitures such as visual filters in social networking, and the diffusion of dematerialized approaches to storage such as visual big data or the act of scrolling in dating apps, change the ways of performing, and thus of understanding, the processes of identification. A proposal for framing the complexity of the phenomenon is to imagine a genealogical trajectory that, from the Renaissance development of geometrical perspective as a mathematical eye based on a statistical code that translates the complexity of the world into discrete elements (Maldonado 1974; Friedberg 2004), leads up to the present. We can identify a watershed in this genealogy in the diffusion of the mechanical model (Maria Tortajada and François Albera 2010) between the seventeenth and eighteenth centuries, a sociocultural process that opened a series of propositions on the models of apprehension, particularly according to the concept of division into discrete units that can be combined. The legacy of this model is still present in our contemporary media ecology, as a meaning-effect in the discourses and practices that cross it. Nevertheless, this is an environment where the intelligibility of the modes of information, technologies, and codes of communication is driven by both human and artificial agencies, an ecology where the units to be combined are both flesh and bits.

At the beginning of the twenty-first century, John Johnston (1999: 27) analyzes the contemporary media ecology in terms of *machinic vision*[10]: "not only an environment of interacting machines and human-machine systems but a field of decoded perception that, whether or not produced by or issuing from these machines, assume their full intelligibility only in relation to them". Within this same perspective, Paul Virilio has referred to it as the *vision machine*, that is, "the possibility of achieving sightless vision" (Virilio 1994: 59), a vision that recognizes shapes and combines them through synthetic and discrete data. In more recent times, Trevor Paglen has described the artificial visuality diffuse in our media ecology in terms of "invisible images" (2016), referring to the flow of visual data produced by machines and used within human-machine interaction. This is what the video artist Harun Farocki, in his series *Eye/Machine I-III* (2001–2003), named operational images: images that do not resemble or depict a referent but are part of complex processes such as detecting, identifying, visualizing, tracking, navigating, and so on. In addition, as a sorrowful bench test of their efficacy in communicating the sense of otherness, we can see how operational images are increasingly central in warfare, for example, in the functioning of military devices such as drones. Unlike the images of precariousness, on their surface, human precarity is blurred and, therefore, so is the sense of vulnerability. There seems to be no room for empathy in the operational image because there is no room for the communication of humanity, only efficiency and the fulfillment of tasks. We can signal a paradigmatic shift defining the phenomenology of otherness within these images: they modify their proxy function, being no longer linked to the impression of resemblance but to the simulation of the quantity of data stored in them. This shift is part of a wider biopolitical process that interweaves the contemporary diffusion of automated images with specific rhetorics.

We can identify in the artificial way of seeing that takes possession of the embodied dimension of the face and turns it into an intelligible tool for recognition, an omnipresent and omni-significant *para-faciality*, an inchoative process of identification always ready to be processed and fulfilled. From this standpoint, it is possible to affirm that automated facial images allow for the detection and identification of recurring para-facial *surface effects*, digital matrices that contain the expected metrics of facial features. They result from the *interface effect* of the artificial face concerning the required data necessary to model and simulate what can be recognized as human. These para-facialities emerge from algorithmic gestures that designate a technology that no longer reflects a *techné* but becomes an executing actant capable of revealing identity according to a differential *meta-face effect*.

These gestures of artificial revelation are part of a wider algorithmizing process, a para-modelized procedure whereby artificial intelligence systems

not only govern the logic of computing but, more generally, have become the agents that model and reveal, by simulating, our reality. Biology, genetics, engineering, forensics, and many more areas of our lives today use algorithms that perform evolution, growth, adaptation, and change of data while they provide "a body that can be read and a body that is of use in virtue of its ability to produce information" (Lee-Morrison 2019: 46). At the same time, these algorithms teach other algorithms how to operate: they have ceased to be constative instructions and have become entities that perform, insofar as they select, evaluate, and transform; they produce ways of life and, of course, ways of seeing otherness:

> Algorithms learn: they adapt, adjust and evolve their behavior according to a qualitative synthesis of vast quantities of data. Their performative activity is afforded by their capacity to compress large quantities of information and thus transform outputs into new inputs, involving a new synthesis of reasoning and calculation. Here data do not have to fit categories but are redefinable in the manner in which algorithms generate possible rules, causes and facts where these are missing.
>
> (Parisi 2019: 94)

Artificial intelligence's algorithms, thus, are no longer just simulators of data dynamics since they have acquired a new status that is not related to the preexistence of biophysical matter. They do not just represent our reality by capturing, detecting, or recognizing objects but are performing entities that expose the inconsistency of the proliferation of increasingly random and biased data within our societies. In this regard, the performative functioning of algorithms in designing facial images reveals how the degree of prehension proper to this artificial revelation has come to characterize the representation of otherness. Rephrasing a common cliché, it is possible to affirm that bias is neither a bug nor a feature but is a meaning effect.

Within this framework, the current spread of digital para-facialities redefines certain practices that have characterized Western societies since time immemorial, such as those of the recognition and analysis of a face. The codification and, thus, the decodification of the face are historically determined – to this day and in most cultures – by precise aesthetic, normative models, and biopolitical conditions. It should therefore come as no surprise that nonhuman-produced facial images have always been recognized as possessing a special aura capable of attributing extraordinary powers; they are images endowed with an absolute authenticity that determines an unmediated interpretation. This is why long-standing traditions concerning facial images produced by nonhuman agencies, such as the so-called

acheiropoieta images which intersect the history of visual cultures from East to West and North to South, can be useful for framing our topic:

> Since the face is so central in human behavior, facial images that are considered as produced by a non-human agency receive a special aura throughout history and cultures, as if they were endowed with extraordinary powers. Furthermore, since in many societies the face is read as the most important manifestation of interiority, "non-man-made" images of faces are attributed a status of authenticity and earnestness, as if they were the sincerest expression of some otherwise invisible agencies.
>
> (Leone 2021b "Prefazione": 17)

This auratic understanding of automated facial images continues to this day, generating a particular process of legitimation to which artificial intelligence has been recently subjected: an aletheic power (Sadin 2018). Today, facial images produced by artificial intelligence systems seem to be endowed with the extraordinary power not only to compare natural and artificial intelligence but also to attribute a status of authenticity to images based on an automated inference that quantifies the bodies and, thus, the sociocultural process of identification and construction of otherness. Indeed, this state of authenticity seems to rewrite the forms through which we relate to reality, the ways in which we experience the world around us and, above all, the rhetorics of verisimilitude. Immersed in an iconosphere where the immediacy of data produces a very strong sense of presence, where objects become hyper-real and, above all, where an aletheic impression of reality seems to permeate everything by means of a hyper-stimulated visual regime, which images are to be believed? And above all, which facial images will still be able to communicate the precariousness of otherness?

To answer this question, I propose in what follows the analysis of an artistic presentation, the video *Face Scripting: What Did the Building See?* produced in 2011 as part of the investigations of the multidisciplinary group known as Forensic Architecture, based at Goldsmiths, University of London.

4.1. *The para-faciality of otherness and its uncertainty*

In January 2012, Mahmoud al-Mahbouh, an official belonging to Hamas – an acronym that stands for Islamic Resistance Movement, the political-religious organization whose goal is to liberate Palestine from Israeli occupation to establish a religious state there – was killed in a hotel in Dubai. A month after the killing of the official, the police of the United Arab Emirates published a video, still available on YouTube, where through an

operation of remixing and recomposing images extrapolated from video surveillance circuits of airports, hotels, and shopping centers, the aletheic agency of the artificial gaze is staged. This is a gaze that encodes a specific way of seeing; that is, it encourages us to trace in the succession of images that make up the video a legible, and plausible, crime scene. This rhetorical effect finds its essence in the verdictive nature of the images of the video surveillance circuits, in their clinical precision ready to guarantee total adherence to reality thanks to the aletheic power of the facial recognition software used to analyze those recorded images. In just under thirty minutes of images, the reel released by the Dubai police attributes the murder of Mahmoud al-Mahbouh to agents of Mossad, that is, the intelligence agency of the State of Israel, focused on foreign operations. Once posted on the YouTube platform, this video became a real agent, part of the crime scene. And it is precisely thanks to the recognition of a widespread para-faciality in the spaces examined, a latent figure always ready to communicate an identification process, that the police tried to identify the faces of the murder suspects in the crowd.

However, the video cannot be classified as a document, as the trace or the evidence of a crime but as the montage of a series of possible scenarios and faces. In fact, during its scant 30 minutes we witness a mise en scene where, through the result of the intersection of a narrative flow between spaces and faces, between architecture and face images, the faces of the suspects and the suspicious become latent surfaces of criminality, an *interface effect* that reduces the *meta-effect* of those faces to the verification of a crime scene. They are faces, after all, that are denied any possibility of grasping human infinity because of the way the mechanisms of the gaze are positioned: video surveillance cameras deny the possibility of looking back, emphasizing strongly asymmetrical power relations.

In a sort of digital update of the *portrait parlé* techniques by Bertillon, the Emirati police extracted a whole series of data from the *surface effect* played out by the images captured by video surveillance circuits, such as the relation of forehead to hairline, the relation of nose width to eyes, and the relation of jaws to cheeks. To rewrite the crime scene, each moment of encounter between Mossad agents or between the agents and unidentified persons provides the surveillance scanning algorithm with a possible line of investigation. This line is disentangled from the impression left by the *interface effect* which, thanks to the material actualization of otherness, follows new faces in the crowd to meet other suspects. The *para-faciality* to which the media ecology of our digital contemporaneity is accustoming us eventually allows the inchoative opening of new avenues of investigation, bifurcations that could continue *ad infinitum*, because every time the identified agents meet colleagues in Dubai or in any other country, other

agents will also be identified due to a particular *meta-face effect*: these faces stage intransitive dominant forms of communicating otherness while communicating quantified data concerning what can be understood as a precise human-type, the suspicious.

The collaborative video *Face Scripting: What Did the Building See?* co-made by Shumon Basar (writer, editor, and curator), Jane & Louise Wilson (an artistic duo engaged for years in audiovisual and installation works), and Eyal Weizman (founder and director of the research group *Forensic Architecture*), reflects precisely on the veridical rhetoric of para-faciality in the age of algorithmic reproducibility. It is part of the investigations realized by *Forensic Architecture* a group, founded in 2010, which develops its work in the field of historical, theoretical, and artistic research starting from a re-appropriation of contemporary forensic practices to critically evaluate their epistemologies, protocols, and knowledge production policies. *Forensic Architecture* practice starts from a deep and sensitive understanding of the two fundamental aspects of every forensic investigation: the field and the forum. Central to their practice is, thus, a focus on what we can define in terms of a material investigation, that is, research that seeks to bypass human testimony in favor of the material findings that can be brought to the forum by making the matter a political agent. As in all research developed by this group, it is the *forensic turn* on the space of the visible that is at the center of *Face Scripting: What Did the Building See?*

At the very beginning of the video the voice-off defines the piece as "a narrative assembled by an algorithmic forensic based on the architecture of the human face", the design which describes *surface effect* through the taxonomies of eyes, noses, forehead, mouth, and the distance between them. Then it continues: "algorithms identify individuals by extracting and analyzing landmarks from the images of the face". Using the theoretical system built up throughout these pages, we can erect an analogical bridge between the image of the landmark and the *interface effect*, always primed for the inchoative process of identification to occur, the face being central for the recognition of what is suspicious. While the voice frames the narrative, the filmic enunciation guides us through a free indirect discourse where we witness the undecidability of the point of view on subjectivity: we glimpse a screen, the reflected image of which alerts us to the possibility of a gaze that is absent but nevertheless ready to grasp its contents; the revolving door of a hotel entrance observed at human height without, however, a body passing through it; a journey from the bottom to the top, almost simulating an absent face gazing upward at the ceiling with its nose in the air, along what appears to be the corridor of a luxury hotel. We are faced with the impossibility of assigning an identity, a putting into perspective that is totally antithetical to the rhetoric of hyper-visibility enacted in the video released by the Dubai police. In the video *Face Scripting: What Did the*

Building See? it is through the material dimension, through its situated sig-
nification that an attempt is made to make sense of – and be sensitive to –
what has been considered a simple thing. It is the walls of large shopping
malls and luxury hotels, the spatialities made up of corridors, and build-
ings whose interstices are not completely reachable by the watchful gaze of
security cameras that are the protagonists, with their affordances and usage
programs. Restarting from the material dimension means, then, putting the
connections between human and nonhuman, between the artificial eye and
the embedded dimension of perception, back in the center of the frame.
It means bringing back into the limelight the efficacy of models, simula-
tive and interpretive, made of flesh and bits, those which hopefully may
allow for some uncertainty in the process of subjectification with which to
counteract – or at least assign an out-of-frame to – the inchoative nature of
digital para-faciality.

5. Conclusions

Throughout these pages, I have aimed to encompass how, in the contem-
porary iconosphere, facial images *do things* while taking into consideration
differential perspectives of communicating otherness: from the circulation
and use of facial icons to the mutability of facial formats and the biopoliti-
cal implications of the storage of large volumes of data regarding faces.
Furthermore, observing the implementation of technologies capable of
automating perceptual models, I have framed a differential understanding
of contemporary ways of seeing and communicating otherness in terms
of para-faciality. All these phenomena raise new questions concerning the
processes of quantification used for the representation and recognition of
otherness in a cultural context in which an increasing number of images
are produced and consumed not only by humans but also by machines.
To think that otherness can happen *through* the production of automated
facial images allows a material turn to be applied to the medium itself. In
this regard, if the term "media" can be used to refer to an established and
institutionalized communicational environment, then conversely, by using
the word "medium" we can refer to the net of material components that
produce the uncertainty of images. On this matter, I have referred to the
artificial representation of the human face as a sociocultural set of visual
techno-ideologies produced by always-situated facial effects that allow dif-
ferential forms of communicating otherness. This switch from media to
medium has also permitted considering the scopic regime that produces
and enables facial images, the dynamics associated with the mechanisms of
visibility and knowability of social bodies and, of course, of social faces.
At the same time, my inquiry into the scopic regime that defines portraiture
has focused on the analytical effectiveness of visual and semiotics studies as

productive theoretical instruments for reading the present and for developing strategies useful for untangling cultural complexity, even in contemporary warfare.

Notes

1 This chapter results from a project that has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program (Grant Agreement No 819649-FACETS; PI: Massimo LEONE).

2 "The first comprises the qualities of phenomena, such as red, bitter, tedious, hard, heartrending, noble; and there are doubtless manifold varieties utterly unknown to us. [. . .] It is sufficient that wherever there is a phenomenon there is a quality; so that it might almost seem that there is nothing else in phenomena. The qualities merge into one another. They have no perfect identities, but only likenesses, or partial identities. Some of them, such as the colors and the musical sounds, form well-understood systems. Probably, were our experience of them not so fragmentary, there would be no abrupt demarcations between them, at all. Still, each one is what it is in itself without help from the others. They are single but partial determinations."

3 "The second category of elements of phenomena comprises the actual facts. The qualities, in so far as they are general, are somewhat vague and potential. But an occurrence is perfectly individual. It happens here and now. A permanent fact is less purely individual; yet so far as it is actual, its permanence and generality only consist in its being there at every individual instant. Qualities are concerned in facts but they do not make up facts. Facts also concern subjects which are material substances. We do not see them as we see qualities, that is, they are not in the very potentiality and essence of sense. But we feel facts resist our will. That is why facts are proverbially called brutal. Now mere qualities do not resist. It is the matter that resists."

4 "The third category of elements of phenomena consists of what we call laws when we contemplate them from the outside only, but which when we see both sides of the shield we call thoughts. Thoughts are neither qualities nor facts. They are not qualities because they can be produced and grow, while a quality is eternal, independent of time and of any realization. Besides, thoughts may have reasons, and indeed, must have some reasons, good or bad. But to ask why a quality is as it is, why red is red and not green, would be lunacy. If red were green it would not be red; that is all. And any semblance of sanity the question may have is due to its being not exactly a question about quality, but about the relation between two qualities, though even this is absurd. A thought then is not a quality. No more is it a fact. For a thought is general. I had it. I imparted it to you. It is general on that side. It is also general in referring to all possible things, and not merely to those which happen to exist."

5 "Let us use the word habit . . . not in its narrower, and more proper sense, in which it is opposed to a natural disposition (for the term acquired habit will perfectly express that narrower sense), but in its wider and perhaps still more usual sense, in which it denotes such a specialization, original or acquired, of the nature of a man, or an animal, or a vine, or a crystallizable chemical substance, or anything else, that he or it will behave, or always tend to behave, in a way describable in general terms upon every occasion (or upon a considerable

proportion of the occasions) that may present itself of a generally describable character."

6 After September 2001, Paul Ekman's theories became very popular in US culture and in other disciplinary fields besides psychology. Ekman's laboratory approach promised to make others' emotions truthful and unambiguous regardless of the awareness of the person who was experiencing those emotions. In this regard, Jan Plamper (2015) indicates ideological parallelism between Ekman's approach and the logic of political national security that spread after the fall of the Twin Towers. In the laboratory, the certainty of the analysis is the result of the specific epistemology of experimental psychology which is the reduction of the reality of certain dependent and/or independent variables. This reduction cannot be reproduced in the real world.

7 Developed in the 1880s, the composite portrait creates the criminal type from the statistical averages of the anthropometry of the face according to essentialist biometrics. The starting point of the composite photograph is a repetition of shooting and assembling acts that function as a promise against the variance of human conditions. Galton believed that he had translated the Gaussian curve into the pictorial image which wires a human face (cfr. Sekula 1986; Lee-Morrison 2019).

8 For Bertillon, the mastery of the criminal body necessitated a massive campaign of inscription, a transformation of the faces into texts that pared verbal description down to a denotative shorthand, which was then linked to a numerical series. Firstly, he combined photographic portraiture, anthropometric description, and highly standardized and abbreviated written notes on a single fiche. Secondly, he organized these cards within a comprehensive, statistically based filing system. Bertillon would go on to hone his system of physical description into a morphological vocabulary to describe the variability of human features, as well as a system of abbreviations to render that vocabulary communicable by telegraph.

9 Pareidolia is a perceptual illusion that allows the recognition of figures endowed with meaning, faces in most cases, in plastic configurations where this meaning has not been introduced by any human intentionality. From a biological point of view, pareidolia is the result of a long perceptual process linked to the survival of the human species through which the recognition of hostile faces in the environment is fundamental.

10 Johnston borrowed the term "machinic" from *A Thousand Plateaus*. In their essays, Deleuze and Guattari oppose the machinic on the one hand to the mechanical, which applies to the machine as a functional unity of discrete but homogeneous parts and on the other to the organic, which applies to the organism as a hierarchical organization of biological organs. Where bodies and machines enter into machinic relationships, that is, become parts of an assemblage, Deleuze and Guattari distinguish two opposing processes: the decoding or deterritorialization where a functional equilibrium gives way to movements of change and becoming, and the opposite side of the assemblage where there are processes of stratification or reterritorialization.

4 Simulacral faces

A dramaturgy in digital environments[1]

Enzo D'Armenio

1. Introduction

In this chapter, we seek to analyze the construction of meaning performed by new social actors – especially the so-called influencers – on online social networks. In particular, we will attempt to characterize the role of the face in their images by the way they develop peculiar narratives through photographic posts and video productions.[2] We will then attempt to define a dramaturgy of the face and two genres of images that exploit it on social networks: in particular, the new portrait genres (selfies and identity-related images) and video performances (live streaming and You-Tube footage).

This focus on the face has a twofold motivation. On the one hand, the role of visual identities seems to have been strengthened on social networks, allowing new personalities and new professions to emerge mainly owing to their physical personality and character. The action of influencers, who are able to build communities of followers around themselves, redefines the concept of entertainment carried out by more traditional media such as television and cinema. On the other hand, the meaning-generating action of the face departs from the canons of fiction and traditional portraiture, to the point of revealing new semiotic qualities in which social identity and personal identity are fused in peculiar mimicry performances.

However, the role of the face must be framed in relation to the dynamics already in place on social networks. The actions of influencers show how identities are at the center of multiple social mediations. The way in which they build quantitative value through large communities of followers paves the way for other types of value transformation: financial value, through the monetization of visits and subscriptions, but also reputational value with appearances in traditional media such as television and print. Framing the context of the action of these actors is therefore fundamental to understanding their particular identity narrations and the role that the face plays in the images they produce.

For this reason, we will proceed in three stages. Firstly, we will attempt to characterize the pressures exerted on identities within social networks, paying attention to the peculiar overlap between the experiential and algorithmic dimensions that characterize digital networks. A brief analysis of the semiotic value of the acts of liking and following, together with striking examples of influencers, will allow us to provide a semiotic background for analyzing their actions. A reinterpretation of Paul Ricoeur's theory of identity will allow us to locate the peculiar narrative structure that governs the construction of identities on social networks.

In the second part, we will focus on the role of the face, starting from Hans Belting's considerations contained in his *Face and Mask: A Double History* (2017). We will attempt to identify the qualities that make of the face not only a semiotic device but also one of the most effective ones, all the while relating its characteristics to those of another expressive medium: images. Finally, we will present two fields of analysis of social networks across which is deployed what we call a dramaturgy of the face, although, in light of Belting's hypotheses, we could rather call it a dramaturgy of face masks. On the one hand, we will compare the principles of artistic portraiture with identity images on social networks. On the other hand, we will discuss the transformation of the actor into a fictional character in order to identify the specificities of the so-called influencers. This dual comparison will be an opportunity to articulate, from a semiotic point of view, the theoretical frameworks proposed respectively by Ricoeur and Belting.

2. The economy of attention and appreciation on social networks: toward an experiential regression

The case of the so-called influencers allows us to frame the dynamics of interaction on social networks because they push their functioning to the limit, exhibiting the mechanisms of construction and transformation of value. According to a distinction recently proposed by Lev Manovich (2017) pertaining to images on Instagram, it is possible to define the action of influencers as a competitive practice, in which the shots produced and shared are aimed at gaining maximum appreciation and visibility, as opposed to casual photos, which follow the pattern of "home photos" (Chalfen 1987) and which are therefore aimed at the niches formed by family and acquaintances.[3]

According to our hypothesis, the activity of the influencers shows in an emblematic way the emergence of a new economy of values. The notion of economy to which we refer is inspired by semiotician Jean-François Bordron, according to whom economies are the social systems that regulate the emergence of all forms of valorization: "The economy refers first and

foremost to the order that underlies the possibility of values and their possible circulation" (Bordron 2010: 37, our translation). In short, an economy would be "a set of instances, presupposing an operation of sharing which institutes them in their differences and, by that, in their possible relations. . . . To each of these instances corresponds a more or less privileged origin of value" (Bordron 2010: 38, our translation). In this context, the instances governing linguistic and communicative values are part of a more articulated system, intertwining with the instances relating to other types of value.

Let us first consider the formation of monetary value while focusing on the case of MrBeast, the YouTube channel of an influencer who publishes video montages in which he makes an aggressive use of money. In one set of videos, in particular, he visits the video channels of little-known streamers and sends them donations of thousands of dollars for futile reasons.[4] He targets young gamers engaged in live gaming sessions of *Fortnite*, a competitive video game whose popularity has made it a mainstream phenomenon, and makes large donations as long as these streamers admit that they are children. The resulting video is a montage of the reactions of extreme surprise and jubilation at the thousands of dollars received.

This example clearly shows the emergence of a particular economic logic: the influencer can afford to spend his money aggressively because the resulting video attracts enough views and subscriptions to his channel to justify it. This video has garnered over 38 million views and six hundred thousand likes, while the channel has a total of over 37 million subscribers. With these numbers, YouTube commercials guarantee a significant return, not to mention the numerous sponsorships from third parties. This creates a virtuous circle – from a financial point of view – in which the influencer can donate money that will then be repaid through the monetization of the attention and appreciation of users, measured on the basis of likes, subscriptions, and views. However, this example also allows us to question the appreciation expressed by the acts of liking, following, and sharing at the center of this economy: what kind of semiotic acts are they? And how do they contribute to sustaining the particular economy of values that governs social networks?

First of all, they are spontaneous, simple semiotic acts, easy to perform because they are linked to a basic aesthetic reaction, which can be identified with what in semiotics is called the thymic category, that is, the basic affective disposition articulated into euphoria (attraction), dysphoria (repulsion), and aphoria (neutrality). Secondly, they are very flexible acts because they are as appropriate for expressing appreciation toward a simple photographic shot, such as a selfie, as they are for showing support toward a discursive opinion on a sensitive issue. Finally, they are measurable acts

because they are expressed by a single person, or at least by a single profile, in a direct way.

This first framework of semiotic features configures a sort of experiential regression in the fruition of contents, precisely because they are immediate, simple reactions, ideally close to a basic aesthetic liking. On the other hand, another important factor must be taken into account, one which concerns the socialization of discursive contents: the acts of liking, following, and sharing – as well as comments – are processed automatically by algorithms, which spread the contents in various ways to wider circles of collectives, thus proving decisive in the formation of communities. This constitutes a paradoxical experiential regression, in which contents are valued on the basis of simple acts of appreciation but are also managed by an algorithmic intelligence that automatically regulates their socialization. The combination of these two factors generates an economy in which appreciation is certain and measurable and allows the video to be monetized even if viewers do not subscribe in cash or do not express an articulated adherence to the contents: it is an attention and gift-based economy (Lanham 2006; Casilli 2011). An illuminating comparison, in this sense, is the technique for measuring television audiences, in which sample polls return percentages of the share of each show, often with questionable approximations. For instance, it is not possible to measure the degree of appreciation of a show, but only whether the viewer was actually tuned in to the relevant channel. Compared to this method of measurement, appreciation on social media is more certain, precisely because it is expressed in a simple way by users as it is perfectly measurable and linked to the actual viewing of content.[5]

3. Paul Ricoeur's theory of identity applied to social networks

In light of this brief semiotic exploration of social networks and of the peculiar economy of attention and appreciation configured by acts of liking, it is possible to isolate two major trends that impact the formation and the management of identity on social networks. On the one hand, we have observed a sort of experiential regression in the interactions due to the abundance of simple images which are often adherent to lived experience, as in the case of selfies and identity-related images, as well as in the acts of liking, following, and sharing, which are the aims of the competitive practices pursued by influencers.

On the other hand, an outsourced management of identity behavior emerges, as it is increasingly delegated to algorithms. This is the way Facebook recommends circles of friends based on the ones we already have or how Netflix offers us personalized audiovisual palimpsests based on our previous viewings and preferences, and how Tinder and Grindr present us

the profiles of potential partners, modeling our aesthetic dispositions and preferences expressed by the faces we liked in the past, (Finn 2017). Our hypothesis is that images on social networks always express a negotiation strategy for dealing with these two pressures, even when it results in an ineffective solution which lets itself be pulled toward one pole or the other. In order to fully understand this dynamic pertaining to identity and to elaborate a theoretical framework capable of framing the fundamental dimensions of identity-related images on social networks, we may propose a reinterpretation of Paul Ricoeur's theory of identity, exhibited in the now classic volume *Oneself as Another* (1992). According to Ricoeur, identity is made up of two interrelated poles, which form a dynamic unity. On the one hand, we have *idem*-identity as the permanence of human traits such as dispositions, habits, and more generally what is related to the permanence of character and body. In this work, Ricoeur refers to the character as "the set of distinctive marks which permit the reidentification of a human individual as being the same" (Ricoeur 1992: 119) and as "[designating] the set of lasting dispositions by which a person is recognized" (Ricoeur 1992: 121). The habits and dispositions of one's character, for example, are described in terms of "a history in which sedimentation tends to cover over the innovation which preceded it" (*ibidem*). In short, the definition of character and *idem*-identity tends to qualify the features of identity linked to permanence, even if they are the result of changes due to habits assumed over time. Becoming static, a habit of this kind must be understood as a trait: "a character trait, a distinctive sign by which a person is recognized, reidentified as the same – character being nothing other than the set of these distinctive signs" (*ibidem*).

On the other hand, the *ipse*-identity is conceived of as the maintenance of the self in the long run, resulting from a management of behavior: "the selfhood of the self [implies] a form of permanence in time which is not reducible to the determination of a substratum" (Ricoeur 1992: 118). It is formed through the choice of heroic role models, values, and ethical principles to which one remains faithful over time: a practical and ethical orientation resulting from the evaluative choices about one's own identity. It is therefore possible to distinguish the fundamental difference, together with the necessary articulation, between the tendency toward the permanence of the *idem*-identity and the tendency toward innovation and self-preservation of the *ipse*-identity: in the choice of ethical principles, values, and heroic figures, "an element of loyalty is thus incorporated into character and makes it turn toward fidelity, hence toward maintaining the self" (Ricoeur 1992: 121). This innovative tendency of the *ipse*-identity will then be sedimented and internalized "in such a way that the person is recognized in these dispositions, which may be called evaluative" (Ricoeur 1992: 122). The *ipse*-identity, in short, is not linked to permanence of

character but to fidelity to the given word. The example of the promise allows Ricoeur to further specify this second axis of identity: "even if my desire were to change, even if I were to change my opinion or my inclination, 'I will hold firm'" (Ricoeur 1992: 124). In other words, it is the "properly ethical justification of the promise" (*ibidem*) that exemplifies the fidelity to the given word, to the figures chosen as guides, to the durable values elected for the self.

Between these two poles of identity, especially as a consequence of the intrinsically temporal character of life, there is a persistent "*interval of sense*" (*ibidem*) that must be filled to build a durable identity. In order to manage these two polarities and constitute an identity that can resist throughout a lifetime, it is necessary, according to Ricoeur, to build an identity narration capable of linking them. The narrative intelligence of a story would be able to constitute a revisable and accident-proof identity unit, harmonizing the two poles through successive revisions – the permanence and resistance of the *idem*-identity, the fidelity to the given word, and the variation of the *ipse*-identity. The meaning of the narrative unity of a life, in fact,

> must be seen as an unstable mixture of fabulation and actual experience. It is precisely because of the elusive character of real life that we need the help of fiction to organize life retrospectively, after the fact, prepared to take as provisional and open to revision any figure of emplotment borrowed from fiction.
>
> (Ricoeur 1992: 162)

According to Ricoeur, the models of literary fiction are the most suitable to provide a repertoire of solutions to manage the complex tension between the two poles of identity, as they constitute a vast reflexive laboratory for "the *application* of fiction to life" (Ricoeur 1992: 161). It is through an imaginative and narrative appropriation that the course of a life, with all its accidents and choices, can be built into a meaningful form and hold up in the long run. This complex theory, which we present here in its essential characteristics, is summarized in Table 4.1.

The structure of the narrative identity elaborated by Ricoeur's theory seems of great value for our purpose here, but a series of adaptations must be made in view of its application to the sphere of social networks. First of all, it is possible to place the experiential regression due to the diffusion of simple acts such as *like*, *follow*, and *share*, as well as images adhering to experience and to the body, in the sphere of influence of *idem*-identity. These acts are linked to our disposition, to what we consider to be our character traits as sedimented over time. On the contrary, the modeling of user behavior by algorithms and the resulting recommendations concern

Table 4.1 Jean-Marie FLOCH. A schematization of Ricoeur's theory of identity (Floch 2000: 32)

Narrative identity	
Character	Truth toward others [parole tenue] or preserving oneself [maintien de soi]
Perpetuation	Perseverance
Continuation	Consistency
Covering the ipse by sameness	Freeing the ipse in relation to sameness
Sedimentation	Innovation

Table 4.2 Our reinterpretation of Paul Ricoeur's identity theory

Identity on social media	*Idem-identity*	*Ipse-identity*
	The experiential pressure expressed by *like*, *follow*, *share* acts, as well as the diffusion of body and face-related images (selfies, subjective shots, direct feed videos)	The modeling of identity accomplished by algorithms and condensed into dynamic profiles of behavior; the delegation of the process of preserving oneself to an algorithmic "intelligence"
	Identity narration: new forms of visual narration, which adopt, deviate, betray, and serialize the canons of portraiture and other identity-related genres (*face reveals*, *reaction videos*, and so on)	

a delegation of the *ipse*-identity – the maintenance of identity over time and the fidelity to oneself – to an algorithmic "intelligence". Analyzing our behavior and preferences, the algorithms model them and program a set of parameters for future propositions on the assumption of a compatibility of preferences and of an overall continuity of practices.

In accordance with Ricoeur's theory, we think that, in order to manage the tension between these two pressures – experiential and algorithmic – it is necessary to build an identity narration capable of mediating and harmonizing them in a suitable and durable form. However, the models of this narrative mediation are necessarily different from those described by Ricoeur. They are no longer literary models because the proliferation of photos and videos on social media requires us to take into account the specificities of the language of images, their figurative and plastic devices, and their narrative structures, which replace the imaginative laboratory of literature. According to this framework, identity narrations are often expressed through simple images or performances in the case of videos, in which the *idem*-identity

is exhibited according to solutions that can structure it temporally. In short, it is only by fully understanding the plastic, figurative, and generic characteristics of the identity-related images that we may understand the narrative pressure to which identity is subjected on social networks.

The mediation between *idem*-identity and *ipse*-identity is often skewed toward one of the two poles, sometimes through a reduction of identity to a simple serial exhibition of one's own face and body or sometimes even to a partial and stereotyped version of one's own character, that is, a limited part of the *idem*-identity.

4. The way images and faces compose

It is clear that identity narration on social networks exploits the body, and in particular the face, in a privileged manner. This is why, in order to understand productions such as *selfies*, *face reveals*, and live streaming, we need to address a fundamental question head-on, one which concerns the relationship between the semiotic qualities of the face and the semiotic qualities of images.[6] In his book *Face and mask: a double history* (2017), Belting proposes a series of enlightening considerations that allow us to describe the face as a semiotic device. To summarize, we may say that Belting gives a central role to the dynamism of facial mimicry, to the plastic appearance of the face animated over time. On the one hand, the face is something that exhibits moods and emotions and that connects "internal" feelings by exhibiting them externally. On the other hand, mimicry can be controlled to hide these same emotions and internal states, thus building a device capable of lying, as in one of the most famous and provocative definitions of semiotics proposed by Umberto Eco.[7]

> The same face expresses truth and falsehood: at times someone can vividly reveal his "inner self" to us; at other times he conceals himself with an impassive face as though from behind a lifeless mask.
>
> (Belting 2017: 17)

What interests us, however, is the relationship between the dynamism of mimicry and the production of particular expressions, which Belting frames by means of two metaphors: on the one hand, the face produces masks, for example to conceal and protect emotions and not let them transpire outward. On the other hand, and more profoundly, Belting argues that the face is a plastic device that *composes images*. "In life, expressions change the face we *have* into the face we *make*" (*ibidem*). And more in detail: "When the face is animated by expression, gaze, or language, it becomes the locus of many images. It follows that the face is not merely an image but also *produces images*" (Belting 2017: 21).

We would like to point out a strong correspondence with the expressive system of images. Authors such as Jean-François Bordron (2011) have rightly pointed out that the meaning system of images cannot be traced back to verbal predication, precisely because images signify in a completely different way: like faces, images do not predicate but rather compose. Certainly, we can immediately identify a similar syntax in the construction of meaning by faces and images: for example, the fact that they do not stimulate linear but rather "tabular" readings in which centrifugal and centripetal tensions, progressive transformations, and opposing force flows contribute to the production of meaning.

Another interesting aspect of this relationship concerns the centrality of perceptual mechanisms in the semiotization of images and faces. It is a matter of relying on a perceptual semiosis, one based on Eco's primary iconism (Eco 2000), for example, rather than on an articulated meaning that relies on linguistic categories. In both images and faces, "recognition" is a fundamental semiotic mechanism, whether it is a matter of recognizing a face or of recognizing an emotion as expressed by a particular configuration. In both images and faces, it is the recognition of such or such specific trait, for instance, a particular configuration of fear or a particular shade of yellow that counts, and not the categorical generality of the concept of "yellow" or "fear". We can describe a face verbally, even in minute detail, but what we lose is precisely the fundamental identity core that allows us to know and recognize it for its compositional qualities, and the same applies to images. Without going into details pertaining to perceptual mechanisms, what this parallelism allows us to do is to identify the way in which image configurations and face configurations are stabilizing on social media compared to past representations of the face.

5. The face in still images: portraits, selfies, and identity-related images

First of all, as far as still images are concerned, we need to recall how the classical genre of the portrait resolves the tension between the compositional qualities of the face and the compositional qualities of images. Belting rightly tells us that the portrait stands in relation to the face as an externalized and objectified mask on a support, which makes it a durable, transportable object but which inevitably erases the mobile, temporal, and dynamic character of mimicry. Art history and semiotics have formalized the conventions of the portrait by identifying those compositional tensions that operate between visual and facial configurations, tensions such as in the relationship between the figure and the background, which must allow the face to stand out, the tensions in the gaze directed at the spectator, who

configures a form of dialogue and presence, and the compactness of the figure represented.

However, two aspects are of particular interest to us: the first concerns the way in which the visual mask relates to the identity of the person represented. Anne Beyaert-Geslin (2017) and Maria Giulia Dondero (2020), who have carried out some of the most important semiotic studies on the subject, insist on the *iconization* of the character of the individual, which is summed up, condensed, and best presented in the portrait. It is therefore the production of a unique and significant image, built upon the intensity of the centripetal relationship that draws the viewer's gaze toward the portrayed subject. For this reason, the portrait is characterized by the absence of movement and by a neutral, posed expression. The portrait must be capable of condensing the subject's past, present, and future, capturing his or her identity and destiny in a single image. For this reason, in classical pictorial portraits, the objects and the background often build a narration capable of harmonizing the visual aspects of the character, which are the traits of the *idem*-identity expressed by the face with visual elements pertaining to the subject's conduct and thematic role, that is, the *ipse*-identity as may be expressed by effigies, professional or rank objects. In short, a classical portrait is a unique image, turned toward the future, in accordance with a memorial temporality, capable of iconizing a narration identity within a fixed image. If we compare this model to the *selfie*, and more generally to identity-related images that circulate on social networks, some macroscopic similarities, but also major differences emerge. First of all, with regard to the *selfie*, it should be noted that it is a kind of image that could be defined as belonging to the subgenre of the self-portrait.

The first difference between classical portraits and social network images relates to the technical expertise required to produce them: the classical portrait requires expert skill and a refined work of inter-semiotic translation; on the contrary, *selfies* exploit the automatisms of the photographic medium and can be taken repeatedly on any occasion. Compared to portraits, however, the major differences are linked to the temporal dimension and to the various identity dynamics. Social network shots are images that do not aim at iconizing and condensing a character within a single shot but rather build a repeated series of shots that pluralize identity, fragment it, and re-enact it in different contexts.

The temporality of production and reception constitutes a pellicular temporality, which develops itself in close proximity to the acts of visualization and sharing. In other words, it is not a question of building a visual narrative that can summarize the life of an individual but of a theatricalization of the face in accordance with a management of the presence of the self, which is a presence to be reaffirmed, multiplied, and pluralized over time in the public sphere. With respect to Ricoeur's considerations, we could say

that while the portrait aims to build a narrative elaboration of the overall identity (*idem* and *ipse*), social network portraits are often a simple exhibition and multiplication of the *idem*-identity. The example of the Instagram profile of Rupi Kaur – a Canadian poet and influencer of Indian origin – helps us to clarify this point. Let us briefly consider her production from the beginning of her activities until today.

It is possible to identify a change in style from a casual use of identity-related images to a competitive, planned, and effective exploitation of her images. In other words, we could describe the process of transformation from a casual user to an influencer. Her profile is characterized by a wide variety of deformations of the portrait genre, some of which may be seen in contemporary pictorial and photographic art, including turning one's back to the camera, the use of veils, and atmospheric occlusions, but also fragmented portraits, which are typical of social networks, as noted by Lev Manovich (2017).

Moreover, the image that made her famous, although not a portrait, makes sense precisely in relation to the abundance of portraits published previously. It is an image dedicated to the theme of menstruation, in which Kaur hides her face and shows her back in order to represent herself as a generic female individual.[8] A process of depersonalization but also of generalization and universalization is built in order to ideally embody every woman around an underrepresented theme and moment. The censorship carried out by Instagram and Kaur's protest earned her the support of online communities and the attention of mainstream media. We cannot go into the details of this case here (D'Armenio 2022), but it is emblematic of the ability of still images on social networks to build a critical identity narration, negotiating experiential and algorithmic pressure around a visual storytelling capable of mixing a visual character (linked to *idem*-identity) and ethical conducts (linked to *ipse*-identity) in a critical manner.

6. Mobile masks: actors, characters, and influencers in video productions

The second comparison we would like to present concerns video productions and, more generally, those images capable of exhibiting the dynamic mimicry of the face. In particular, as far as the genres preceding social networks are concerned, it is the actor-character nucleus, in film but also in theatre, that constitutes the most emblematic case. As pointed out by Belting, the theatrical actor builds images, and more specifically masks, through his or her face, and builds a character thanks to mimicry skills:

> The mask is the role, but it is played with the real face. It is precisely in the face that the human being's dissociation from himself shows most

clearly. That is to say, he can represent himself as someone else using his own face and, as a result, behave eccentrically.

(Belting 2017: 49)

In semiotic terms, we could say that it is a peculiar process of *débray-age*: starting from the overall articulation capabilities belonging to his or her own face and body, the actor projects a selection of emotional and mimicry features that constitute the identity of the fictional character. This transformation has always fascinated us because it demands that we take into account aspects that cannot be reduced to abstract narrative functions, as the body and face of an actor cannot be replaced with that of another actor without distorting the meaning of experience. Authors such as Edward Branigan (2006) speak of fictional supervenience: the way in which we see both the actor, for instance, Sean Connery, and the character, James Bond. Two aspects of this transformation strike us as important: firstly, the centrality of a peculiar competence of the actor, which we could define as a competence at mimicry. An actor with a calm temperament (*idem*-identity) may be able, through this competence, to build an anxious character.

Secondly, it is necessary to stress the filtering role of the script because it allows us to find a peculiar articulation of the identity poles defined by Ricoeur: the actor certainly projects some of the character traits belonging to his or her identity, but these remain embedded in his or her person. The actor therefore lends part of his or her *idem*-identity dispositions to the fictional character. The fictional character, on the contrary, is a narrative identity, one already endowed with a closed path of transformation with values of departure and arrival. In short, the fictional character in the script is already a virtual mediation between the *idem* and *ipse* and is capable of building a unitary identity. The mimetic projection of the actor, together with the narrative mediation of the script, allows to build this transformation, in which the face and the body of a person build a rich, dynamical, and narrative identity. We could qualify this process as the donning of a fictional mask by the actor, worn on the face (and body).

We can relate the actor-character to the most representative and emblematic figure on social networks, one which is struggling to find a stable definition, that is, the *influencer*. What these two figures have in common is that they owe their success to their public image and, if we take streamers into account, to their mimicry identity, to their dynamically exhibited personality, and especially, to their face. We will develop the comparison using an example chosen for its clarity, that of video game streamers.

Usually, these live broadcasts are organized as follows: the video game performance is displayed full screen with the virtual avatar moving in the digital environment according to a text – in this case, the video game text,

which is already organized narratively and syntactically but certainly in a less strict manner than a movie script might be, since it allows the expression of various styles of gameplay. On the right of the screen, we usually find the chat through which the audience can interact with the streamer. Most often, it is very short messages which are sent, mainly emoticons and peculiar forms of "slang". Finally, a smaller window shows the face of the steamer who reacts live to the game performance and to the chat messages.

Compared with the actor, the streamer does not project a character on the basis of his or her capabilities and skills in terms of mimicry. On the contrary, he or she attempts to extract his or her identity character without prior programming and preparation. The filter is not that of a closed narration condensed into a script but a playful script, which organizes in a partly open way the mimic responses of fright, tension, exaltation, and so on. In other words, the narrative mediation provided by video game texts does not serve to build a narrative identity but to extract a live character identity. It is no coincidence that this filter belongs to the macro-genre of the game, a practice by definition situated somewhere between lived experience and cultural construction. The character which emerges from this interaction does not use a narrative mask but a playful socialized mask, whose purpose is precisely to embody its own *idem-identity*, making it emerge dynamically within a partially structured experiential interaction. Compared to the case of the actor, the temporal dimension should again be emphasized: while the actor builds a sophisticated performance, subjected among other things to the articulations of the theatrical or cinematographic language, in the case of the influencer, the performance of mimicry is strongly linked to the present moment, to the personality expressed "naturally", with a visual direction that is limited to a fixed shot of his or her face.

Reaction videos, *face reveals* and children's game channels replicate this formula and show us the peculiar way in which the link between images and faces increasingly tends to adhere to an identity close to genuine, instinctive, and contagious reactions. It is a matter of taking a song, a trailer, or the execution of a cooking recipe as the basis for exhibiting, through facial mimicry, the visible expression of one's reactions during a first encounter with a widely known cultural product.[9]

7. Conclusions

In this article, we have proposed an analytical framework for understanding the images and performances of the face produced on social networks. We have first of all characterized the semiotic context of social networks by detecting an economy of attention and appreciation. At the heart of this economy are the acts of liking, following, and sharing: simple semiotic acts, close to experience and not very articulate from a discursive point of view,

but which are automatically socialized by algorithms. We have therefore proposed to consider the fundamental dynamics of interaction on social networks as an experiential regression because quantitative appreciation becomes the basis for the value transformations carried out by influencers: from a quantitative value to a monetary and reputational value. We therefore focused on identities and in particular on identities expressed and negotiated through images. Through a rereading of Paul Ricoeur's theory of identity, we identified the forms of narration through which identity images negotiate algorithmic and experiential pressure. We found visual narration on social networks to deform and betray the genres of portraiture and audiovisual fiction.

This contextualization has allowed us to analyze the semiotic qualities of the face in relation to the semiotic qualities of images, following with the theoretical elaboration proposed by Hans Belting. Both of these expressive systems rely on a different mode of meaning than the verbal one: visual composition. In particular, according to Belting, faces, by blocking the intrinsic mobility of mimicry, produce images and masks. Similarly, facial images propose more or less dynamic versions of facial masks, capturing salient expressions or enduring performances. Finally, we proposed a comparison between two kinds of artistic images and two genres that have become established on social networks. On the one hand, we compared the selfie and identity-related images on social networks with artistic self-portraits, and on the other, we contrasted the transformation of the actor into a fictional character with the performances of streamers on Twitch. The first comparison showed that portraits on social media are not characterized by their salience, by the meaningful presentation of a character in a single shot, capable of summarizing *idem-* and *ipse*-identity in a single image. On the contrary, they express a management of the presence of identity over time, resulting from a potentially daily multiplication and fragmentation of the self. This opposition can be summarized in the opposition between the iconizing mask produced by portraits and the multiple experiential masks produced by social network images.

In the case of video performances, we opposed the projection of a fictional character from the mimicry skills of an actor, capable of building a narrative mediation between *idem* and *ipse* with the performances of video streamers. Streamers set up an open and dynamic situation in order to stage their own personal and mimicry character in a manner that is as close as possible to actual experience (*idem*-identity). The fictional mask of the actor is in such case opposed to the socialized playful mask of the streamer. Overall, as we have seen with the example of Rupi Kaur, there are rarer cases of visual construction of an identity that can harmonize the *idem* and the *ipse*. This analysis allows us to identify a further trend: a narrowing of the strategies built on the peculiarities of the languages of images, of their

compositional possibilities, in favor of the compositional qualities of the face which multiplies the masks of presence thanks to the growing number of digital channels.

As regards future lines of research, it would be necessary to deepen the understanding of the relationship between the expressive qualities of the face and images – in particular, to identify other kinds of masks produced by faces within images, in addition to the iconizing mask of portraits, the multiple experiential masks of selfies, the fictional mask of the filmic or theatrical character, and the socialized playful mask of influencers we have tried to describe.

Notes

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3 We would like to refer to D'Armenio and Dondero (2020) for a semiotic analysis of casual, professional, and design photography practices on social networks.
4 www.youtube.com/watch?v=qAW6CE7_bFM&t=1s
5 We would like to refer to D'Armenio (2021 "L'économie") for a more in-depth analysis of the experiential regression managed by algorithms on social networks and of the resulting economy of values.
6 On visual semiotics, see Dondero (2020) and Basso Fossali and Dondero (2011).
7 According to Eco (1975) a semiotic system is anything that can be used to lie.
8 www.instagram.com/p/0ovWwJHA6f/
9 For an analysis of the new genres that are emerging on social networks, and their relation to the forms of identity narratives, we would like to refer to D'Armenio (2021 "La gestione").

5 Emerging faces

The figure-ground relation from renaissance painting to deepfakes[1]

Maria Giulia Dondero

1. Introduction

This chapter will address five theoretical attitudes with regard to portraiture. The images I will consider to exemplify these five theoretical positions can be regarded as *images embodying different theories on vision and identity*. The statement according to which images embody theories (about looking, producing, observing, and so on) finds support in the semiotic theories of enunciation and of the metavisual proposed in several works by French School Semiotics (Fabbri 1998; Basso and Dondero 2011)[2] and that I present in my latest book *The Language of Images. The Forms and the Forces* (Dondero 2020b). To summarize, it may be said that every image proposes a specific position to the observer and thus a singular vision of the world and, notably, a manner of looking at this world. In this sense, every perspective within an image is a proposition of a way of conceiving of the world and, moreover, of conceiving of images as a way by which to envision the matters of perspective and of point of view – the position of seeing. In other words, the image is the concretization of a way of conceiving of the image itself and an instrument by which to conceive of the world (including, in what concerns the specific matter of interest to this chapter, to conceive of identity).

In this chapter, my fundamental argument will be that *visual forms are made of forces*, that is to say that forms are made of oriented markings. Every marking possesses a direction which generates flows of energy that may conflict with one another within the frame of the image. This conception of the image as a container of energies that can be stored and reoriented in the future has been proposed in Warburg's theory of *Pathosformeln* and exemplified in his panels composing the *Atlas Mnemosyne* (2012): The form is indeed understood by Warburg as a deposit of forces that can be abated, reactivated, and transferred. The German theorist considered images to be "dynamograms", that is, visual forms having registered a dynamic force that they are in turn presumed to transform and transmit to

other images. Another theorization of forces in images, especially in painting, comes from art historian Henri Focillon (1934), who was the first to speak of a genealogy of forms and, in particular, of forms as resulting from the forces of the resistance of matter subjected to the technical work of designing and of composing. More generally, the frame can be considered as a *device of enclosure* that pushes the composition toward a stabilization of the forces and of the directions carried by pictorial markings. Forces are living and dynamic because they are what support the forms; their tension ensures the stability of the composition and sustains the manifestation of forms.

These five theoretical attitudes that may be seen in various traditions of portraiture will be described through a panoramic overview that will look at

1. an example of Renaissance painting,
2. some portraits taken from the Baroque era,
3. the representation of heads in portraits by Francis Bacon,
4. Roland Barthes' conception of the photographic portrait,
5. the contemporary facial images used to produce deepfake videos.

As a conclusion, I will propose a *mereological view* of each of these five types of compositions, that is to say, how *the relation between the totality and its parts* is modeled and remodeled in these five different kinds of portraits with a special emphasis on the relation through which the figure and ground are respectively shaped.

2. Renaissance portraiture: the plenitude of presence

The first attitude I wish to describe is the one exemplified by Renaissance painting. I consider the *Portrait of Baldassarre Castiglione* by Raphael (1514–1515, Louvre, Paris) as a model of this attitude. The Renaissance portrait is the starting point of my reflection because it exemplifies very well the ideal-typical rules of classical portraiture. In fact, at first glance, classical portraits appear to be highly *compact*, not very *articulated*, and excessively *immutable*, especially if compared with the other great genres of the painterly tradition. It seems that portraits only generate a simple contrast, a binary figure-ground articulation which hinders the apprehension of any narrative deployment of the image. This impression of an intemporal freezing can be explained through at least three rules[3] that are highlighted by the literature on this kind of portrait (Beyaert-Geslin 2017).

The first rule concerns the relation between the figure and the ground and specifically the centrality of the face. A portrait is first and foremost the *focalization of attention upon a subject*. The ground, intended as a

worldly environment for the figure devoid of intensity, has to present itself in a very neutral manner so that the figure may emerge and be met directly by the observer.

The second rule is the absence of action, that is, the *pose*. For the identity of the subject to become salient, his or her body must be immobile and not engaged in the performance of any action. The only relevant action would be gazing, the gaze being directed from the subject's inner space towards the environing world, with the objective being to put forth something intimate and exclusively unique, in an offering to the observer. Any action other than the subject's gazing would perturb this communication between the subject and the observer. As portrait theorist Jean-Marie Pontévia states, "in portraiture, the model is busy only with a single task: Looking like him or herself".[4] The subject represented must therefore only display that part deemed to be the most "noble", the part closest to the eyes and to the head because a view of the body would already carry the value of a proto-action or *of a movement exceeding the simple act of gazing*, thereby breaking away from the highest level of presence achievable.[5]

The third rule, and in a sense the most important one for the Renaissance period, is compactness. Through compactness, the face, that part of the body which is the most marked by past experiences, is able to *condense a life story to be displayed* before a viewer. In the painterly tradition, the compactness of the figure is considered to be a necessary feature of all portraits, and this also reflects a literary topos regarding portraiture: Each portrait is meant to *condense* the life of the subject represented. Perfection in portraiture is achieved when the subject succeeds in *coalescing* his or her self's past experience and destiny in *the here and the now of the act of being looked at*, while ensuring the linkage of the moments of both the portrait's production and observation. The face presented through a certain *compactness* or density on the plane of expression produces a "cohesive totality" against the void formed by the background. On the plane of content, the density and compactness of the figure must be capable of signifying *the sum* of the represented subject's life experiences.

The condensation of the figure obviously depends on the chromatic, luminous, and topological stability of the ground. It is therefore unsurprising that the use of blurring has been excluded from portraits, as it would hinder the recognition and valuing of the subject, who by definition forms a *well-determined and circumscribed totality*. In portraiture, blurring would impede the subject's stabilization and would suspend any exchange with the observer; what would result from blurring would instead be a *floating identity*.[6]

To summarize, we can say that the model of portrait that we inherit from the Renaissance is a portrait that has for task the presentation of a human being in his or her full completeness/plenitude by virtue of the fact that the

present time captured in the portrait genre condenses the subject's past and the future experiences. These past and future experiences condensed in a present view are the exemplification of one's *destiny*. To put it shortly, the portrait is an ideal and exemplary biography, an identitary narrative fixed in a *perfect equilibrium between the figure and the ground*, between the subject and his/her worldly environment.

3. The baroque portrait: the struggle between presence and absence

The next model I would like to briefly examine is that of the Baroque portrait. A famous portrait by Caravaggio, *Boy With a Basket of Fruit* (1593, Galleria Borghese, Rome), can be seen as one of the examples of this painting tradition. In this portrait by Caravaggio, the tension between the figure and ground is no longer irenic; there is a tension between the person represented who has difficulty emerging as a clear and complete individuality and the background, where the shadows are not really realistic – they are geometrically unjustified. The background is unstable, almost magmatic, and it places the figure in an unsteady position. I propose to understand this portrait as one in which the manifestation of identity gives way to a *struggle between presence and absence*. That is to say that the portrait's field of action is rather modulated by various gradients of intensity of presence and absence by contrasting and competing forces (for instance, light and shadow). These competing forces prevent the observer from capturing the essence of the identity of the subject portrayed.

The famous portrait *Girl With a Pearl Earring* by Vermeer (1665, the Mauritshuis, the Hague) displays as well something incomplete: the subject is evasive and presents herself in a sort of *negation of exposure*. The girl begins to retreat from the focal area of attention and to withdraw from the gaze of the observer; she is on the point of evading the shot (by turning away), and the observer is denied any power of vision. The background is completely dark and allows the painter's vision to go no further. The ambient darkness blinds the painter and the observer, dissolves the contours of the figure, and destroys its compactness. The treatment of the materials of the girl's clothes gives a very ephemeral character to her appearance: it is as if she is about to evaporate, not only because she is turning away from us but also because the materials of her clothes look ghostly and seem to be on the verge of disappearing. A negation of presence is at work here. In another portrait by Vermeer (*Study of a Young Woman*, 1665–1674, Metropolitan Museum), we can notice the same functioning of the ground. We cannot really see where the lady's hair ends and where the background begins, meaning that the figure is not stable but is rather fluctuating in an ether that does not freeze the face or, consequently, the identity. With

Renaissance and Baroque paintings, we have taken into account two distinct models of portraiture: in Renaissance portraiture, the background enables the figure to emerge, and the identity is cast forth in its plenitude. In Baroque portraiture, on the contrary, the struggle between the figure and the ground on the plane of expression corresponds to an eroded and unsteady identity.

4. The deformation portrait

If the deformation of faces surely appeared in the Renaissance and Baroque periods as an eccentric representation method as we can see in this seminal portrait of Parmigianino (*Self-portrait in a Convex Mirror*, 1524, Kunsthistorisches Museum, Wien), it was only in the twentieth century that the deformation of the face became a theorized and attested artistic program. I think of Francis Bacon who had his own theoretical ideas regarding portraiture and sensation in addition to the well-known interpretation of his painting by Gilles Deleuze. Deleuze is, if not the first, one of the best theorists of forces in painting. In his book *Francis Bacon: The Logic of Sensation* (2003), Deleuze defines the task of painting as the attempt to render visible forces that are not themselves visible. What is remarkable in his theory of the relation between forms and forces is that he distinguishes between *transformation* and *deformation*:

> These are two very different categories. The transformation of form can be abstract or dynamic. But *deformation is always bodily, and it is static, it happens at one place*; *it subordinates movement to force*. . . . When a force is exerted on a scrubbed part, . . . it turns this zone into a zone of *indiscernibility* that is common to several forms, irreducible to any of them; and the lines of force that it creates escape every form through their very clarity, through their *deforming precision* (we saw this in the becoming-animal of the Figures).
>
> (Deleuze 2003: 59, my emphasis)

What I find remarkable in this idea is the fact that deformation is opposed to transformation and to an external dynamic: movement. The dynamic of forces is internal: internal to the face and to the head of these subjects who are stricken by deforming forces. As Deleuze states, deformation "is a movement 'in-place', a spasm, that reveals *the action of invisible forces on the body*" (Deleuze 2003: 41, my emphasis). Deleuze continues:

> [T]he extraordinary agitation of these heads is derived *not from a movement* that the series would supposedly reconstitute, but rather from the forces of pressure, dilation, contraction, flattening, and elongation that

are exerted on the immobile head. They are *like the forces of the cosmos confronting an intergalactic traveler immobile in his capsule*. It is as if invisible forces were striking the head from many different angles.

<div align="right">(Deleuze 2003: 58, my emphasis)</div>

Deleuze states that a force is exerted on a body and specifically "on a point of the wave" (Deleuze 2003: 56). We are here at the antipodes of a well-deployed identity. The body and, in the cases of portraits, the face are conceived of as a *wave* and not at all as a stable entity. Bacon's paintings show that to cover this wave, to make this wave present and sensible through visual means, it is necessary to abandon the figurative, the illustrative, and the narrative so as to attain what he calls the figure, that is, *the Matter of Fact – the sensation*. In a sense, we could say that illustration and narrative are like movement: something that occurs outside of the painting and that is not specific to painting; on the contrary, painting has the objective to capture and render the forces as "in-place movements", spasms, and waves. To do so, it is necessary to drain the figure from every narrative: narrative is an obstacle to the capturing of deformation forces. The Matter of Fact that Bacon is looking for is a kind of separation and isolation of the figure from history, from the ordinary narrative of life, and from everyday worldly events. To reach the Matter of Fact means detaching the figure from every sort of narrative action: *what characterized the Renaissance portrait (the absence of action) becomes in Bacon's painting the objective of all types of paintings*, including that of the triptych, where he obstructs every temptation the observer may have to narratively link the triptych's panels and to build a story. But in contrast to Renaissance portraiture, reaching the Matter of Fact means achieving a *portrait of sensation* that is the opposite of a portrait that illustrates an identity. Portraits of sensation have to do with the existential void and torments of a subject:

> When he paints the screaming Pope, there is nothing that might cause horror, and the curtain in front of the Pope is not only a way of isolating him, of shielding him from view; it is rather the way in which *the Pope himself sees nothing*, and screams *before the invisible*.
>
> <div align="right">(Deleuze 2003: 38, my emphasis)</div>

As we can see in the *Study After Velázquez's Portrait of Pope Innocent X* (1953, Des Moines Art Center, Des Moines), the objective that the British painter has always pursued is to show the struggles between forces, between what is not immediately manifested, to paint the "violence of sensation more than the violence of the spectacle", as he states through this beautiful formula: "The struggle with the shadow is the only real struggle". The Matter of Fact, the sensation in a portrait, must overlook

the recognition of an individual, the biography of a person, and build what Deleuze calls a "diagram". The diagram is generated by injecting chance into the painting through accidental marks.[7] In fact, the painted face is the result of accidental marks that depend partly on the hand of the painter and partly on the chance which the gesture involves. This process is called a diagrammatical process: in order to destroy the figurative, that is, the fixed identity in the case of portraiture, the painterly gesture has to be controlled by chance. All these statements show that Bacon revolutionized the way of understanding portraiture by *dissociating* the portrait from the valorization of an identity considered as a complete and stable entity.

5. Barthes' *Camera Lucida* and his last seminars at the Collège de France

Roland Barthes realized a comparable revolution in his publications on photography. In his book *Camera Lucida*, he opposes the identity of a person to his or her *air*. When Barthes speaks about the body and the face of a beloved person, as in the case of his mother, he states that the photograph must allow the discovery of that human being is in "its essence, 'as into itself . . .' . . . beyond simple resemblance, whether legal or hereditary" (Barthes 1999: 107). Barthes describes the air of a face as the opposite of resemblance, as something unanalyzable, as an evidence, and evidence is defined as "what does not want to be *decomposed*" (Barthes 1999: 108). Barthes describes the air as following in his *Camera Lucida*:

> The air (I use this word, lacking anything better, for the expression of *truth*) is a kind of *intractable supplement of identity*, what is given as an *act of grace*, stripped of any "importance": the air expresses the subject, insofar as that subject assigns itself no importance. In this veracious photograph, the being I love, whom I have loved, is not separated from itself: *at last it coincides*. And, mysteriously, this coincidence is a kind of *metamorphosis*.
>
> (Barthes 1980: 109, my emphasis)

And he expands on legal identity as a mask:

> All the photographs of my mother which I was looking through were a little like so many masks; at the last, suddenly the mask vanished: there remained a soul, ageless but not timeless, since this air was the person I used to see, consubstantial with her face, each day of her long life.
>
> (Barthes 1980: 110)

It's interesting to note that this topic of the air captured by a photograph is something that makes one discover again what specifically identifies a beloved person, what is "consubstantial with [his or] her face, each day of [his or] her long life" (Barthes 1980: 110). Recalling the idea of the Renaissance portrait that had the role of depicting the destiny of a human being, we may ask what has changed since then. In Barthes' conception, the air manifests itself as soon as the legal identity is overlooked. In contrast, during the Renaissance period, it was the representation of the legal identity that had been privileged. For Barthes, the subject has to be in a way unconscious of him or herself: "the air expresses the subject, insofar as that subject assigns itself no importance" (Barthes 1980: 109). In this case, it's the *supplement* of identity, something that could look like an ephemeral attitude but that becomes the center of the uniqueness identifying a beloved being. This supplement has no longer to do with the sum of past and future experiences because it comes from a subject's not being conscious of him-/herself. This supplement of identity is a sort of moment of grace that is difficult to capture and difficult to reproduce: it's the magic unique to a person.[8]

In another text written for his last seminars at the Collège de France, published posthumously in the book *La Préparation du roman* (2003), Barthes went even further and developed this idea of air in a more extreme way. A selection of photographic portraits, taken by Paul Nadar, which Barthes elected to show to his students, was found in the Proust archives; they represent aristocratic people who, according to Barthes, may have inspired some of the characters of the *La Recherche du temps perdu* (1913–1927). Despite the fact that the explanations of the photographed subjects are very precise about people who really lived, Barthes' real goal was not to find physical and psychological resemblances between the subjects Marcel loved and the characters of the *Recherche* but, on the contrary, to uncover the *atmosphere of a past world*.

In this text, Barthes proposed to extend the idea of air, which is defined here again as an "intractable supplement of identity", a trace of the *non-separation* of the person from him or herself, something that cannot be quantified. But contrary to the theorization of the air in *Camera Lucida*, here, the air is no longer linked to a portrait of a person but to the *portrait of a sort of a world*, the world that Marcel Proust deeply loved. In this sense, *the air is something that not only dissipates resemblance but also can be shared among a multitude of people*.

The air of a world, in this case something akin to a Proustian world, is something that is shared among people who have a common sensibility and who form a community of "Elective Affinities". It means that the air of a world can be conceived of as the result of the *de-personification of*

individuals. Individuals don't count anymore for their specificity, for what makes them different from one another, but for what they evoke to the observer when taken together. So *an air is the result of a blending of many faces*, where the individual face is no longer focused upon: in this process of blending, a face becomes fused with the other ones. We could speak of an *ephemeral collective portrait*, "ephemeral" because Barthes elected to successively show the slides of the faces without allowing time for his students to focus on any single one of them. The purpose of this seminar was not to analyze these represented faces but

> to intoxicate you [the students] with a world, as I am intoxicated with these photos, and as Proust was with their originals. Intoxicated with what? With the *accumulation* of these faces, of these glances, of these silhouettes, of these clothes; with a feeling of love towards some: one of nostalgia (they lived, and all are now dead).
>   (Barthes 2003: 391–392, my translation)[9]

In this case, the relation between the figure and the ground is very peculiar: it is no longer the figure of an individual which is predominant: it is rather the ground of a collective group that becomes the figure of this beloved world – every individual figure needs to disappear, and the faces of each person must become interchangeable to allow the emergence of the ephemeral aura of a collective portrait.

6. The blending of faces in deepfake videos

The *de-personalization* of the face described in Barthes's last seminars leads us directly to another kind of de-personalization of the face, the one which takes place in deepfake videos, which consists in a process of *face replacement* – a face swap. We all know how deepfake videos work: Convolutional neural network algorithms analyze a source face from different angles to learn what it looks like; then, the algorithms transpose these learned features onto a target face as if it were a mask. In a face swap,[10] a user feeds the encoded images of person A's face into the decoder trained on person B. The decoder then reconstructs the face of person B with the expressions and orientation of face A and vice versa. The more convincing fake contents have been produced by extracting thousands of frames and are of course associated with "voice cloning", which uses technologies for deepfake audio.[11] What is important for achieving a very good replacement, as stated by the tutorials of the Faceswap app, is to use "as many different angles, expressions and lighting conditions as possible". Because it is essential to "train the model to understand a face at *all* angles, with *all* expressions in all conditions, and swap it with another face at all angles, with all expressions in *all* conditions".[12]

The technical process of extraction comprises three steps: detection, alignment, and mask generation procedures. Detection is the process of finding faces within a frame while alignment consists in finding the landmarks within a face and in orienting the faces consistently. The landmarks of a face are the core elements, the key data points that indicate the facial position and expression in each frame. Ultimately, it is a reduction of facial information to a diagram which stores and computes every expression. To replace one identity, it's necessary to work with the highest complexity of face gestures and movements. This complexity coincides with all the diversity that can be found within a single individual, and this diversity is rendered by a diagram made of landmarks.[13]

Finally, the procedure of mask generation creates a "mask" that identifies *which parts of the final image are part of the face and which belong to the background or are obstructions*. Here, the concept of background is treated together with the concept of obstruction, as noise alongside information. In a face swap, a mask is composed of the face's saliencies against a background.[14] The critical point, even in very contemporary representations of the face, is always the relation between figure and ground, the fact that the background has to remain distinct and not disturb the face taken as a whole, even when this whole is not that of a single view upon an identity but the whole calculated on the basis of every occurrence of a face that will be swapped onto the face of someone else. This kind of mask is fundamental for our purpose because the background must be prevented from interfering with the detection of the figure and is treated as noise, as something that may prevent from correctly identifying the diagram of landmarks that define the essence of the face in deep learning processes.

7. Conclusion: the whole to parts relations in portraits

To conclude this chapter, I wish to recapitulate the different stages briefly presented through the perspective of the figure-ground relation. In the Renaissance period, portraits would represent the destiny of a person. And for this destiny to be understood as radiating from the figure, the figure and the ground were made to occupy different areas of the image. Everything is in its place, and the portrait shows the ontology of a human being in a perfect, irenic environment. It's the portrait of the full presence of a deployed identity in a world that fits the figure. In the Baroque portrait, there is a negation of presence at work built upon a contrast in forces on the expression plane (i.e., light versus shadow) that means a contrast, on the content plane, between presence and absence, between the emergence and disappearance of presence.

In the twentieth century, Bacon's portraits were a continuation of the Baroque tradition and of the focus on identity transformation/

deformation. The figure and ground are blended: the figure seems to be invaded by the ground, the ground being a force in place that acts upon the form of the face. A blending of the ground and the figure takes place, just as we have noted regarding the deepfake mask, but the difference is that in Bacon's portraits, the ground melds with the figure, freeing it from the narrative and illustrative identity and conducing to what Bacon calls a portrait of sensation and a total negation of illustrative identity, whereas in deepfake videos, such invasion stems from the exclusive focus on saliencies so as to achieve a perfect diagram of the landmarks calculated for the face.

The portrayal of the air of a world, as Barthes had called for, also involves a sort of blending: a multitude of faces has the effect of producing a collective portrait of a whole, of a totality, and of a certain world. But such a world can only be suggested and not directly shown because Barthes sought to make the people represented lose their individual identity so as to form an atmosphere, something ephemeral, something that is not quantifiable, that is to say, something auratic.[15]

Conversely, in deepfake video production, the multitude of occurrences of a face is the means by which to determine, to calculate the landmarks of a person, the diagram of the face, making up a silhouette of points that build a mathematical totality. This totality is schematic and not a full totality because the noise formed by the ground now encroaches upon the figure as it incorporates the non-fundamental part of the visible face, that is to say, the part that is left to the indeterminate and to the Other.

Notes

1 This chapter results from a project that has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program (Grant Agreement No 819649-FACETS; PI: Massimo LEONE).
2 Close to semiotics, other scholars have worked on the image as a concretization of a theory. Among them, we may notably think of Damisch (1987) or the photographer Denis Roche.
3 For more details on these rules, see Dondero (2020, *The Language*).
4 Our translation. See Pontévia (2000: 16).
5 This may differ in some extra-European cultures of the face. For instance, Indians ask their photographers for complete body portraits, and, as Pinney (1997) wrote, they threaten to pay the photographer half the price if only half of the body is taken in the picture.
6 I have already expressed myself regarding this matter (Dondero 2021, *Composition*). This paper focuses on the meaning of the blurred portrait in a dialectic between artistic and scientific photography and between the portrait of an individual and the portrait of a human type, especially in the case of the experiments of Francis Galton (composite photography).

7 On this matter, see the vol 9, issue 1 of the journal *Metodo. International Studies of Phenomenology and Philosophy* on "Diagrammatic Gestures" (Dondero and La Mantia, Eds. 2021) and especially the papers by Batt and Dondero which focus on Deleuze's theory of forces in painting.

8 This state of grace has been defined as being the characteristic of beauty in Dondero (2022, Models), where the beautiful woman's face coincides with some kinds of movements and unique ephemeral gestures. The paper concludes asserting that this ephemeral character of beauty in photographed faces is more similar to the description of the instable equilibrium made of air and water in Chinese landscape painting than to the Western tradition of the figure/ground division in portraiture.

9 On Barthes's idea of photography as it is conceived of in his last seminars at College de France, see Dondero (2006, *Barthes*). For a very detailed description of the scientific attitude and teaching approach of Barthes during his last seminars, see Amigo Pino (2018, 2022).

10 Cfr Momina Masood, Mariam Nawaz, Khalid Mahmood Malik, Ali Javed, Aun Irtaza, *Creation of a Deepfake using an auto-encoder and decoder. The same encoder-decoder pair is used to learn the latent features of the faces during training, while during generation decoders are swapped, such that latent face A is subjected to decoder B to generate face A with the features of face B*. Extracted from Momina Masood, Mariam Nawaz, Khalid Mahmood Malik, Ali Javed, Aun Irtaza, "Deepfakes generation and detection: state-of-the-art, open challenges, countermeasures, and way forward", draft: www.researchgate.net/publication/349703826_Deepfakes_generation_and_detection_state-of-the-art_open_challenges_countermeasures_and_way_forward, 2021.

11 For instance, Lyrebird AI has the capacity to form sentences just by hearing a few spoken words, thus creating a digital voice fake.

12 See https://forum.faceswap.dev/viewtopic.php?f=5&t=27

13 This conception of the diagram is slightly different from that of Deleuze, mentioned in the previous pages. For a discussion on the similarities and differences between the conception of the diagram in Deleuze and Goodman, see Dondero (2023, *The Experimental*). It is rather more inspired by Goodman's (1976) theory of the diagram, according to which the diagram may be seen as a third term between dense (autographic) and notational (allographic) symbolic systems: dense systems are well illustrated by pictorial arts constituted by non-repeatable entities (such as each unique face), whereas notational systems, which are articulated and composed of elements that are fixed value, disjointed, and recombinable, concern arts such as music and architecture, in which the score or the architectural project resorts to an articulated language (mathematics or algorithmic work), namely a notational system providing unambiguous instructions for each new execution. Goodman does not however assimilate the diagram among the allographic arts. He rather includes the diagrammatic among dense and autographic systems, placing it at the extremity of a gradient of which the opposite pole corresponds to the pictorial. Both the pictorial and the diagrammatic are thus made to form part of the same gradient of dense systems where they occupy the two opposite extremities. Here, the diagram is the mediator between the uniqueness of every face and the mathematical calculation of proportions within a face: in this case, the geometrization of the facial landmarks constitutes a diagram because it generates at the same time a rarefaction of the specificity of a face and a densification of the simple calculations of its proportions.

14 Cfr Github Face Swap. The model performs its full potential when the input images are preprocessed with face alignment methods. https://github.com/shaoanlu/faceswap-GAN/blob/master/README.md.
15 The students attending the seminar were also supposed to lose their institutional identity so as to become the "intoxicated" people desired and loved by Proust. Barthes had the objective of making them into a blended collectivity of individuals (see Barthes 2003; Dondero 2006, *Barthes*).

6 Timely faces[1]

Antonio Dante Santangelo

1. Symbolic "artificial" faces

Every now and then, when watching the media, we come across faces that significantly embody some cultural models that are crucial to understanding the meaning of our times. They are "artificial" in the sense that even if they belong to actual people, they are the result of representational work. They are symbolic because they signify some abstract concepts that are central to our culture in a certain historical period. It is in this sense, for example, that Roland Barthes once remarked that the faces of Greta Garbo and of Audrey Hepburn, in the various movies circulating in the fifties, admirably represented that particular moment when cinema was about to extract an existential beauty from an essential one (Barthes 1957).

The faces I want to talk about are of this kind. They are those of the young protagonists of *La vie d'Adèle – Chapitres 1 & 2* (Kechiche 2013) and *Jeune Femme* (Serraille 2017), two movies awarded at the Cannes Film Festival, respectively, with the Palme D'Or and the Caméra d'Or prizes. Their representation led several Italian film critics to argue that "exaggerating Flaubert, *Adèle c'est nous* [Adèle is us]",[2] since the girl embodies "the basic problem of the loneliness of the contemporary individual, of the misery of the proposals for liberation and for full and profound self-affirmation that this era offers".[3] Other critics, also forming part of the Italian scene, considered Paula, the hero of Serraille's film, as "a matrix upon which a face selected at random from the batch of contemporary European youth could be affixed".[4] For them, she is "one of the most authentic female characters of recent years",[5] one who "symbolizes the shouts of the new generations wanting to claim their place in the world".[6] My hypothesis is that if Adèle and Paula look so meaningful, in the Italian cultural context, it is because they both represent a typical strategy that many persons follow to find a sense to their life in a society where social mobility – or, more generally, conceiving one's own existential project, believing that one day it will be achieved – has become almost impossible.

In fact, if we look at their stories, the protagonists of *La vie d'Adèle – Chapitres 1 & 2* and *Jeune Femme* are some kind of *vagabonds*. From the very beginning of the films in which they appear, they do not know who they actually are or who they want to become. So, like many people of their age, they seek their own path, experimenting freely with the many opportunities offered by Paris and Lille, the towns where they live. Between heterosexual and homosexual love affairs, jobs, and homes of varying prestige, the two girls, both of whom come from the suburbs and from the petite middle class, understand that they are different from the people who populate their places of origin. Hence, they try to settle into the upper class because their significant others belong to it. Nevertheless, they realize that the world is made of rigidly separated niches and that, even if these niches seem to be open to everyone, in many of them, they cannot find a place for themselves. This ends up causing pain to Adèle and Paula, but it does not lead them to make any political demands. It is simply that, at the end of their stories, they find themselves alone, and they have to continue on their way without yet having understood where they will go.

Since they do not have clear existential projects, the two girls look for the meaning of their life by trial and error. They seem to believe that it will eventually manifest itself as they accumulate the most varied experiences. This is the reason why the sensorial organs of their faces – their mouths and skin, in particular, but even Paula's heterochromatic eyes – are very central to their representation, so much as to become the main subjects of the posters for the movies. They are a metaphor for the difficulty faced by the two protagonists of *La vie d'Adèle – Chapitres 1 & 2* and of *Jeune Femme* in following one single ideally predefined trajectory. Rather than distantly looking towards the endpoint of an existential path upon which to center their life, they have to grope for the meaning of the many situations in which they find themselves immersed. In practice, paraphrasing Barthes again, they symbolically represent that particular moment when cinema was about to differentiate the notions of the meaning of life either as something towards which to aim or as something that one does not know where it can be found, but that may suddenly become manifest as one wanders through the world. In fact, a synonym of the word "meaning" is "sense": sense as a *direction* that can no longer be pursued and that transforms itself into a *sensation*, the last refuge for the existential quest of the new generations who can only dare – or maybe gamble – to find it this way, especially if they do not belong to the upper classes.

To demonstrate that this interpretation of the two movies and of the iconic faces of their protagonists is correct, I will compare them to the contents of another film about a young woman who is very representative of our times: Chiara Ferragni, the famous influencer. I will then analyze *Chiara Ferragni – Unposted* (Amoruso 2019), the documentary film that

tells the story of her life, showing how she started off as an outsider to the world of fashion and how she achieved glory and fame counting only on her talent. Once again, in this movie, the representation of the protagonist's face is central in particular as regards her beautiful blue eyes that so clearly see what she wants and that direct the choices she has to make in her private and professional life. So much so that her eyes – or maybe, more significantly, if compared to the two-colored eyes of Paula in *Jeune Femme*, one of them – become the logo of her fashion company. Since she was young, Chiara Ferragni knew that she liked fashion, and eventually, she became a star in the field.

What interests me here is that many commentators in Italy have criticized the message conveyed by *Chiara Ferragni – Unposted*, defining it as something of a fairy tale that may be misleading for many young spectators who might believe that their life can also be such. But in many reviews, the authors pointed out that the famous influencer is the daughter of a wealthy family and of a mother who already worked in the fashion industry. Moreover, they stressed that great marketing strategists have always been helping her. Actually, these critics, even without referring to *La vie d'Adèle – Chapitres 1 & 2* or to *Jeune Femme*, seem to share the same worldview as the new generations depicted in these films, to the point where they believe that real life is more similar to the fictional stories of which the films tell. They radically contrast the world view portrayed therein with the one pursued by persons such as Chiara Ferragni, who they judge to be even more "fake".[7] Hence, I will compare the cultural model of the *self-made woman*, which the story told in *Chiara Ferragni – Unposted* clearly embodies, to that of the aforementioned vagabonds, showing how central their opposition is for understanding the meaning of our experience of life nowadays, at least in the Italian context.

2. Some preliminary theoretical considerations

Before delving into the analysis of the faces and films I have written about, I feel it necessary to offer some indications as to the method that I will use. It is a method that derives from the *structural semiotic* tradition, and it is based on the idea that when we need to interpret the world, we recur to signs and narratives that are in our mind and that we use to classify what we are faced with (Ferraro 2012). Such signs and narratives make sense because they are encoded into structures we all know and share. These structures put them into some logical relations, most of the time in opposition to one another (Saussure 1916; Hjelmslev 1943). For example, if we see the image of a tiger in an adventure movie and want to understand its meaning, in our mind, we will oppose it to the images of herbivorous or domestic animals. Then, we will oppose the stories about the relationships

between humans and wild predators to those between humans and harmless animals. Similarly, if we see a face in another movie, we will recognize the signs used to create it but also the narrative structure of the story of its owner. Doing so, we will recognize the face as being similar to some other faces and different from some other ones, and this operation will enable us to give it a meaning.

Starting from these convictions, Lévi-Strauss (1979) once demonstrated, in his studies on Salish swaihwé masks, that although they may look very different from the Kwakiutl dzonokwa ones, they are actually similar because they have the same meaning for the populations who produced them. At the same time, although they have many traits in common with the Kwakiutl xwexwé masks, they are actually different because the stories of the characters they represent talk about the same concepts, but they have opposite narrative structures. What I want to do with my analysis is analogous. However, instead of studying exotic cultures, I want to show how Italian culture works to make the faces of the protagonists of *La vie d'Adèle – Chapitres 1 & 2* and *Jeune Femme* look similar, even if the two actresses who embody them are physically different. At the same time, even if, like Chiara Ferragni, Adèle, and Paula are two young and beautiful women, I want to demonstrate that their faces have the same meaning as one another because the signs used to represent them and the narrative structures of their stories are in similar opposition to the ones used in *Chiara Ferragni – Unposted*, which are typical of another kind of stories.

Nevertheless, behind my analysis, there is another theoretical conviction. It is connected to the explanation of the fact that, as I have mentioned earlier, the critics of the three movies have affirmed that the two fictional characters which are Adèle and Paula are "real", in the sense that they actually resemble the young people forming the new generation while Chiara Ferragni, who claims to tell her own true story, is not believed. In fact, many think that she has somehow "fictionalized" her chronicle, making it look like something of a fairy tale. Actually, as I will show better in the following paragraphs, fairy tales can tell the true meaning of life as envisioned by a certain culture. For example, Propp (1946) demonstrated that the narrative structure of Russian magical fairy tales reminds of the initiation rites seen in many other parts of the world, and anthropologists know that initiation rites, like myths and other narratives, reproduce the vision of reality upheld by the populations they belong to (Van Gennep 1909). This is due to the presence, behind every factual or fictional discourse about our way of being in the world, of some similar *cultural models* that, like signs and narratives, are tools that we use to classify our experience of life by opposition, so as to give it meaning. Such cultural models are actually made of signs and narratives. In fact, elsewhere,

I define them as recurring discursive configurations with specific narrative structures that connect some signs so as to give them a certain connotative meaning (Santangelo 2012). We recur to them every time we have to talk about a particular topic, and they enable us to take a position towards it. Hence, the problem with *Chiara Ferragni – Unposted* is not that it conveys a fairy tale but that such a fairy tale embodies a cultural model which is no longer believable for portraying the meaning of the life of the young people of today because it is too elitist. It is more realistic, when talking about this topic, to construct discourses such as the ones we can find in *La vie d'Adèle – Chapitres 1 & 2* and *Jeune Femme* because the class of persons whose existential experience has a similar meaning is wider. In the following pages, I will try to show how the cultural models from which the three movies derive oppose one another, why they are so central to understanding our times, and how they determine the representation of the faces of their protagonists.

3. Two similar stories

As I wrote before, a cultural model is a semiotic tool that enables us to interpret some seemingly different discourses in the same way, focusing on their analogies more than on their differences. We give such discourses the same meaning because we recognize that they are based on similar narrative configurations of the same signs. Therefore, to become aware of the existence of cultural models and to describe them, we have to find that different texts on the same topics function in the same way. This is exactly what happens if we compare *La vie d'Adèle – Chapitres 1 & 2* and *Jeune Femme*.[8]

   As I have anticipated, both of these works are about young women trying to define their identity, to find their place in the world. These girls come from petit bourgeois families on the outskirts of Lille and Paris, and they both experience leaving the environment in which they were born. They both enter into relationships with artists belonging to the upper middle class: Paula falls in love with Joachim, an older established photographer, while Adèle falls in love with Emma, a painter who is also a little bit more mature and who is studying at the Academy of Fine Arts. Both, however, experience being violently ejected from the lives of their respective lovers: *Jeune Femme* begins just like this, with the door of Joachim's flat closed in Paula's face and with her screaming and banging her head against this barrier to get it reopened, injuring her forehead. *La vie d'Adèle – Chapitres 1 & 2*, on the other hand, gradually reaches this situation after the protagonist, having moved in with Emma, cheats on her with a colleague and, having been discovered, is sent away.

The similarities between the two films continue. Paula begins to wander from one social context to another, looking for a place to settle down. She finds two jobs: one as a babysitter for the daughter of a wealthy woman, who also gives her a place to sleep in the attic of her beautiful house in the center of Paris, and another as a saleswoman in a shopping center, where she meets Ousmane, a black security guard, separated and with a son, with whom she starts a fleeting relationship. However, Paula also seems to fall in love with Yuki, a girl she met by chance in the metro, with whom she explores the world of nightclubs. She tries to get hosted by Joachim's rich friends. She even agrees to see her former lover again, when he backtracks and goes looking for her. Finally, she also meets her mother, with whom she has a stormy relationship and who would like her to return home, but she decisively flees.

Adèle, for her part, is no less of a wanderer. In the first "chapter" of her existence – the film portrays her as a teenager and then as an adult – she accepts the courtship of Thomas, a schoolmate, who is deemed highly desirable by her friends. The two make love, but the spark does not ignite, at least for Adèle. She realizes that she feels attracted to women and, in particular, to Emma, the nonconformist blue-haired painter, who she finds to embody the ideals of beauty and freedom that she reads about in her literature classes or in her philosophy books. However, after letting herself be swayed by passion and moving in with her partner in a social context very different from the one from which she comes, she does not feel understood or valued, except as the object of Emma's own artistic expression. The two women, animated by irreconcilable existential horizons, drift apart until the aforementioned betrayal, perpetrated by Adèle with a man whom, for a moment, she feels closer to. In fact, he belongs to the world she has chosen for herself by inclination, that of teaching children. Only, having been discovered and then driven away, Adèle feels she wants to get back with her former lover at all costs – a hope that, unfortunately, proves to be in vain, as Emma makes a new life for herself with another woman who, like her, is well connected within the world of art.

Both Adèle and Paula, therefore, "wander" between one life experience and another, accepting and transgressing rules and clichés, in search of their own identity, which they do not find. In this regard, both films end with the protagonists having yet another strong and significant experience, one that is painful but not resolved. For Paula, there is her choice to abort alone in a hospital, renouncing the child she conceived with Ousmane. For Adèle, there is her participation in Emma's first triumphant *vernissage*, in which she finds out that she is now but a past memory for the artist, perpetuated through the paintings hanging on the walls. Hence, they both end up walking down the street thoughtfully, alone, passing through anonymous places, where they feel they do not belong.

4. A similar narrative structure

The narrative structure of the two movies is shown in Figure 6.1. To understand it, it is necessary to know that among the narrative structures to which we recur, particularly relevant for the study of faces, we have those of *Alpha class* stories (Ferraro 2019: 96–98). Such stories focus on how to determine the *identity* of their main characters (and we all have a sense of how closely faces are tied to identity), depending on the relationship between an individual value system, also called the *perspective instance*, and a collective value system, called the *sending instance* (Ferraro 2012: 172–174). The former gives rise to all the parts of this kind of story in which we talk about the meaning that things and events take on in the eyes of their protagonist, based on his or her innermost personal convictions. The latter, on the other hand, is responsible for the meaning that those same elements of the narrated story acquire for the other characters who constitute the social reality in which the protagonist operates, who have their own way of seeing. Between these two instances, various types of relationships can exist, and such relationships play a fundamental role in determining the identity of the characters who embody them. For example, such characters can be those who fight for their individual value systems as opposed to a collective value system they consider to be unjust. Conversely, they can be the individuals whose personal value systems coincide with those of others. In other words, they can be subjects with an individual value system that differs from the collective one, subjects who decide to not oppose to it, and so on. It is clear that even the overall meaning of the events of their stories depends on the relationship between the sending instance and the perspective one.

In *La vie d'Adèle – Chapitres 1 & 2* and *Jeune Femme*, the perspective instance represented by the two protagonists and their desire for freedom push them to search for themselves regardless of social expectations. However, this desire clashes with the sending instance represented by the social rules that inform the various niches of society in which the young women try to settle down. The characters who populate them would like to define the identities of Adèle and Paula, telling the girls who they should be, but this does not make sense to them. For example, when Adèle affirms that she dreams of becoming an elementary school teacher, Emma urges her to rather write novels because in the upper class to which she belongs, people admire artists who express themselves more so than teachers who repeat the words of others, taking care of the education of children. The fact that she paints Adèle in her works also allows her to define the identity of her lover and to share it across her own social context, regardless of what the latter thinks of herself and wishes to show publicly. Paula, for her part, lives through a similar experience,

as she too is "defined" by Joachim's successful photos and as her partner expels her from his life, once again because he judges her unsuitable for him. In fact, he has a prestigious job and clear existential goals while she is unemployed at the beginning of the film, having just returned from a trip abroad in search of herself. However, when Joachim tells her to go to work, it does not make sense to Paula because the girl has no idea of what she would like to do.

Unlike their lovers, Adèle and Paula do not know who they are and would simply like to understand it through their own self-experience. Only, they realize that this is complicated if even love is governed by the values of the social contexts to which the people they meet belong, and as soon as they stray from them to try something else, they are brutally thrown out. They also experience what it means to be part of the world of their parents, work colleagues, schoolmates, and friends, who all do the same thing: they attempt to judge and define who the girls should be. Unfortunately, they both fail to adhere to any of the models they come across because within the boundaries imposed upon them, they struggle to recognize their own identity. Hence, they end up "wandering" between one sending instance and another (this is the meaning of the different arrows in Figure 6.1). However, they remain cut off (this is the meaning of the horizontal line in Figure 6.1) without ever finding a home for good.

This narrative structure is perfectly recognized by the Italian film critics, who consider it decisive in its capacity to tell what life is like for young people today. Of the protagonist of *Jeune Femme*, for example, someone writes that

> undecided with respect to her means, her affections, her ambitions, Paula is the mirror of a generation that no longer identifies with the bourgeois ideals and aspirations of the second half of the 20th century, . . . yet is too weak to propose an alternative model.[9]
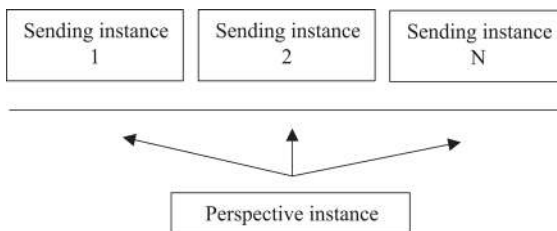

Figure 6.1 Antonio Santangelo. 2022. *The narrative structure of Adèle's and Paula's stories*. Copyright: Upon a kind concession by Antonio Dante Santangelo.

Her wandering between one sending instance and another, in search of her own identity, may be traced back to the aesthetics of *flânerie*, so often used by the directors of the French *nouvelle vague*. But one commentator rightly points out that

> compared to the films of the Young Turks, Serraille's is the child of a more written and less free script, as well as of a worldview in which the protagonist's bewilderment and her losing herself in the nonsense of everyday life is not a declaration of anarchy with regard to the rules, but rather a way of re-entering them.[10]

Paula, in fact, does not wander because she is non-conformist, but only because she does not understand, a priori, what should be the sending instance that establishes the values of that part of society in which she wishes to live. Thus, she tries different paths, but they never take her where she really wants to go: "throughout the film, she never delivers her character to a recognizable or calculatingly lovable model, remaining a constantly changing, metamorphic, elusive character, in transition at every level".[11]

The same themes are identified and considered significant by critics of *La vie d'Adèle – Chapitres 1 & 2*, confirming the fact that the story told by director Abdellatif Kechiche, being the fruit of the same cultural model, appears superimposable to the one narrated in *Jeune Femme*. Many, in fact, emphasize Adèle's great openness and her desire to experience life without prejudice. However, they highlight the castrating and in many ways unjust nature of those social mechanisms that cause suffering to young people today: those who, like Adèle herself, seek their own way freely, outside of the socio-cultural context from which they come, and who meet with existential failure. They find themselves "wandering" between very different portions of the world, in which it is not possible to settle down definitively. In this regard, a commentator points out that the girl does not follow "a traditional evolutionary trajectory, which involves a series of changes in worldview until the final attainment of a certain maturity and emotional equilibrium".[12] If this were the case, at the end of the film, she would find her own identity. Instead, as I have hinted, Adèle ends up experiencing "the basic problem of the loneliness of the contemporary individual, of the misery of the proposals for liberation and for full and profound self-affirmation that this era offers",[13] as is always the case in Kechiche's cinematography. In fact, it all seems to be centered upon "social classes as the regulators of an order that is difficult to negotiate; . . . and on slices of life . . . never understood as simple sections of everyday life, but rather as emblematic segments of formative paths that do not produce evolutions".[14]

5. Faces of vagabonds

The narrative structure of *La vie d'Adèle – Chapitres 1 & 2* and *Jeune Femme* is represented by analogy by a set of signs that are used several times throughout the two films, also giving shape to the protagonists' faces. For example, since they do not identify a priori a sending instance pointing them towards a precise existential direction, Adèle and Paula need to find a way a posteriori. Therefore, as I have anticipated, the representation of the two girls is characterized by the emphasis placed on the details of their sense organs. In fact, they move by trial and error, testing, with their bodies even before engaging in rational planning, the consequences of what it means to live in the various social contexts with which they are confronted.

   All the reviewers of the two movies underline the symbolic importance of this emphasis on the bodily *sensations* of Adèle and Paula. Some point out that Adèle "reads the world only through her own body, made into an instrument of exploration of phenomenal experience"[15] because for her, "existence comes before essence; that is, experience is not made comprehensible by a prior definition of the self, but on the contrary, subjectivity is determined by the multiplicity of experiences themselves".[16] At the same time, Paula is also a character who "finally sees and perceives the world with the eyes and body of a woman, a real woman, who is not afraid to be what she feels she is".[17] In particular, since the face is perhaps the main sensory terminal of the human body, all critics of *La vie d'Adèle – Chapitres 1 & 2* and *Jeune Femme* recognize that the portrayal of the protagonists' faces is crucial. Adèle "is constantly filmed with close-ups or details that enhance her overflowing physicality, her humoral fluids, from tears to mucus, the sense of a warm and deep instinctuality".[18]

> She is voracious, as suggested by Kechiche's constant return to her lips filmed while she sleeps or eats: lips stretched out, greedy, almost distinct from the rest of her body, as if living a life of their own and dragging the protagonist forward against her will.[19]

Once again, even Paula

> struggles to stay within the frame, due to the latter's inability to contain her overflowing physicality. Before sinking the camera inside the girl's story . . . director Léonor Serraille keeps to the surface of events and to the wounded and impatient body of actress Laetitia Dosch.[20]

In particular, she highlights her heterochromatic eyes, " 'bipolar eyes', mirroring an equally bipolar and restless soul".[21]

As can also be seen in the posters for the two films, the sensory organs of the faces of Adèle and of Paula, particularly the mouth of the former and the eyes of the latter, in addition to the excoriated skin on her forehead, are fundamental in symbolically communicating the meaning of the two girls' stories. Adèle and Paula, in fact, enter into relation with a material reality that functions according to the values of the sending instances that give a meaning to the people, places, and even the food they find therein. Adèle, at the beginning of Kechiche's work, is shown enjoying the "simple" pasta cooked by her father with details of her teeth chewing voraciously and her chin getting dirty from too much eagerness. However, when she visits Emma's more upper-class parents, she is shown tasting oysters, a notoriously more "refined" dish, which she reluctantly savors. When she makes love to the young painter, she voluptuously probes the latter's body mainly with her mouth, and when she betrays her and is expelled from her life, she tastes, again with her mouth, the bitter taste of her own tears and the mucus that drips down her nose. It becomes clear then that there is an opposition in the two films between, on the one hand, the lips and skin of the protagonists and, on the other hand, their eyes. The former represent the sense, also in its sensorial meaning, which is found a posteriori, link-ing these two components of Adèle's and Paula's faces to their perspective instance, an instance with which, paradoxically, is associated a kind of lack of perspective, an inability to look afar, beyond the limited horizon of the here and now. The eyes, on the other hand, refer to the various sending instances found in the world in which the girls live. They are gazes upon the latter, institutionalized and defined a priori, capable of indicating a direction – like those of Emma and Joachim, who not surprisingly make art by observing and defining reality from their own point of view, which is already "successful" or is soon to become so because they know it is shared with all those with whom they keep company. However, Adèle and Paula, more or less metaphorically, have changing eyes, which do not lead them to see things in the same way as those whose irises are of a single color. They are different: as "vagabonds", they do not look at the world from a single perspective but try to identify with the point of view of different sending instances. Such an attempt is certainly full of strongly flavored sensory stimuli, but it is also characterized by the concrete risk of "banging one's head" and getting hurt.

As is thus evident, the signs that make the sensory characteristics of the faces and bodies of the protagonists of the two films pertinent stand for something else. They take on a second and symbolic meaning, clearly linked to the narrative structure of the story they help to tell and, in particular, to the relationship that, within the story itself, is established between the perspective instance and the sending one. This is also the case of the signs that emphasize the *movement*, made by both Adèle and Paula, between one

social context and another, as well as being the case of the movement of the strictly handheld camera that shoots them. These signs are also given a central role in communicating the deeper meaning of the discourse pursued by the directors of the two films. In this regard, I have already had the opportunity to write about the extent to which critics of *Jeune Femme* appreciate Serraille's expertise in the use of a handheld camera. But the same thing is emphasized in reviews of *La vie d'Adèle – Chapitres 1 & 2*, pointing out that "the camera, rarely placed far from the characters' faces, is a seismograph with an icastic and immediate sensitivity; every change of mood is detected in real time".[22] The expertise recognized in Kechiche lies in his ability to always know how to capture the manifestation of meaning, at the exact instant when it is consciously detected by the protagonist experiencing it with her own body and the organs of her face. However, to achieve this, he too must make himself into a "vagabond": he cannot direct the camera towards a specific point, knowing a priori that he will be filming something significant there. Rather, he must always be on the move.

Closely related to these signs are those that communicate a feeling of *incompleteness*, of both Adèle's and Paula's lives and of the images that represent them. Indeed, the handheld camera, focusing more on the details of the two girls' faces than on the whole scene, makes it difficult to construct complete, balanced, stable, and harmonious shots. Moreover, since completeness, balance, stability, and harmony are not part of the existence of the protagonists of the two films, these concepts are not sought for on a visual level in order to tell their stories. If Adèle and Paula succeeded in integrating their perspective instance with one of the sending instances of the world in which they live, if their identity allowed itself to be "framed" within the logic and values of one of these sending instances, then the way of filming the two young women and, more generally, of narrating them would be different. But Serraille, when interviewed about the underlying message of her film, asks: "What does it mean to be a young woman? We are often asked to fit a certain pattern, an identity, a definition. The expression 'Young woman' should be a free, deliberately undefined one".[23] And indeed, *La vie d'Adèle – Chapitres 1 & 2* is so titled precisely because Kechiche does not intend to tell the whole story of his heroine's life, preferring to leave it unfinished, in the midst of her wanderings. This is somewhat similar to the unfinished work *La vie de Marianne* (Marivaux, 1731–1742), one of the books Adèle studies at school, drawing inspiration from it for her existential quest.

Finally, in these two cinematographic works, the signs that communicate *separation* are fundamental. The authors of the reviews of *La vie d'Adèle – Chapitres 1 & 2* emphasize the importance of the director's insistence on using very narrow shots when capturing his film's protagonist, keeping

her figure separate from the context in which she lives. This is underlined, for example, by those who appreciate Kechiche's expertise "in depicting the details of faces and bodies, in lingering on the very near close-ups, and then widening the shots to other things, where strictly necessary, only when others become an attraction for Adèle's gaze".[24] Because "there is nothing beyond what the young woman knows and experiences"[25]: "more light, more details enter the field of vision, but also blur things in the background".[26] At the same time, the commentators of *Jeune Femme* point out how Paula "is almost always filmed alone",[27] emphasizing her difficulty in integrating with her surroundings. Even in these cases, the images depicting the faces and bodies of the protagonists of the two films, so clearly separated from those of the other characters who populate their world as well as from the spaces the latter occupy, symbolically represent by analogy the separation between the perspective instance and the sending one around which their stories are structured.

6. The story of a self-made woman

The cultural model that serves as a matrix for the stories of vagabonds and the representation of their faces contrasts sharply with that of the stories of self-made men and self-made women. To demonstrate this, one only has to look at how Elisa Amoruso's *Chiara Ferragni – Unposted* is constructed. Here, it is shown that Chiara, ever since she was a child, has always had only one desire: to follow in the footsteps of her mother, a well-known professional in the fashion world, in order to establish herself in this context. Thus, the perspective instance, represented by the individual values and convictions of the protagonist of this film, fits perfectly with the sending instance with which she is confronted. The latter constitutes, for her, an existential horizon that is valid a priori, one that is capable of filling each of her life choices with meaning. Her identity depends, then, on her ability to break through the barrier I mentioned, describing the narrative structure of vagabond stories: the "young woman" recounted by Amoruso, so different from those in the works of Kechiche and Serraille, must succeed in gaining a prominent role in the society of professionals who share her same passions. Here, she gains citizenship thanks to her talent and dedication, driven primarily by her fans on social networks, the first to recognize her qualities. Thanks to their support, Chiara progresses through her *cursus honorum*, from her first steps as a fashion blogger to her achievement of fame, with the numerous attestations of esteem received from the greatest stylists, managers of the most famous labels, models, and specialized journalists, but also with the foundation of her own brand of clothing and accessories, her marriage to the well-known singer and showman Fedez,

the birth of her son Leone, and the moving of her whole family to Los Angeles, where she keeps company with the biggest stars of the international jet set.

In Figure 6.2, one can visualize the narrative structure of the story told in *Chiara Ferragni – Unposted* and some of the many images within the film that represent it by analogy. As is natural, given that it is a matter of recognizing the identity of a young "outsider" within the world of fashion, a prominent role is played by her face, "framed" within the most representative spaces of this context, be they the covers of glossy magazines, boutiques, catwalks, or the headquarters of the most important companies.

However, I will return later to the representation of Chiara's face. For the time being, it is interesting to emphasize that the story of her life fuses the vicissitudes of the well-known influencer with those of the heroes of the Russian magical fairy tales analyzed by Propp (1928). In fact, it is no coincidence that Ferraro, in his book on theories of narration (Ferraro 2015: 75–85), defines them as *self-made men*. As Propp himself argued in a later work (Propp 1946), they are reminiscent of the figures of those young men who, wishing to show that they are worthy of reproducing the system of values established by the sending instance of the social context in which they aspire to fit. They undergo a sort of initiation rite, facing hard individual trials and thus pursuing some form of collective recognition, especially by those who are already in a prominent position within that society.

As I have shown elsewhere (Santangelo 2013), Hollywood textbooks have taken up this narrative matrix (see, for example, Vogler 1992) in order to show American film scriptwriters the way to construct success stories, endowed with a strong symbolic meaning for viewers all around the world. After all, watching films about characters such as those depicted in fairy tales, who start out poor and become rich, who begin their journey outside of a certain social system and who end up, owing to their own merit, at the center of it, can be edifying for many. All of this, in fact, embodies the American dream. But ultimately, it represents the desire for
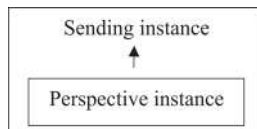

Figure 6.2 Antonio Santangelo. 2022. *The narrative structure of* Chiara Ferragni – Unposted. Copyright: Upon a kind concession by Antonio Dante Santangelo.

affirmation held by any of those who believe they can find their true selves by adhering to the values shared by those who belong to that niche of society in which they aspire to live.

In this sense, then, *Chiara Ferragni – Unposted* fits into an ancient narrative tradition. Indeed, reading the Italian reviews of this film, this matrix and the cultural model of which it is the bearer are recognized by all. Yet the choice of resorting to it to tell the story of a real person, with whom so many young people identify, has been strongly criticized with arguments such as the following:

> If we talk about affirmation and personal fulfilment . . . the film certainly clarifies one point, namely that the idea that anyone, with commitment and determination, can realise their dreams is still a very pervasive concept, but above all, a narrative that guarantees a multi-million-dollar box office. . . . The real knot where the film proves artificial is . . . the message behind this empire. You can make it on your own. You don't need anybody. Believe in your dreams and anything can happen. . . . And to say that the documentary shows Chiara as a child, filmed and photographed by her beautiful mother, who came from the fashion world. We will see a rich and happy family. . . . Above all, we will see a host of ubiquitous, friendly and diligent collaborators, even ready to tie her shoes. . . . Making it on their own? It is certainly noble to fight for the idea that women can be completely autonomous and independent, but perhaps those who have only lived in such a privileged dimension should not speculate on such dangerous illusions . . . after having seen the film, the dream machine increasingly seems like a deadly factory, ready to incessantly generate frustration and sadness.[28]

Indeed, there are also those who are thrilled to finally see on the big screen the story of a girl who succeeds in realizing her dreams, as indicated by those who praise *Chiara Ferragni – Unposted*. They deem it

> almost a miracle, precious in entering a reality far away from us, to show the unique value of an entrepreneur, blogger, model and designer who has revolutionised the world of fashion, overcoming the barriers to entry of a closed and snobbish sector, uncomfortable because it shows the face and impact of a true influencer.[29]

However, both of these types of interpretations – of which the proponents of the latter openly polemise with those of the former, writing that "negative reviews by critics are . . . quite negatively biased due to a lack of understanding of the phenomenon"[30] – can only be fully understood if one compares them to the vagabond stories I wrote about in the previous

paragraphs. In fact, for those who believe that the cultural model and matrix of stories such as *La vie d'Adèle – Chapitres 1 & 2* and *Jeune Femme* accurately describe the condition of young people today, the reference to the American dream achieved by the famous Italian fashion blogger cannot but appear "fake". It looks like the result of fairy tale imagery, good only for international box-office success and for generating false myths, coming from a cinematography that is currently incapable of telling how the world is really going. Therefore, even those who believe that *Chiara Ferragni – Unposted* represents a breath of genuine novelty know that they are confronted with the opposite cultural model, which is the one shared by most Italian critics.

7. The face of a self-made woman

Since the narrative matrix of *Chiara Ferragni – Unposted* contrasts with that of *La vie d'Adèle – Chapitres 1 & 2* and *Jeune Femme*, the same happens with the signs that, within Amoruso's film, represent by analogy the structure of the story being told. These signs, as in the works of Kechiche and Serraille, in turn, are also used to construct the image of Chiara Ferragni's face.

Firstly, the body and face of the famous influencer are never separated from the background of the social context in which she lives because it is important to show her *integration* within the latter. Moreover, the camera that shoots her is rarely mobile but is fixed on a tripod, also signifying the *stability* of the condition of the film's protagonist, who has arrived where she wants to be. Chiara allows the spectators to observe her with ease and to pry into her world while explaining how she got there. Only in a few moments, in the archive images shot by her mother with an amateur camera when Chiara was a child, do we find the handheld camera aesthetics of *La vie d'Adèle – Chapitres 1 & 2* and *Jeune Femme*. Significantly, this is the case in the scenes that tell of when the protagonist of Amoruso's film was not yet famous and when those watching her, a bit like Kechiche and Serraille with Adèle and Paula, were trying to understand what her identity would be in the future. However, precisely because Chiara has now found herself, the director who tells her story chooses to talk about her completeness as a person and the *completeness* of her existence. She does so by assembling harmonious and balanced shots, perfectly in line with the balance and harmony of the hero of her film, magically capable of holding everything together, from success to family, from the pride of her Italian-ness to the internationality of her fame, from friendship towards her employees to the ability to direct them like a great manager.

    Above all, however, instead of speaking, as in *La vie d'Adèle – Chapitres 1 & 2* and *Jeune Femme*, of bodily sensations, of mouths, and of epidermises seeking meaning in the here and now, Amoruso focuses on Chiara's capacity for *vision*. This is represented, as I have mentioned, by her beautiful blue eyes that know how to look far ahead and by the logo of her label, which, uncoincidentally, is represented by an eye resembling her own. It is these eyes, set within a serene and satisfied face framed with composure and precision, that symbolically represent the narrative structure of the cultural model from which *Chiara Ferragni – Unposted* derives. In this film too, there are in fact signs that focus on the bodily sensations and the skin of the protagonist. At the beginning of the narration of her story, she wants to get a tattoo to forever remember the happy moment she is going through. At the end, she sits by the sea, enjoying the pleasant breeze of the Californian beach, close to the place where she has made her home. But it is precisely in this last sequence, in which Chiara scans the horizon, imagining what the future will be like, that we understand the difference between Adèle's and Paula's life story. We find ourselves, in fact, at the end of a path of personal fulfillment of which Chiara herself enjoys the results, which remain imprinted in her body and soul, making her confident in what is to come. In the works of Kechiche and Serraille, we are rather in the middle of the journey. We are in the midst of the wanderings of two young women who are more or less the same age as the protagonist of Amoruso's film and who could legitimately aspire to be self-made women but who are still in search of themselves and of their place in the world. What they lack, precisely, is a vision, capable of holding together their perspective instance and the sending instance that governs the social contexts in which they attempt to integrate.

8. The eye model and the tongue model

The analysis I have conducted so far shows that the opposition between the vicissitudes and faces of vagabonds and those of self-made women is particularly significant in the Italian culture represented by the reviews I have quoted, as if there were a code for reading reality that opposes the narrative models I have described in Figures 6.1 and 6.2. However, the same code opposes vision to taste, stability to movement, and completeness to incompleteness in addition to opposing integration to separation from the social context within which one lives.

    With this in mind, I find it interesting to cite the research of Gobbi and Morace, two authoritative observers of the changes in cultural models, which they study in order to intercept new trends in the field of consumption. These authors argue that we live in an era in which the logic that has

characterized the history of our way of consuming over the last twenty years, based on

> the eye and fashion, on image and on pure visual sensibility, has entered a crisis. In this model, personal status reigned supreme . . . expressed through a landscape of objects and products that remained outside of our tactile, bodily, kinesthetic experience, without ever coming into contact with our epidermis, our skin, our hands.
>
> (Gobbi and Morace 2007: 84–85)

In the past, we lived in an *economy of the eye and of sight*, symbolized by the passion for clothes and clothing accessories indeed but more generally by status symbols. In such an economy, reigned the tale of someone who had arrived where he wanted to be and who, because of this, wanted to be admired, positively "sanctioned" because he wore the signs of his success. The contemporary era, on the other hand, is characterized by an *economy of the hands and tongue*, symbolically represented by the passion for food. It is linked to sensory experience in its making:

> [T]hought descends from personal experience . . . the real becomes a single, immense, permanent ice cream . . . language also refers directly to other experiences . . . first of all, to the experience of conversation, of speech, of dialogue . . . and then, even more profoundly, to an erotic experience with reality, in which what we like is worth licking and savouring.
>
> (Gobbi and Morace, ibid.)

As can be seen, many of these concepts are common to the analyses I have conducted so far. It seems as if the consumption of a film such as *Chiara Ferragni – Unposted* would suit those who prefer the model of the eye, whereas the appreciation of works such as *La vie d'Adèle – Chapitres 1 & 2* and *Jeune Femme* would stem from a way of seeing the world that is more akin to that derived from the model of the tongue. Of course, the critical undertones towards our society, which can be found behind the stories of Adèle and Paula, as told by Kechiche and Serraille, or behind the forms of criticism directed towards the discourse carried out by Amoruso, in her narration of Chiara Ferragni's life, are not seen in Gobbi and Morace's reflections. After all, consumer studies do not have this function. Even if, by watching the movies and reviews I have analyzed, one could argue that paradoxically, the self-made man or woman model nowadays may look more meaningful to upper-class people, who have the means to make it become true, whereas lower-class people have to switch to the vagabond's cultural model. In any case, it is true that something leads many observers

of contemporary culture to say that our logic of reading reality is changing, and this reverberates widely, including in our way of thinking and symbolically interpreting faces.

9. Old and new models of meaning construction

Considerations such as those I have just written about make us reflect on the fact that the Strega prize for the best Italian novel of 2017 – one of the most prestigious literary prizes in Italy – went to Paolo Cognetti's *Le otto montagne*[31] (2016). The story is about a young man who searches in the mountains, amidst nature and old traditions, for the meaning of his being in the world. However, he does not find it and realizes that his destiny is to be always on the move, wandering like a vagabond among the metaphorical eight mountains that recall a Tibetan myth. Cognetti himself, in 2018, published *Senza mai arrivare in cima. Viaggio in Himalaya*,[32] declaring that he was inspired by Peter Matthiessen's *The Snow Leopard* (1978). According to Cognetti, in describing Matthiessen's pilgrimage to Tibet, this book had captured the true essence of life. In this regard, the Italian writer states:

> Peter had used a very precise word for his journey. *Gnaskor*, which means to wander. . . . A pilgrimage is in every culture a path of purification, but in wandering, in walking in circles, there is no point of arrival, which is fundamental in the pilgrimages we understand. Jerusalem, Rome, Mecca: without a destination, how do you know when you have achieved purity? I found a connection between this need for holy cities at the end of the path and the mountaineering obsession with mountain peaks: since I was a child, I had heard the word summit used as a metaphor for paradise, and the word ascent in a spiritual sense . . . on the other hand, the most important Tibetan pilgrimage is to go around Mount Kailash, which is sacred to that culture. *Kora* in Tibetan, *circumambulazione*[33] in Italian: Christians plant crosses on top of mountains, Buddhists draw circles at their feet. I found violence in the first gesture, kindness in the second; a desire for conquest versus one of understanding.
>
> (Cognetti 2018: 20–21)

As we can see, albeit with the due differences that need to be grasped among all these discourses on who we are and on the value of our experiences in today's world, the opposition I wrote of in the first paragraph of this article has become the matrix of many successful contemporary works. On the one hand, there are those who speak of a sense of life found a priori, within a system such as that of our society, in function of a sending instance upon which the latter is centered – a sending instance that

is capable of indicating a path towards a visible destination such as, for example, a distant peak, reachable by those who decide to align themselves with their own perspective instance. On the other hand, there is a sense of life recognized a posteriori after espousing and departing from different sending instances, some central and shared by many in our own society, others more peripheral and minoritarian, others still completely external, coming from elsewhere.

The question remains as to why the opposition between the cultural models I have written about seems so significant in justifying the interest of the works that speak of it. During my discussion, several explanations could be discerned. There is the more political one, for example, about a Western world that would have us believe that it is structured to provide everyone with the opportunity to thrive within a system of values that would claim to be both liberalist and libertarian but which is rigidly divided into classes separated from one another. This would cause a disconnect with respect to the narrative of self-made men and self-made women I have defined, justifying the emergence of the idea that our societies are populated by vagabonds condemned to search for meaning that they struggle to find. In this regard, there is a very interesting sequence in *La vie d'Adèle – Chapitres 1 & 2*. We see the protagonist who, after having lunch at home with her petit bourgeois parents while watching TV, finds herself at school listening to a lecture on the aforementioned *La vie de Marianne*, a work that belongs to a more "elevated" culture and that teaches her to desire the very things she will later see embodied in Emma. This will allow her to enter into a relationship with the young artist, but it will not be enough to keep the two girls together. The attempt at social integration made by the school system, therefore, will fail due to a series of inequalities external to it.

Then there is the socio-economic explanation. According to this perspective, people are aware that they can find very different products and services on the market, all of which are of value, quite accessible, and capable of making the consumer imagine what it means to lead a certain "lifestyle", even if it is far removed from their own. They would therefore no longer accept to "enclose themselves" within the existential horizons of only one of them, however desirable, but would rather be inclined to experiment with all of them in search of the one that best suits them. Rivers of ink have been spilled over the "incoherent" post-modern consumers (Fabris 2003), who could very well be symbolically represented by Adèle's bisexual orientation or by Paula's heterochromatic eyes. Certainly, Gobbi and Morace's reasoning, which I wrote about in the previous paragraph, goes in the direction of reading the meaning of our life choices in this key, which is much less critical of our societies.

Lastly, there is the anthropological explanation provided by Cognetti. According to him, the encounter with other cultures, at the end of a not-too-happy experience within the confines of our own, would have allowed us to leave the Christian perspective (of Weberian memory?). Such a way of seeing would be aimed at by laboriously following the indications of a sending instance shared by all, capable of suggesting in which direction to go and to assign a meaning to our life choices. However, today we find it meaningful to embrace another way of seeing, of oriental inspiration, one which is more inclined to "wandering" in a search for the self as a form of epiphany. In this regard, the Italian writer, as anticipated, commenting upon Matthiessen's work, which he feels to be close to his own sensibility, says that "the 1970s, with their failed promises, had disappointed him, or perhaps he himself was the source of his own disappointment: he was entering middle age and realized he had done little" (Cognetti 2018: 17). In short, after having tried several paths and still not having found his place in the world, he attempts yet another, believing or hoping that this will be the right one. However, just like Matthiessen and Cognetti, he does not do so in order to leave his society forever but rather to do something meaningful to him and to a niche of people within society itself, such as writing a good book that someone can appreciate. Doing so, he still wishes to be part of the collective, as a representative of one of the many sending instances that are recognized within it. Of course, there are no guarantees of success, but wandering still makes sense.

Notes

1 This chapter results from a project that has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program (Grant Agreement No 819649-FACETS; PI: Massimo LEONE).

2 F. Pedroni, www.cineforum.it/recensione/Melodramma_materialista (last accessed 12 January 2023). The translation in English is mine, as are all the ones from Italian articles that follow.

3 G. Fofi, www.foglianuova.wordpress.com/2013/10/27/goffredo – fofi – la – vita – di – Adèle/ (last accessed 12 January 2023).

4 R. Capra, www.ondacinema.it/film/recensione/montparnasse-femminile-singo lare.html (last accessed 12 January 2023).

5 L. Magnoni, www.cineforum.it/recensione/Montparnasse-Femminile-singolare (last accessed 12 January 2023).

6 R. Cisternino, www.anonimacinefili.it/2018/10/03/montparnasse-femminile-singolare/ (last accessed 12 January 2023).

7 Marta Z. Poretti, www.lascimmiapensa.com/2019/09/04/chiara-ferragni-unposted-recensione-venezia76/ (last accessed 12 January 2023).
Marco Massimiani, www.madmass.it/chiara-ferragni-unposted-recensioni-negative-critica-valore-influenza/ (last accessed 12 January 2023).

8 From this moment onwards, what follows is the translation (even if with some additions and changes) of paragraphs 3 to 8 of my article *Volti del nostro tempo. L'opposizione tra self-made women e vagabonde* (Santangelo 2022).

9 R. Capra, www.ondacinema.it/film/recensione/montparnasse-femminile-singo lare.html (last accessed 12 January 2023).

10 C. Cerofolini, http://icinemaniaci.blogspot.com/2018/04/Montparnasse-fem minile-singolare.html (last accessed 12 January 2023).

11 L. Pacilio, www.spietati.it/montparnasse-femminile-singolare (last accessed 12 January 2023).

12 I. De Pascalis, www.alfabeta2.it/2013/10/31/il – tempo – intenso – del – desiderio/ (last accessed 12 January 2023).

13 G. Fofi, www.foglianuova.wordpress.com/2013/10/27/goffredo – fofi – la – vita – di – Adèle/ (last accessed 12 January 2023).

14 M. Marangi, www.lindiceonline.com/l – indice/sommario/dicembre–2013/ (last accessed 12 January 2023).

15 I. De Pascalis, www.alfabeta2.it/2013/10/31/il – tempo – intenso – del – deside rio/ (last accessed 12 January 2023).

16 Ibidem.

17 R. Cisternino, www.anonimacinefili.it/2018/10/03/montparnasse-femminile-singolare (last accessed 12 January 2023).

18 M. Marangi, ibidem.

19 V. Vituzzi, www.doppiozero.com/materiali/odeon/kechiche – la – vita – di – Adèle (last accessed 12 January 2023).

20 C. Cerofolini, http://icinemaniaci.blogspot.com/2018/04/Montparnasse-fem minile-singolare.html (last accessed 12 January 2023).

21 L. Magnoni, www.cineforum.it/recensione/Montparnasse-Femminile-singolare (last accessed 12 January 2023).

22 G. Gangi, www.ondacinema.it/film/recensione/vita_Adèle.html (last accessed 12 January 2023).

23 https://c4comic.it/2018/05/03/montparnasse-femminile-singolare-arriva-al-cinema-il-nuovo-film-di-leonor-serraille/ (last accessed 12 January 2023).

24 G. Gangi, www.ondacinema.it/film/recensione/vita_Adèle.html (last accessed 12 January 2023).

25 I. De Pascalis, www.alfabeta2.it/2013/10/31/il – tempo – intenso – del – desiderio/ (last accessed 12 January 2023).

26 V. Vituzzi, www.doppiozero.com/materiali/odeon/kechiche – la – vita – di – Adèle (last accessed 12 January 2023).

27 L. Magnoni, www.cineforum.it/recensione/Montparnasse-Femminile-singolare (last accessed 12 January 2023).

28 Marta Z. Poretti, www.lascimmiapensa.com/2019/09/04/chiara-ferragni-unposted-recensione-venezia76/ (last accessed 12 January 2023).

29 www.madmass.it/chiara-ferragni-unposted-recensioni-negative-critica-valore-influenza/ (last accessed 12 January 2023).

30 Ibidem.

31 *The Eight Mountains*, in English.

32 *Without Ever Reaching the Summit. Journey Into the Himalayas*, in English.

33 In English, "circumambulation", as in "going around", "walking in circles".

7   Featureless faces
A film aesthetics[1]

Bruno Surace

1. Introduction: can a meme kill?

Can a meme kill? It would seem so, according to a semiotically significant news story. Marcel Danesi, commenting on the nineteen stab wounds suffered by a twelve-year-old at the hands of two of her peers in Waukesha (Wisconsin) in 2014,[2] affirms that "the world of the matrix is more real and perhaps more meaningful to people today than the real world" (2019: 64). The girl survived by a miracle, and her friends stated they had performed the act as a sacrifice for "Slender Man". It was therefore in all respects an attempted human sacrifice, made to please (or because forced by) an entity that ontologically does not exist, and that is part of an "online mythology" capable of inducing a form of so-called screen paranoia (*ibidem*). Slender Man does not exist in reality: we can identify its demiurge in Erik Knudsen, and we even have access to the reconstruction of some sources that probably inspired this character's creation:

> At that time, Knudsen used the username "Victor Surge", a fact that seems to refer to the sources of inspiration for the visual design of the Slender Man. Described as a tall man, dressed in a black suit, and who has a "faceless face", whose identity it is therefore impossible to recognize, the characteristics mentioned still point to a visual similarity with the character The Question (as it was called in Brazil). Typically a hero with no special powers, the Question was a masked vigilante who used his intelligence and combat skills to fight criminals. His secret identity was protected by a mask that made his face look flat. His real name was Victor Sage, a detail that probably influenced Eric Knudsen's choice of pseudonym Victor Surge, as well as the lack of facial appearance in Slender Man.
>
> (Bastos Dias 2019: 261)[3]

However, Slender Man evidently exists as a cultural fact and has very profound consequences on the ontological reality.[4] We are not interested here in thinking about the psychic disorders of the two stabbers – limiting ourselves to noting the relevance of this paranoid act's having been carried out by not one but two people (a so-called *folie à deux*) of very tender age –[5] but rather in how what is in effect a fruit of fiction and human intelligence was able to become the motive (or at least the justification) for such a brutal act.[6] It is not the only related case:

> In May 2015, the New York Times reported that in the previous six months there had been nine suicides and over 100 suicide attempts made by youths living on the Pine Ridge Indian Reservation. As reporter Julie Bosman (2015) explains, "Several officials with knowledge of the cases said that at least one of the youths who committed suicide was influenced by Slender Man, a tall, faceless creature who appears in storytelling websites, often as a figure who stalks and kills victims."
>
> (Blank and McNeill 2018: 14)

Our thesis is that not only the narrative substrate but also the somatic specificity of this entity affects its success and can furnish some relevant

Figure 7.1 A cosplay of the Slender Man. Credits: Terry Robinson; www.flickr.com/photos/suburbanadventure/8494619702; licensed CC BY-SA 2.0.

data in terms of a semiotic anthropology of postmodernity. Slender Man is a meme of a certain kind. It is undoubtedly the best-known exponent of that para-literary form born within the Internet known as creepypasta.[7] Creepypastas (*portmanteau* of "creepy" plus "copypasta", an Internet slang expression)[8] are horror stories, usually written anonymously and disseminated online, starting from a dedicated "wiki" (https://creepy-pasta.fandom.com/wiki/Creepypasta_Wiki). The objects of these tales of terror are highly varied, but it is no coincidence that some recurring iso-topies of this fringe of "digital folklore" (see Sánchez 2018) appear in them: naturally the theme of the paranormal declined in many ways but also a certain protagonist dimension of the media (especially digital) as a vehicle of evil, the presence of adolescent or infant victims/executioners (a direct reflection of empirical/model authors and readers),[9] and a certain tendency towards seriality (usually achieved through the recurrence of some characters, such as Slender Man) as a trace of that narrative eco-system that forms and conforms to the tastes of the new generations with increasing vigor.[10] All this is situated on common ground, namely that of writing almost always devoid of strong literary connotations – there is a preponderant interest in content and plot rather than in expression or style – and of a cultural sediment which is a direct consequence of the so-called urban/metropolitan legends of the pre-digital world. In the light of these considerations, a further underlying characteristic of this genre is explained, and that is, a certain disregard towards the historical sources of what are always presented as natural narratives or, in other words,[11] true stories:

> The Slender Man Mythos unquestionably functions as a virtual world in Saler's sense: it is a fictional universe which countless individuals from around the world have chosen to both inhabit and build upon through creative contributions in the form of videos, games, and written narra-tives. The overwhelming majority of these contributors and participants also exhibit what Saler would term ironic belief: they know that Slender Man is a fiction, but winkingly create media that pretend otherwise. But as we have seen, not all responses to fictional media are ironic.
>
> (Tolbert 2015: 50)[12]

All this is true although technically they are often false uchronic narratives as demonstrated by all the creepypastas that are based on Nazism, claim-ing to build on a historically solid background (since it is surreptitiously assimilated by readers who thus believe they have a true idea of the histori-cal event) when they are rather the result of the unconscious processing of a mythical imaginary already explored in Nazisploitation or similar veins several decades ago.[13]

In this fictional context, Slender Man has assumed, from the year of its birth, 2009, to the present day, a mythological status, to the point of having been relocated transmedially numerous times, becoming a character in video games, cartoons, and even live-action films. It is a malicious

Figure 7.2 An artwork depicting Slender Man. Credits: LuxAmber; https://commons. wikimedia.org/wiki/File:Тонкий_человек.jpg; Licensed CC BY-SA 4.0.

and mysterious entity, clearly humanoid in shape. An oblong, lanky "individual", dressed in a suit and tie, with a variable number of elegant tentacles protruding from its back, but above all with a face/no-face. Slender Man's head is white, and where the features should be, there is nothing. The creature is endowed with various paranormal powers and usually targets youngsters or children, kidnapping them or driving them to insanity or self-injury. Its fame is such as to have generated a complex symbolism and an articulated narrative system of roles linked to its figure.

The Slender Man schematically described earlier as "tall, dark, and loathsome"[14] cannot but call to mind several previous references: it is very similar to a contemporary version of the Boogeyman, for example, but also conveys multiple traits of a horror imaginary that consolidated itself throughout the twentieth century in literature and fantasy cinema. The somatic datum, however, is what is most pertinent here. In fact, the character's features in no way resemble those of a classic monster, except for its tentacles, an iconic remnant of a Lovecraftian background. There are no suckers or burrs. Slender Man's tentacles are elegant symmetrical filaments, befitting a certain underlying grace inherent in the character. What makes the entity frightening is rather the physical disproportion of its stature, slightly taller than an ordinary human, and above all the absent face, which can only activate a doubly disturbing mechanism:

1. Where there should be a certain system of human apparatuses, perceptually there is nothing, which places the being in a categorical dyscrasia;
2. Where there is nothing, those elements that serve as an "agency detection" portal are missing, and so we fall back into a specific Uncanny Valley.[15]

The fact that it is clothed in a suit and tie lends itself to numerous ideological readings but undoubtedly heightens that strange and paradoxical human/nonhuman condition that finds its confirmation and acme in the face. If we think of Slender Man's visage in terms of a Greimassian articulation, then it is not the opposite of a face but its contradiction.[16] It is a nonface, just as a zombie is not a dead man but a non-dead being. The fact that this specific non-face is thus placed in the axis of the subcontraries, that is, in that semiotically rather problematic gray area, only further motivates its esoteric charm. It is not in fact a representation of the indefinable face, like that – we will get to it – of Marcel Schwob *sans-gueule* (1891) but of the indefinite face. Slender Man's face is a consubstantial non-face, nor can it be otherwise. The faces of the *sans-gueule* are, at least in their aspectuality, faces that are no longer faces. The two are quite different, although their disturbing effects may appear similar.

2. *Slender Man* – the movie

The Slender Man phenomenon becomes a feature film of the same name with a major production in 2018, directed by Sylvain White. The result is not exciting, according to the critics who generally treat it as an unsuccessful experiment which wastes a potentially interesting character in rather trivial ways. In fact, the film does not stand out either from a formal point of view or in terms of the plot, re-proposing the tired pattern of the teen movie with the theme of evocation. Nonetheless, beyond these value judgments, in the text we find a whole series of elements that corroborate the theses put forward earlier about the characterizations of the Slender Man myth.[17]

There is certainly the theme of "media contagion". The narrative premise is that Slender Man persecutes those who are daring or reckless enough to summon it, an evocation that occurs "virally" – here is the underlying *memetic humus* –[18] through a video circulating on the Internet which contains the secret instructions for this operation. Nothing new, if one thinks of cinematographic cornerstones such as *Ringu/The Ring* (Nakata 1998; Verbinski 2002), *Poltergeist* (Hooper 1982), *Videodrome* (Cronenberg 1983), or lesser-known films such as *Pontypool* (McDonald 2009), *Cell* (Williams 2016), and so on. There the "traditional" media were the vehicle while here everything passes through the Internet and the discourses it produces:

> [A]s a consciously-constructed sign, Slender Man . . . reflects important semiotic processes at work among members of the various internet communities in which his [*sic*] legend has appeared. The most significant of these processes, and perhaps the area that has seen the most fruitful overlap of folkloristic and literary semiotic investigation, is ostension.
>
> (Tolbert 2013)

Indeed, the Slender Man in the film is not a mystery. Students talk about it in high school, and the idea that it can be evoked with a specific ritual, transmitted through a sort of "electronic gospel" (Mellor *et al.* 2016), circulates as an initiatory myth. In this case, too, an eternal return is reified if one thinks of how many times in past decades the *topos* of the séance, held by adolescents in search of a thrill, has constituted the basis for demonic narratives of various kinds. Here, however, there is – in essence at least – the exaltation of a meta-discursive component. The film was born from an Internet phenomenon, to which it refers as a culturally existing fabric in the diegetic premises and even reproduces creepypasta *wiki-style* sites, showing the young protagonists, before and after the evocation, feverishly in search of videos to unravel the mystery of the creature that haunts them, in what at times therefore presents itself as a detective story.

In this spiritism 2.0 the medium therefore not only confirms its role as a vehicle of evil but is also promoted as an investigative tool. The role of the face is clearly paramount, as has already occurred in other films, such as *Unfriended* (Gabriadze 2014), entirely based on a Skype video call in which the ghost of a cyber-bullied girl punishes her peers by making them suffer via webcam, or *Host* (Savage 2020), with a similar plot expressed in a Zoom call.[19] In Slender Man, however, the face assumes various roles. There is the face filmed in the video-selfies, which become evidence of close encounters with Slender Man in the woods; the face in close-up, seen during sleep troubled by the nightmares induced by the creature (echoing Wes Craven's Freddy Krueger); the non-face of the creature itself, here whitish and with veins that also make it a sort of mummy; or the faces belonging to the hallucinatory states of the protagonists who see strange figures with a void instead of a face or perceive people's faces as deformed (in this vortex of madness sometimes the faces turn black or are penetrated by tentacles), as happens in other teenage horror movies such as *Truth or Dare* (Wadlow 2018) from the same year, where the deformation of the face is a disturbing element and prelude to nefarious events. Already in *Final Destination* (Wong 2000), however, the initiator of a successful saga, those predestined for death have seen their faces dim in their photographs, and in *Smile* (Finn 2022) an eerie smile is the prelude to a sordid, deadly curse.

The somatic relevance of the character is further testified by a certain iconic obsession that accompanies it. Slender Man in all respects is glimpsed, dreamed, and perceived through various visual indexes (shadows, traces of its appearance in loved ones, and so on). This obviously applies online, and in fact the web is full of videos and photographs more or less clearly created ad hoc in which the character can be discerned, and of course a similar semiotic protocol reemerges in the film. The characters draw it, look for evidence online, and so on. The creature's specific design also makes it particularly inclined to materialize in various pareidolias, just as its reference "habitat" constitutes the mimetic fabric within which it can most visually manifest itself. Among the branches and brambles that become misshapen dark tangles in the night, the creature seems to be everywhere because of its black dress and oblong limbs. The film will eventually merge environment and character when the latter reaps its last victim by literally incorporating her into a tree trunk.

The non-face is the culmination, the ultimate place of making contact. Here, therefore, emerges a further specificity of Slender Man. One should not look it in the face, otherwise madness and, sooner or later, death will follow. So much so that the second evocation in the film takes place right in the woods, where the creature is thought to reside, but with the girls blindfolded. This veiling strategy is in effect a modification of the face through the affixing of a drape that at first sight appears useless, as the eyes already have their own biological ability to eclipse, namely the closing of

the eyelids. However, the tension between fascination and terror is evident, that ancestral curiosity towards the unknown, which requires bandaging as a form of artificial or prosthetic eyelid. Furthermore, this intensifies on the face a strategy of not seeing which is also, phenomenologically, a primitive form of not being seen. Just as children hide under their bedsheets to protect themselves from the monster under the bed, or a cat tries to conceal itself behind a post, the underlying mechanism is a sort of suspension of perceptual disbelief:

> Being seen (being witnessed) . . . in non-judgmental supportive somatic explorations is an antidote for depression and builds confidence. Being seen is ultimately about seeing as well. As phenomenology has taught [...] we cannot separate ourselves from the world. We are implicated from the start, as part of the otherness that we perceive to be separate. We are not alone; separateness is an illusion. . . . We might feel alone, however, as a matter of experience. Surely many people feel isolated, and empty sometimes, even those who are for the most part happy. Feelings of isolation and separation arise phenomenologically – as ways in which the world appears to us and is sometimes experienced.
> (Fraleigh 2019: 91–92)[20]

Hiding one's face, or part of it, blindfolding oneself, masking oneself, means not seeing but also not being seen, incorporating in the facial surface – a place of unification of the human senses and antechamber of the most vital of the organs, namely the brain – the wholeness of the body. And yet the bandaged face is also an immediately mutilated face, which protects itself from its own scopophilia but which is also, paradoxically, exposed. Slender Man thus engages in an atrocious form of blackmail: if one wants to dialogue with it, one has to deprive oneself of the most precious – as a place of phenomenological self-certification –[21] of the senses, building an esoteric language based on deprivation.[22] However, this dispossession is like the casting down of a shield, which in the moment of perception of danger one wants to take up again: this happens when one of the girls gives in to the urge to take off her blindfold and has contact with the monster face to face.

It is an impossible confrontation with a lying being, which declares itself human but whose otherness is revealed in its face, making it a transient creature, which can assume a thousand forms. This is a "figure of absence" (Vernet 1988), a personification of fear and representation of evil like its many predecessors in the history of cinema; just think of the cult of Pennywise, *IT*, born from the pen of Stephen King (1986), which later became an iconic TV film in the 1990s (Wallace 1990) and more recently a

cinematographic bilogy (Muschietti 2017, 2019). Here the person responsible for the "coulrophobia" of an entire generation constructs fearfulness on mutations of the clownish semblance, which in the moment of revelation passes from affability to hunger, changing its mouth, eyes, proportions, and so on. Slender Man, an authentic case of bricolage, remix, and semiotic mash-up, also appropriates these elements, eventually closing the cycle when, in addition to terrorizing and capturing one by one the four protagonists who have evoked it, the entity also begins to haunt the innocent little sister of one of the victims, driving her insane. This madness, which leads to forced hospitalization (paratopic horror space par excellence)[23] and gruesome facial hallucinations of all sorts, will be expressed in a series of desperate screams: "He was faceless! He was faceless!" As demonstrated by the most typical of cinematographic horror procedures, the "jumpscare" (whose effect proves the importance of the face as a scopic device, which looks at us),[24] the initial fright generated by a monstrous face that appears out of nowhere is usually immediately assimilated, and its terrifying potential declines (it is then the task of the diegesis and other formal solutions to keep it alive). On the contrary, if the face is absent, if there is only a head but the rest is missing, then the disturbance is perpetuated like an incessant an-epistemic horizon. As Trevor J. Blank and Lynne S. McNeill argue: "Fear has no face" (2018: 3).

3. *Ante litteram* creepypastas: *les sans-gueule*

In 1891 Marcel Schwob published *Cœur double*, a collection of fantasy and horror stories coming a few decades after those of Edgar Allan Poe but absolutely of the same stature. Among these, the short story of the *Sans-gueule* (literally, "The Without-snout") stands out. It is a heartbreaking tale of two soldiers, found on the battlefield, physically alike and bearing the same wounds: deaf and blind, their faces blasted away by a howitzer. A doctor operates on them and gives them mouths which emit inarticulate sounds. A woman, a "quasi-widow" who is looking for her husband who she knows is missing and wounded, decides to take them both in because they remind her of her lost husband but then little by little begins to prefer one over the other, for reasons that have nothing to do with physical similarities, since the two bodies have lost the traits that made them significantly different (in the full Saussurian sense). Meanwhile, the other's condition slowly worsens, and he eventually dies, throwing the woman into the despair of uncertainty: she does not know if the one who has left her was her husband or not while the survivor's living body, totally unaware, continues to smoke from that slit it has in place of a mouth.

Here, therefore, the lost face is a perturbing object as a synecdoche of a dehumanization that coincides with a loss of sociality. The two men are no longer men but completely indecipherable physiologies. They also no longer have an identity. They breathe, require nourishment, and even seem to enjoy smoking, emitting strange gasps when they do so, but the lack of a face has made them something completely different, eliminating any possibility of establishing even the simplest of communications, the phatic one, which enables us to understand if they can hear or comprehend. Whoever does not have a face is eventually in some way stripped, one by one, of Jakobson's communication functions (1963), up to the meta-linguistic one. The face is thus configured as an interface, a linguistic bridge, between us and the other, which if eliminated makes any communicative exchange, any semiosic production, impossible. At most, the poor woman has to limit herself to interpreting these bodies, thus passing to a regime of signification, without ever obtaining confirmation that they are possessed of any initial intentionality. Slender Man is equally frightening somatically because it lacks a lingua franca, a common metalanguage, an aid to understanding its intentions.

Schwob's story, therefore, which is initially the narration of the horrors of war through a literary invention that actually reconstructs an episode not so infrequent at the time,[25] is also and above all a reflection on the facial device as a necessary threshold for the establishment of a meaningful relationship between us and otherness. The face is a precious sign. This exegesis is shared by a valuable, and very rare, semiotic study of the story:

> Structurally, the story pivots . . . on a description of the anxiety to which the "petite femme" is subject by reason of the need to choose between two featureless – not faces – but "surfaces". . . . This passage makes it clear that her careful scrutiny does succeed in distinguishing something equivalent to a "face". . . . But her anxiety stems from the impossibility of discerning a sign that would give one of the Sans-Gueule, but not the other, a face (the face of her husband): she cannot choose between them. So the problem is not to produce meaning by humanizing the faceless surfaces she is scanning; the problem is to opt for one rather than the other as being the "true" or "right" choice, the one that corresponds to her lost husband. The anxiety she displays in attempting to "read," . . . the undifferentiated text. . . . In short, the problematics of reading she is thus enacting derives from the classical conception of meaning as being unique and determinable and subject in consequence to acts of discernment as to the rightness or wrongness of specific "readings": it is reading of the "readable," not the scriptable.
>
> (Chambers 1984: 40)[26]

And:

> At a number of points, the text is explicit that the two Sans-Gueules pose the problem of meaning. At the outset, they are a "double cicatrice arrondie, gigantesque et sans signification," and later, "les deux coupes rouges couturées reposaient toujours sur les oreillers, avec cette même absence de signification qui en faisaient une double énigme." . . . Since it is the two Sans-Gueule together who form the mouth (even though each is equipped individually with a "palais beant" and a "tremblant moignon de langue"), the selectivity of love can only be self-defeating, and the production of meaning can only destroy the totality that offered the possibility of meaning.
>
> (*Ibidem*: 42)

The rarefaction of facial features, therefore, from the perspective of a strong relationship between "soma" and "sema",[27] coincides on the one hand with a loss of meaning and on the other with an almost inversely proportional increase in restlessness. Where the face empties, cognition fills with uncertainties and anxieties. In fact, *Les Sans-gueule* seems to prefigure a sort of creepypasta literature, both in terms of the themes and rhetorical choices (the open ending, for example) and on account of its duration (it is a short, immediate story, which begins *in medias res* without getting lost in particular contextualizations). Of course, unlike creepypastas, it claims its own literary dignity, but what interests us is that it constitutes a cornerstone in a potential philology of the face/non-face as a device which elicits anxiety.

The cinema will then become an ideal place for the development of this dimension of the contradicted face, clearly due to its media specificity based on the visual.[28] More or less marginal characters, but of great impact, with empty faces, will appear throughout the history of cinema. In the dream sequence in *Spellbound* (Hitchcock 1945), whose setting was masterfully designed by Salvador Dalì, the character played by Gregory Peck relates a specific moment of his dream in which the manager of a gambling house introduces himself, fully dressed, but without a face. In one of old Isak Borg's dreams in *Smultronstället* (Bergman 1957), a strange man appears, once again well dressed, whose face is a strange two-dimensional surface (as sometimes happens to faces in *INLAND EMPIRE*, Lynch 2006), white, with deformed and rarefied features, and eyes reduced to small slits. One of the witches in Polański's *Macbeth* (1971) is not only blind but the space where her eyes should be seems covered with skin as is also the case with the young Laura in *Pieles* (Casanova 2017), as if the eyes had never been there (therefore not a space of being that is no longer but a space

of nonbeing). In Joel Barish's twisted dreams in *Eternal Sunshine of the Spotless Mind* (Gondry 2004), the progressive cancellation of Clementine's memories coincides with the rarefaction of faces. There is a lengthy list of similar examples.

What do all these characters have in common? They are, first of all, always relegated to a dream or hypnagogic dimension, designating one or other space or "allospace" (cf. Surace 2019). They are also marginalized. As signaling of the limen or threshold figures they seem to enjoy a limited cultural autonomy, which explodes in their perturbing power and immediately dissipates. The faceless, in other words, do not seem to have enough strength to hold up a whole narrative; they mostly act as props. This appears not to be true for some cases: one might argue that it is not the case with Slender Man or the *Sans-gueule*. But, in fact, Slender Man is rarely seen. Rather, it can be glimpsed from afar in the pareidolias, hinted at but not clearly shown, and even in the film based on this figure its presence is marginal compared to the actions of the protagonists who struggle to escape it. When it appears it is either dark, blurred, or merely the means to an end (it does what it must do and disappears). Similarly, the *Sans-gueule* are the object of description in Schwob's tale, while the story of the woman is its fulcrum. Most of the aforementioned faceless appear in dreams or magic as figures of passage, memory traces, residues of the unconscious, ultimately functional exclusively to the development of those who still have a face. In *Eternal Sunshine of the Spotless Mind*, the disappearing faces tell us about Joel's memory loss, which we can see very well. In *Spellbound* the owner of the gambling house, representing the metonymy of the white cards thrown on the table, is a sign of the protagonist's mental state. The "face" is therefore not only inter*face* but also sur*face*, on which traces of us are written – or in some cases erased – as demonstrated by other films, such as *La Jetée* (Marker 1962): "On a primary narrative level, as the protagonist's mind, and the photogrammatic representation of his body, move between past, present and future, the only visual, rather than diegetic clues to temporal location are the repetitions of images, particularly the face" (Chamarette 2012: 79).

The empty face, the removed face, the thin face, or the rarefied face is a generous face in semiotic terms, which abandons the claim to mean something for itself and begins to mean exclusively for the other, to be consumed quickly, and painfully.

4. *Les Yeux sans visage*, Le Visage Sans Yeux

In 1937 the character of *The Blank* appeared for the first time in the famous series of detective comics *Dick Tracy*: a very dangerous killer which is, again, faceless. Covered by a blindfold, the Blank's face hides his identity,

although once "unmasked" he is revealed to be Frank Redrum (read backward and the word "murder" will appear, as anyone who has seen *The Shining* immediately realizes), a criminal with a horribly disfigured face, just like Erik, the *Phantom of the Opera* by Gaston Leroux,[29] or Spawn, another comic book character created in 1992 by Todd McFarlane, both committed to obscuring their disfigurement.[30]

These stories introduce us to a further dimension of the featureless face, similar in the disturbing effects elicited by its emptiness on those who see it but dissimilar in the order of the genesis of this emptiness. In these cases, the empty face is in fact not a non-face but a meta-face, placed on an "ante-face" (what remains of a face after an accident or what is behind the epidermis) that is to be concealed, somewhat in the manner of Leatherface in *The Texas Chainsaw Massacre* (Hooper 1974), who shows himself only with his face covered by the skin of his victims, thus wearing a full and empty mask at the same time: "Blank masks simultaneously erase identity and create spaces to project new meanings onto, prompting another dimension to the visual iconography of horror film masks" (Heller-Nicholas 2019: 112).

These narratives deal with a face that has been lost. The loss is both physical and symbolic. Sometimes the subject feels that s/he has lost her/his face symbolically and so covers her-/himself in white to cancel a missing identity and seek shelter in a non-identity. Other times, however, it is a physical loss, as happens to Freddy Krueger in *A Nightmare on Elm Street* (Craven 1984), which sanctions the symbolic passage. In short, if soma is sema, it is also true that sema is soma.

In *Les Yeux sans visage* (Franju 1960) this theme is developed through a triple semantization of the face. In the first instance, there is a discourse related to the living face and the dead face. Instead of ceasing its function, the latter becomes the possibility of re-facialization for those who have lost their faces, through futuristic transplants.[31] The film places the emphasis in this case on the face as an obsession. In fact, the lost face must be regained, no matter at what price, even at the cost of sacrificing more than one person by luring them and taking their face away by force. The second dimension of the face is that of the mask, which Christiane wears, for example, when she does not have an "other's" face on her. Here we are dealing with a totally neutral mask, in fact, a white face, whose only significant elements are the eyes, alive, which are behind it once worn. The gloomy non-expressiveness of the mask, also conveyed by other films such as *Vanilla Sky* (Crowe 2001), while on the one hand inducing a certain restlessness in the viewer, is at the same time a sign of a lack of acceptance by the wearer, rather as if it were a transitory device, useful only in the limbic waiting to regain possession of a new skin, as happens in *Seconds* (Frankeheimer 1966). The third valorization of the face is that which passes from diegesis

to mimesis through the medium of film. In fact, the film not only stages a story in which the face is first lost and subsequently rediscovered, passing through the empty face of the mask but also emphasizes this facial obsession through a calibrated use of the foreground:

> It is almost impossible to read about the unnaturalness of the close-up and its association with death without thinking of the classical French horror film *Les Yeux sans visage* (1960), an adaptation of Jean Redon's novel that demonstrates the notion of the close-up as a representation of "dismembered" body, a two-dimensional face severed from its body by the cinematic cut. The uniqueness of Franju's film resides not necessarily in its use of the close-up (although it does that as well) but in the way it literalizes the notion regarding the monstrosity of the close-up in the story it tells. The question that it raises is the following: How does a film "attacking" one of the basic elements of engagement with the protagonist's desire – the face of the actor – affect spectators regarding this very engagement?
>
> (Meiri and Kohen-Raz 2020: 48)

Similar epidermal obsessions can be found in the aforementioned *Pieles*, a Spanish film with a grotesque flavor (not surprisingly a production by Álex de la Iglesia), in which a courageous operation is carried out concerning bodies and faces which are deformed for reasons as imaginative as they are realistic (that is, attributable to existing pathologies). Among the characters can be found Laura who, as we mentioned earlier, has half a face and is eyeless (the place where the eyes should be is covered with skin); Samantha, who manifests a curious pathology whereby she has an anus instead of a mouth (and vice versa); Guile, whose face is completely burned; and Ana, whose left side of her face droops (her pathology is not specified in the film but could be hemifacial hyperplasia). If many of these cases are actually provided with a face, albeit deviant, or as in the case of Guile with an ante-face (there is a very moving final scene in which he looks in the mirror after having undergone a maxillofacial operation, while his ex-beloved Ana proudly chooses to remain as she is), it is Laura's case here that is most prominent, since hers is half a young and pretty face while, vertically, half a non-face. The girl's sad story reveals how she has been locked up in a brothel all her life, in bondage since childhood to afford pleasure first to pedophiles and then when she grows up to women and men whose identity she does not know (being devoid of eyes). One of these gives her two diamonds – telling her: "The world is full of people it is better not to see . . . you deserve the most beautiful eyes in the world"– and puts them on her face like eyes. She will become so fond of them that she will no longer be able to part with them. The outcome of this sort of "symbolic

plastic" is again alienating. In the eyes of the beholder, or at least of those who watch the film, this face with its false ocularity is rather perturbing, reminding the viewer a little of the chilling button eyes in the world behind *Coraline*'s wall (Selik 2009). For Laura, however, these diamonds become indispensable, a form of re-appropriation of the self that passes through a specific somaticity. Only at the end, when she has found the love of an obese woman (who in the meantime has stolen her diamond eyes to pay off her debt), will she be able to accept her half-face and achieve happiness.

Laura's in *Pieles* is a face without eyes, while Christiane's are eyes without a face. In both cases, a new look corresponds to a new attitude, as the claims of *Bruiser*, a 2000 film by George A. Romero, confirm. The director, in fact, after a career spent glorifying the emaciated and indistinguishable visages of zombies, this time depicts the killer Henry who once again opts for a white mask without features: two dot-like holes for eyes, a thin slit for a mouth, and a mere hint of a nose. The identity dimension is once again magnified through the empty face: "Through the blank mask, Henry's monstrosity does not denote an eradication of his identity as such, but a transformation of it" (Heller-Nicholas 2019: 123). Similar are the characters of *The Invisible Man* (H. G. Wells 1881), the last of which (filmed in 2020 by Leigh Whannell) emphasizes the potential of the nonexistent face as a form of anonymity and "passport" for carrying out the worst possible atrocities.

The emptying of the face therefore coincides with the cancellation of a series of stigmas that manifest themselves instead in the counterpart of the "full" face – abnormal, deformed, deviant, as in *The Man Without a Face* (Gibson 1993), in which the protagonist's face is disfigured by burns, and, consequently, he is essentially an outcast, the character of John Hurt in *The Elephant Man* (Lynch 1980), or Roy in *Mask* (Bogdanovich 1985).

5. Conclusions

The figure of the "non-face" thus crosses many narrative spaces, from classical to contemporary literature, from horror cinema to the grotesque, naturally also passing through animation if one thinks of the faceless demon in *Spirited Away* (Miyazaki 2001). It constitutes a degeneration of the face that configures an absent presence of a particularly perturbing character, which potentially magnifies the sociocultural specificities of which the face is a bearer: identity, idea of self, agency detection, aesthetic canons, and the notion of social and personal mask.

The face/non-face induces hesitation precisely because it is devoid of these complex elements, thus leading to a dyscrasia – albeit perhaps a certain fascination, too – in the observer, as in the case of Slender Man but also posing as an ineffable heterotopia that recounts the feelings of those who

are sometimes forced to wear it, as in *Pieles* or *Les Yeux sans visage*. In both cases, however, this interpretation of the face/non-face is often entrusted to the receiver. It remains an enigmatic device, hovering at the edges of the semiosphere (and indeed the corpus of texts in which it appears is significant but restricted),[32] a place where the face as a cultural construct is canceled and the humanity of the wearer inferred but not confirmed, as demonstrated by the *Sans-gueule*, machines of flesh that breathe but disturb because in them no specific intentionality can be perceived. On the other hand, this type of iconography, which also arises at times from tragic human events,[33] may culturally cover a specific semantic universe: that of monsters.

It should be emphasized that the etymology of "monster" is that of the Latin "monère", which means to "admonish" or warn, but there are also links to "show"[34] or make something visible.

> Monsters . . . are therefore not simple things or events but always require: a) to be recognized as such and b) to be interpreted. . . . However, the same things may not always produce the same emotions, and this obviously also applies to the monsters proper, called to generate specific emotions, of a repulsive nature, as Benveniste has already told us, such as fright or terror. In order for these emotions to emerge, the manifestation in the phenomenal field of some *deformity* is necessary, which inevitably appeals to a canon of forms, and consequently to an idea of *conformity*.
>
> (Lancioni 2020: 84–85)[35]

The face/non-face cannot be beheld but comes into view as a "manifestation in the phenomenal field" relegating itself to it immediately relegates itself to the domain of the most irreducible otherness. That on the margins of the semiosphere – that of monstrosity, be it demonic, as in the case of Slender Man, or extraterrestrial, as for the "gray men" of *A.I. Artificial Intelligence* (Spielberg 2001), oblong like the monster of creepypasta tales, humanoid, with heads, but without any facial features. This monstrosity finds in the "empty" signifier of the empty face the springboard for a specific meaning, which is otherness. Thus, in the end, this peculiar facial dysmorphia transliterates from the level of expression to that of content, from a formal level to an ideological and political one, capable of recounting the anxieties and fears, but also prejudices and limits, of certain cultures.[36] Verily, just as there are cultures of the face, there are also cultures of the non-face.

Notes

2 The story of the trial elicited great public interest and was extensively dealt with in both the American and international press. See www.latimes.com/nation/nationnow/la-na-nn-slenderman-girls-adult-case-20150810-story.html (last accessed 05 January 2021).

3 My translation from Portuguese.

4 I reflected on this peculiar connection between the imaginary and the real in Surace (2020b) *unicorni*.

5 We limit ourselves to suggesting that since it is not an act committed by a single person but rather a "shared brutality", the social role assumed by the imaginary linked to Slender Man is relevant enough to warrant dealing with the matter not only exclusively in psychiatric terms but also in semiotic terms.

6 This is not the first case, and even in the pre-digital world episodes can be traced in which a certain maniacality deriving from fictional imaginings was then dangerously transferred into reality. In this relation we consider the burgeoning field of criminal humanities to be of great importance (see Arntfield and Danesi 2016).

7 "an emergent horror genre that manifests through the form of digital fiction, characterized by unsettling paranormal and horror content copied, pasted and remixed on social media and Web 2.0 platforms under the guise of real and lived encounters" (Ondrak 2018: 162). See also Chess and Newsom 2015.

8 See Page 2018; Henriksen 2018.

9 The concepts of author and model reader are found in Eco 1979.

10 On the notion of narrative ecosystem, see Pescatore 2018.

11 The notions of "natural narrative" and its opposite "artificial narrative" are in Eco 1994, and respectively designate a text's claim to be read as reporting truth (as in the case of a news program but also of an urban legend) or fiction (as in the case of a fantasy or science fiction novel). That a narrative presents itself as natural or artificial is not an explicit fact but has to do with the strategies of drafting the text itself.

12 The reference is to Saler 2012 who "has discussed the capacity of certain works of fiction to effectively transcend their own fictionality, to create imaginary worlds that become, through deliberate inhabitation by their audiences, virtual worlds" (Tolbert 2015: 50).

13 Cf. Magilow *et al*. 2012; Fedorov 2018.

14 Cf. Peck 2022.

15 I investigated this concept in Surace (2021b) with specific reference to artificial and robotic faces.

16 Cf. Greimas 1966.

17 We refer to it as a myth, naturally in terms of the mythological reading of society proposed in Barthes 1957, but also relying on the idea of contemporaneity as founded on "low-intensity myths" (that is, in short, less powerful and persistent, more ephemeral and transient) in Ortoleva 2019.

18 On the phenomena of online virality see, firstly, Marino and Thibault 2016, for a compendium. An initial but good definition, which is the one underlying our use of the term, is the following: "First of all, we have to point out that we are dealing with two different forms of virality, which may be complementary but nevertheless need to be kept theoretically separated: the first one entails a piece of media content spreading pervasively and the other entails the practice of creating other contents from a first one understood as the model or prototype. In the latter case we have a token that establishes a type from which other tokens are created by means of replication and modification; this is what happens with memes, which we may conceive, with a pun, as a form of 'complex virality' (as opposed to 'simple virality'). As suggested by Jenkins, Ford, and Green (2013),

we may articulate the opposition between an old and a new model of content use: the first one, called stickiness, defines when many people in one place are enjoying a given content (as in the case of a successful article or website) and the latter, called spreadability, applies when one content is placed almost literally everywhere for everybody to peruse with ease (as in the case of a viral picture or video or of a series of memes with the same base). What we call virality, including both types described above, owes as much to the replicability as to the customization allowed by digital technologies; it is not merely an issue of copying a given content, but rather of adapting, appropriating and properly translating a given content according to need" (Marino 2022).

19 It is evident that, in this case, the COVID-19 pandemic, with its overbearing remodeling of the global imagination and the reconfiguration of common proxemics, has also played a fundamental role and perhaps above all in the way our faces mean outside and inside the digital context. See Leone 2020.

20 On this point, it is possible to approach it with a more psychoanalytical gaze, for example, Lacan 1991, and philosophical, Žižek 2000.

21 As proof of this, just think of the great and lasting (so much so that it has its roots in the origins of the web) success of online videos that prove conspiracy theories visually. The basic idea is that "sightings" or in any case visual evidence are more effective than other types of evidence. A video showing aliens in one's backyard will receive more hits than an alleged declassified document from any government in which evidence of the same fact is set out in writing.

22 And in fact, if one thinks about it, one can "lose" face, thus effectively losing one's reputation (and this is a fact shared culturally from West to East, so much so that in China a common insult is to say that someone "has no face"), or one "wants to lose face" to protect oneself even from embarrassment as in the case of the "facepalm", a veiling of the face analyzed in Marino 2020.

23 The notion of paratopic space is taken from Greimas' theory of the relationship between space and narrativity. Specifically, the paratopic space is understood as the space in which certain skills are acquired by the characters in the story. See Greimas 1976.

24 See Surace 2022: 78.

25 It was not, nor is it unfortunately, merely a literary invention. War wounds have always disfigured thousands of faces. As regards the twentieth-century wars, here you can find photo albums of plastic surgery practiced at the King George Military Hospital in London https://wellcomelibrary.org/item/b20160999#?m=0&cv=0&c=0&s=0; regarding more recent wars an interesting interview with Col. Robert G. Hale, commander of the Army's dental and trauma research detachment at Fort Sam Houston in San Antonio for the New York Times, can be found at www.nytimes.com/2013/12/03/science/healing-soldiers-most-exposed-wounds.html?pagewanted=all (last accessed 05 January 2021).

26 Here specifically Chambers reflects on the following passage of the story: "Elle allait éternellement de l'un à l'autre, épiant une indication, attendant un signe. Elle guettait ces surfaces rouges qui ne bougeraient jamais plus. Elle regardait avec anxiété ces énormes cicatrices dont elle distinguait graduellement les coutures comme on connaît les traits des visages aimés. Elle les examinait tour à tour, ainsi que l'on considère les épreuves d'une photographie, sans se décider à choisir."

27 The fertile soma/sema formula has a long philosophical history that dates back to Plato's Gorgias and goes as far as the post-structuralist works of Derrida 1972 or the semiotic works of Fontanille 2004.

28 On the importance of the face in cinema, from its origins, see Jandelli 2016.

29 Relevant in this sense is the question that Strong puts at the beginning of his bioethical reflection on facial transplantation: "If the Phantom of the Opera were offered a face transplant, would he have the capacity to say 'no,' or would he be so desperate for a new face that he would grasp at straws?" (2004: 13).

30 On the relationship between body image and disfigurement, see Rumsey and Harcourt 2004.

31 Today, face transplantation is a scientific reality, also thanks to the pioneering work (not only in the medical field but also in the bioethical field) conducted by researchers such as Maria Siemionow. See her 2019 volume in which she reconstructs the stages, including the philosophical ones that led to her first face transplant.

32 The notion was codified by Jurij Lotman. See Lotman 1984. For a good definition see Cobley 2009.

33 Proof of this are precisely those people who, for example, victims of an accident, lose their faces and need a transplant or cases in the news such as that of the child born in Portugal without facial features: www.bbc.com/news/world-europe-50166857 (last accessed 05 January 2021).

34 See Benveniste 1969.

35 My translation from Italian.

36 On these topics see also Surace (2020a) culture.

Filmography

A Nightmare on Elm Street (Wes Craven 1984)
A.I. Artificial Intelligence (Steven Spielberg 2001)
Bruiser (George A. Romero 2000)
Cell (Tod Williams 2016)
Eternal Sunshine of the Spotless Mind (Michel Gondry 2004)
Final Destination (James Wong 2000)
Host (Rob Savage 2020)
INLAND EMPIRE (David Lynch 2006)
IT (Tommy Lee Wallace 1990)
IT (Andy Muschietti 2017, 2019)
La Jetée (Chris Marker 1962)
Les Yeux sans visage (Georges Franju 1960)
Macbeth (Roman Polański 1971)
Mask (Peter Bogdanovich 1985)
Poltergeist (Tobe Hooper 1982)
Pontypool (Bruce McDonald 2009)
Pieles (Eduardo Casanova 2017)
Ringu (Hideo Nakata 1988)
Seconds (John Frankenheimer 1966)
Slender Man (Sylvain White 2018)
Smile (Parker Finn 2022)

Smultronstället (Ingmar Bergman 1957)
Spellbound (Alfred Hitchcock 1945)
Spirited Away (千と千尋の神隠し, Hayao Miyazaki 2001)
The Elephant Man (David Lynch 1980)
The Invisible Man (Leigh Whannell 2020)
The Man Without a Face (Mel Gibson 1993)
The Ring (Gore Verbinski 2002)
The Shining (Stanley Kubrick 1980)
The Texas Chainsaw Massacre (Tobe Hooper 1974)
Truth or Dare (Jeff Wadlow 2018)
Unfriended (Levan Gabriadze 2014)
Vanilla Sky (Cameron Crowe 2001)
Videodrome (David Cronenberg 1983)

8 Imaginary faces
Aliens, monsters, and otherness[1]

Remo Gramigna

1. The significance of the human face

The fascination with the study of the human face is constant in the history of humanity. While the face is a visible element of the anatomy and appearance of the human species, it remains quite an enigmatic subject and very difficult to fathom. From ancient treatises on physiognomy to the ubiquity of automated face detection (Kosinski *et al.* 2023) and AI face recognition systems much in vogue in today's "culture of surveillance" (Gates 2011), the face remains a subject of profound interest that cuts across a range of disciplines, from evolutionary biology to artificial intelligence.

Jurgen Ruesch (1956) refers to the human face as the signifier par excellence, Ray Birdwhistell (1970) as a message board, and Max Thorek (1946) as an advertisement to the world. Indeed, faces communicate. They always tell a story, for they represent the visible core of people's identity. As research carried out in cognitive psychology and neuroscience has shown, the face is a broadcast screen onto which a multilayered array of facial stimuli is elicited and constantly monitored by others in real-life settings. Information such as gender, identity, age, skin pigmentations, and basic emotions are inferred and "read" from faces. Darwin (1872) held that facial expressions in humans have something in common with other animals. Other thinkers sought to identify a possible grammar of emotions through the study of facial expressions (Le Brun 1992).

The face is the site of perception, signs, and semiosis. It is quite revealing to notice how biology condensed four out of five senses in the human face. Indeed, sight, hearing, smell, and taste are all grouped in the upper part of the body. Faces are also socially and culturally significant as they give a sense of self-identity and the template for enabling recognition by others - who we are and where we came from. As Juri Lotman pointed out in *Culture and Explosion* (2009):

> Man became man when he realized himself as a man. And this occurred when he noticed that the different members of the human race consisted

of different people, different voices and different experiences. The face of the individual, as with individual sexual selection, was probably the first invention of man as a man.

<div style="text-align: right">(Lotman 2009: 155)</div>

The central role and the significance of the human face as a scientific subject are, thus, evident both in the so-called exact or hard sciences, such as medicine, evolutionary biology, and genetics, and in the sciences of man and society, such as cultural anthropology, history, literature, and psychology. While the exact sciences deal with the human face in its organic dimension, the study of its physiological and biological functions, its origin, evolution, and the genetic architecture that lies beneath it. The human sciences deal with the social functions and values as well as the cultural and societal implications of the study of the human face. Each culture elaborates a specific set of values that tends to vary in space and time. The human face, coupled with its many representations and the social values attached to them, constitutes an integral part of it.

The sciences of man and society study the human face generally based on 'representations' that culture itself filters, stores, and hands down within its social imaginary and its own tradition, namely their own "self-portrait" of a culture (Uspenskij *et al.* 1973; Lotman 1979).[2] Texts, in both oral and written form, are illustrations of such representations. Portraits and self-portraits, drawings, caricatures, statues, and pictures make up some of the visual repertoires of face representations as archaeological history, art history, and the history of artifacts have been well documented.

Today, this array of face representations has been boosted by the proliferation of digital representations of the human face. It suffices to mention the widespread use of the "selfie" by the new generations (Peraica 2017; Rottberg 2014) and the wide access to photo production and reproduction on a mass scale (Fontcuberta 2016). Personal testimonies and first-hand accounts of the members of a society - the interpreters - are also pivotal for reconstructing the history and the study of visual and/or verbal representations of the face. Given the centrality and significance of this theme, it is not surprising to find a wide range of depictions of human faces in many cultures and societies around the world, ranging from the earliest findings of cave paintings from the Paleolithic period to the digital or "artificial faces" (Leone 2021d) of the Internet age generated through computer algorithms and digital manipulation.

2. Looking at faces beyond normativity: on monstrosity and wonder

Yet a question remains as to whether only humans and primates are endowed with face-like traits or also nonhuman animals (Leone 2021d: 2) or if even extraterrestrial beings have a face. Undoubtedly, there seems to be

a conundrum about the study of the representation of nonhuman faces, not so much in regard to nonhuman animals but in respect to off-planet entities or what goes under the rubric of "post-human" (Graham 2002). Whether it is possible to conceive of faces that are not human in this specific sense of the term remains an open question. Are there faces that are literally out of this world? Do gods and aliens have faces? And if so, what do they look like?

Indeed, it should be noted that, besides the representations of men's faces in their manifold forms and shapes, there are numerous depictions and descriptions of nonhuman or pseudo-human faces, as it were. These are, very often, representations of gods and goddesses, imaginary beings, and fantastic creatures that often have a very ancient pedigree and whose origin is very difficult to trace with precision because they are shrouded in myths, archetypes, fiction, and legends (Borges 1957). Ancient teratology is dotted with descriptions of the physical appearance of monstrous, shapeless, horrible, and evil beings that could be grouped in a generic fashion, in the category of 'artificial faces', 'deviant', or 'aberrant faces' in order to set them apart from the mere 'organic faces'.[3]

Internationally renowned scholars, such as Umberto Eco (2007) and, much earlier, the philosopher Karl Rosenkranz (1853), have traced the history of the "aesthetics of ugliness" in the social imaginary of Western societies and have pointed out that the concepts of the 'stranger', the 'monster', and the 'alien' often overlap. This point is worth pondering, and I will come back to it. The concept of *monstrum*, in its mutability, sums up all the aberrant forms and arises as a general category in which to include what deviates from the norm: faces that go beyond normativity. Indeed, according to the Latin lexicographer Festus, things that come out of the natural world fall into the genre of *monstra*.

Monstrum comes from the Latin *mōnēo* (to admonish, to warn). *Monstrum* was a polysemous term. It primarily designated divine warnings, which burst forth unexpectedly, almost assaulting us. It meant, then, 'monster' in our contemporary sense, and finally, it could also be used as a synonym for 'wonder'. In its original meaning, *monstrum* is, thus, the sudden appearance of something extraordinary, which violates nature and is a warning and a caution to man.

This term opens up a chasm of meaning, and the etymological trace here becomes the cue to identify the link established between monstrosity and wonder. The monster bears witness to unprecedented, unforeseen, 'subversive' forms of life in a certain sense, which, by producing wonder, induce reflection and the redefinition of our common sense and the solid reality to which it clings (Cattaneo 2002: 42–43). As Alberto Abruzzese pointed out, the monster represents

a figure that is distinguished by the imaginative force with which its forms upset the ordinary perception of nature and men, by the fear it

instills in them of their chaotic, alien, strange character. A formless creature. A hybrid figure, often between the human and the beastly, in which a diabolical split between soul and flesh, spirit and matter, excludes any harmony, any veiled beauty.

(Abruzzese 2003: 385)[4]

As a 'formless form', the *monstrum* stirs our imagination, making us converse with the unknown toward the abyss of a perceptive emotion based on wonder.

3. Outer appearance and face representations of aliens

A study of the outer appearance of alien races and their representations is, in and of itself, a very fascinating as well as a thought-provoking subject. This chapter is the result of an attempt to penetrate this more or less unexplored territory. Undoubtedly, it is not very common for academics to discuss this particular subject, although scientists and scholars are catching up in covering some aspects of this large and controversial subject (Centini *et al.* 1998; Jung 1967, 1978; Lewis and Kahn 2005; Battaglia 2005; Roth 2005; Wegner 2003). This makes the topic under examination even more compelling. The theme of the existence of ET races has a fairly long history (Dick 1980). Already from the beginning of the 1950s, there was a rise in public awareness about flying saucers and unidentified objects, as evidenced in the press coverage of such phenomena in the United States (Strentz 1970). The literature on the subject is vast. It encompasses studies in the fields of ufology, cultural anthropology, critical studies, psychiatry, psychology (Newman and Baumeister 1996; Blackmore 1999), parapsychology, psychic research (Swann 2017, 2018), and occult studies, social sciences, as well as cinema, science fiction studies, and narratology (Lepselter 2005, 2016).[5]

Today, the subject has seen a resurfacing. This is partially due to the encapsulating of an element of "alien disclosure", "alien abduction", and contacts with extraterrestrial civilizations within the theories that are generally grouped under the rubric of "conspiracy theories" (Aaronovitch 2009; Brotherton 2015; Gramigna 2021; Wheen 2004; Thompson 2013). Academic studies carried out on this subject have generally focused on this one aspect, namely the conspiratorial element embedded in such discourses. As it will be apparent in what follows, however, I will take a different route. For our present purposes, we shall be concerned primarily with the representation of alien races, with a specific focus on the face and the outer appearance, and leave aside the rest of it as it will fall outside the scope of the present inquiry.[6]

To provide the reader with a quick reference of what I refer to as the outer appearance of an alien race, we may consider the visual representation of the type of alien generally referred to as the "Greys". Visual representations of the Greys are often present in numerous accounts of ET encounters as well as in fictional works.[7] The image of the Grey has become a sort of quintessential visual icon of what an alien looks like in the social imagery of Western culture. Suchlike visual representations have become ingrained in the social perception of what the representation of the physical appearance of an alien looks like. Greys are typically purported as humanoid beings with gray skin, elongated bodies, very large heads, and very large black eyes. Greys are often depicted as having

> [a] hairless body that is gray or green in color, have very large almond-shaped eyes, very thin body and a large head again with no hairs, no eyebrows, or eyelashes, a very flat nose and ears or sometimes just holes in place of ears.
>
> (Challoner 2005)

Such representations, as the one just described, surface in the culture so much so that they have a life of their own. Borrowing a term coined by Susan Blackmore (1999), these images make up what the author has termed "memeplexes", that is, ideas that grow, spread, and develop along the lines of biological evolution in a cultural system. These are the kinds of representations this chapter focuses on. It is also worth noting that the image of the Grey as a prototypical alien representation is also evident in the emoticons of the 'alien' available on many social media platforms, from Facebook to Twitter, as well as in all instant messaging apps.

My interest in this particular area of research, thus, lies in one particular aspect of this large and complex issue. The focus of the present chapter revolves around the physical descriptions of alien races that can be found around the very broad discussions on UFOs, alien races, off-planet entities, and ET encounters. Indeed, descriptions devoted to the explanations and discussions of the outer appearance of extraterrestrials abound in the literature on the subject. However, it is hard to find a systematic and coherent survey that catalogs with scientific rigor and accuracy the forms of extraterrestrials based on their physical appearance. This would definitely be the work of a lifetime and, as far as I am concerned, no one has successfully achieved such a project up to now. Undoubtedly, I am fully aware that the present project only scratches the surface of such a large and complex phenomenon and is far from being exhaustive.

To my knowledge, there has not yet been a study that has cataloged all alien species according to their outer appearance. The closest you can get

is the survey of alien races titled *The Alien Races Book* (Carlson 2017), which contains a very large number of images and descriptions of alien races. Other attempts at cataloging different types of aliens can be found in Centini *et al.* (1998), who provide a classification of twenty-one types of aliens and include depictions and sketches of the types discussed. The authors refer to an earlier study by the Brazilian Jaser Pereira, who has cataloged 333 types of "animated entities" (Centini *et al.* 1998: 79). Many other descriptions, typologies, and classifications can be found on YouTube channels although these attempts are unsystematic.[8]

Indeed, information on the subject is scattered throughout many different sources: personal accounts and first-hand reports rendered public by ET experiencers, magazines and journal articles, books and literature of various sorts – from science fiction to WikiLeaks reports – mainstream media as well as "alternative" media outlets, videos, and podcasts, not to mention the cultural myths, legends, stories, and rumors circulating on this subject. This makes the job of a researcher a challenging one, at best.

4. What do aliens look like? A physiognomy of aliens

As there is a physiognomy of man, there is a physiognomy of aliens. This is an interesting hypothesis that is worth exploring. Ancient physiognomy has a long pedigree. It has been used since time immemorial in the West – from Aristotle up to Cesare Lombroso – and in the East, where it flourished under the aegis of Fakiir Al-Dīn Al-Rāzi. Although the face is a visible element of man's anatomy and outward appearance, it still remains an enigmatic and difficult-to-read object. It is no coincidence that the study of the face has given rise to multiple cultural models and various interpretations, schemes, and modes of representation. Ancient physiognomy, in fact, postulated a tight link between two opposite poles, the inner (invisible) and outer (visible) appearance, thus identifying a close connection between the two, that is, the principle of identity between inside and outside, being and appearing, face and character. This aspect is quite evident in Jhoann Kaspar Lavater's definition of physiognomy. Physiognomy means the ability to recognize, from a man's outward appearance, his inwardness (Lavater 1989: 31). Thus, the challenge and aim, often disregarded, of traditional physiognomy as a pseudo-scientific project has been, since ancient times, to enclose the human face within certain categories, specific types, codes, characters, patterns, and so on. This desire to determine the face, typical of all physiognomy, constitutes its profound ambition and greatest limitation.

It is well known that Aristotle, in *Prior Analytics*, gave an example of how to use certain types of signs to infer and identify the character of people. For instance, the large extremities of the lion are regarded, from this standpoint, as an indicator of courage. Physiognomy is generally

regarded as a pseudo-science whose purpose is to infer personality traits from the physical appearance of an individual. Physiognomy was predicated upon a connection between the inner, invisible characteristics of man from the outer, visible features of physiognomic traits (Antonini 1900; Caroli 1995; Daston and Park 1998; Delaunay 1928; Foerster 1884, 1893). Traditional physiognomy is based on the principle of identity. This principle postulates that there is a correspondence between being and appearance, exteriority and interiority, face and character, and body and soul. It is, evidently, a rigid and deterministic scheme that contributes to making the face something rigid, pigeonholing it into neat and predetermined dichotomies: face and mask, appearance and essence, expression and reticence, zoomorphic traits, and human features. This type of approach, based on the principle of identity, held sway from Aristotle until the nineteenth century.

As pointed out before, physiognomic descriptions of what aliens look like are not a reminiscence of a science fiction movie but are very much present in first-hand accounts of those who reported having had interaction and/or communication with such entities. Thus, there is a physiognomy of man, and there is a physiognomy of aliens. The latter is applicable and refers to the characterization of the physical appearance of alien races. In this respect, it follows the same logic as classic physiognomy, namely to identify and sort out alien types from their outer appearance. Such descriptions provide an identikit for the identification and recognition of alien species and discerning between them. There are also key differences between the two as there is no intention to infer personality traits from the physical appearance of aliens but only to identify, cluster, and categorize the aliens encountered into different groups or families.

This is not surprising, considering that attempts at cataloging monstrous creatures and evil entities of all sorts are not a novelty, especially in the domain of aesthetics and art history and concerning specific periods of Western history, such as the Middle Ages (Baltrušaitis 1955, 1960; Kappler 1980). Furthermore, it is well known from research carried out in the fields of forensic anthropology, forensic medicine, and forensic genetics that personal identification of people is based on several criteria and methods, among which is found in the physiognomic study of the face (Falco 1923). Personal identification is based on different types of representations of the face of the individual, photographs being the most obvious ones. To the image of the face, one must add other types of representations: sketches, parodies, drawings, and oral and written descriptions. A similar procedure is used by experts in the field of ufology to identify alien races.

What struck me is that descriptions of aliens often dwell not only on the characterization of the shape and size of the body, skin colors, hands,

and fingers but also on a description of facial features, for instance, the shape and color of the eyes, shape of the head and the ears, and so forth. May this be a proclivity of the human eye, it is significant that faces play a significant role in descriptions of alien races, too, as they are a key element in identifying people's identities. In what follows, I will examine two main areas to expound my study. Firstly, I will dwell on a brief discussion on the concept of 'representation'. I argue that this concept is a useful tool for the analyst of culture inasmuch as what we are dealing with when studying faces are usually representations of facial features embedded in visual or oral records. Thus, a study of the face from a cultural point of view entails a study of such representations. This is a key concept for unpacking this subject.

Secondly, I will provide an overview of those accounts of the people who have witnessed or claim to have had interactions with off-planet entities. These unique individuals are generally referred to as "alien abductees" in the literature on ufology as well as in "alternative" media or as "alien abduction". I will, instead, use slightly different terminology and refer to the subject who had interactions and communication with alien races as "experiencers". This choice of terminology is predicated upon the idea that the term "abduction" retains a somewhat negative connotation, while the term "experiencer" is a more neutral word. When an "alien experiencer" has reported his own experience first-hand, he or she can be regarded as an interpreter of the alien culture he or she knows.

At this juncture, it is also worth mentioning that cultural anthropology, ethnography, and folklore studies have for centuries investigated phenomena of the unnatural, the supernatural, the paranormal, and the mystical by relying on oral or written testimonies derived from the "interpreters" themselves, namely those enmeshed in a particular set of systems and believes (Kluckhon 1949; Rosaldo 1980) that witnessed significant events in a specific sociocultural setting. Think, for instance, of the vast amount of research conducted on the culture of shamans, shamanism, and medicine men (Castaneda 1974; Mails 1979).

Let me also clarify, from the outset, what my stance is in regard to the subject treated. Despite the term "conspiracy theory" being very much in fashion, it is not my intention to couch the views discussed in this chapter from this point of view, nor is my contention to attach a value judgment to the theory discussed. My goal is fairly humble. That is, to show that the relevance of the face as an indicator of identity and recognition is found not only in the identification of people but also in the description of alien races provided by the witnesses who have made their experiences public. Thus, I want to make clear that my interest in the theories is primarily in interpreting the work of alien experiencers as an iconic representation of

a ubiquitous and global phenomenon – undoubtedly, a phenomenon that today has reached a global scale.

5. The nature and paradox of representations

As said earlier, the sciences of man and society study the human face on the basis of 'representations' that culture itself has handed down in its social imaginary. Thus, a discussion on the concept of representation is in order. How can such representations be studied? What is their use? To start with, the approach to the study of representations stemming from semiotics – the study of signs, semiosis, and meaning-making – should be able to distinguish various systems of representations. The range of representations varies. It includes verbal representations, such as oral and written language, as well as visual data, such as diagrams, drawings, photos, and so on. Furthermore, from a semiotic perspective, it is worth discerning between different types of systems of representation and providing a comparative analysis of their grammar. Visual representations of the human face are, thus, multifarious. It goes without saying that visual representations of the face play a key role in the process of recognition of others (Gramigna and Voto 2021).

The distinction between analogical and digital information and codification is an important corollary to this discussion. This distinction applies to the representation of faces, too, and should not be disregarded. This yields the distinction between analogical and digital representations of faces, a difference that often goes unnoticed. When we discuss organic faces as well as when we talk about the human face in concrete interactions and everyday life settings, we operate in the realm of analogical codification. The latter "constitutes a series of symbols that in their proportions and relations are similar to the thing, idea, or event for which they stand" (Ruesch and Kees 1956: 8). While analogical codification deals with continuous functions, digital codification is based on discrete step intervals. The organic face, as embedded in the network of nonverbal communication, is an analogic codification device. This is an aspect worth pondering, and such distinction should not be eliminated.

The concept of "representation" is relevant to the present discussion. This is a complex concept for which there is no universal definition. Each discipline has provided its own meaning to it. In his *Tractatus Logico-Philosophicus*, Wittgenstein provided more than fifteen definitions to explain what the concept of representation stands for. The verbs 'to represent', 'to present', 'to express', 'to exhibit', 'to reflect', 'to project', and 'to keep in place/to be in place of' are some of these terms. What is important to stress is that in every form of representation, something is in the place

of something else. This is one of the most important key aspects of every representation. To represent means to stand for something else, which is at one and the same time evoked and erased. If we take a particular example of a representation, for instance, an ID card, one would say that this is an illustration of a representation of a human face. Usually in any ID card, there is a pictorial representation of the human face. However, as said before, a representation entails two aspects: (i) to point to a particular person, object, or event and (ii) the real person, however, is erased from the representation because he is not physically present there. This is the paradox of the representation, that is, to evoke or call forth the object represented and, at one and the same time, to erase it. We can, therefore, conclude that the principle of duplication is at the base of the nature of representation (Gil 1980).

6. Defining aliens: a real conundrum

There is a real conundrum in this field of research. Because reports come from very different sources, it can be challenging to disentangle the information provided and to assess and ascertain the accuracy and reliability of these sources. Moreover, fictional books and film industries – especially Hollywood – have drawn on the *topos* of the alien, which is often present as an element or a character of a science fiction plot with certain stereotypical features. This has yielded a mix of facts and fiction which is not so easy to disentangle. This has created a plethora of texts, myths, and legends surfacing in different cultures in different channels and forms – from Internet memes to YouTube videos – and variations that are sedimented in the "social imagery" (Taylor 2003) and the collective consciousness of people.

If this is not enough to contend with, it is worth recalling that perception and anthropomorphism are interlocked phenomena, a link that has been aptly emphasized and discussed at length in the study *Faces in the Clouds* (1995) by Stewart E. Guthrie. As can be gleaned from this study, the proclivity to perceive humanlike forms is a ubiquitous phenomenon:

> Faces and other human forms seem to pop out at us on all sides. Chance images in clouds, landforms, and ink blots present eyes, profiles, or whole figures. Voices murmur or whisper in the wind and waves. We see the world not only as alive but also as humanlike. Anthropomorphism pervades our thought and action.
>
> (Guthrie 1995: 62)

Thus, it is probably a natural predisposition of the human brain to gauge inputs from the external world regarding recognizable patterns. And the

face is undoubtedly one of the most recognizable shapes. Thus, some of the descriptions of encounters with aliens that we know of dwell on the face of the being encountered, and there is often an element of anthropomorphism attached to it. This aspect caught my attention.

Because some of the accounts of ET encounters provide some clues and give some attention to the representation of what may be referred to as "alien face" – namely, what an off-planet entity looks like to the human eye – then it is relevant to set out an inquiry along the lines of the present study and bring up the testimony of those who have experienced and described their experience first-hand. However, this terminology would immediately set aside "alien face" instead of "human face" in a dichotomic fashion. At this conjunction, a note of caution should be sounded. It is perhaps inaccurate to refer to the outer appearance of an off-planet entity as an "alien face". Undoubtedly, the organic face has its biological roots and functions. Thus, the face, in its narrow meaning, is "an assembly of bone, gristle, muscle, skin, hair, blood, blood vessels, and organic matter". Its physical function is "to present the chief organs of the senses to the world and to operate them with the utmost advantage" (Brophy 1945: 12–13). However, the term "face" has been used prescinding from its narrow meaning – the organic face – in order to make sense of experiences and go beyond the face as a physical organ. Think of the perception of the environment or the morphology of urban space in terms of a face – Simmel's morphology or "face of the city". Likewise, one can describe the face of a building, the "face of history", and many more examples of this logic can be added up. Thus, besides a narrow definition of a face in its biological dimension, there is also a wider meaning of the face understood as a broader phenomenon, and that includes the outer appearance given by facial characteristics. In this regard, the term 'face' can be used to discuss the outer appearance of what goes beyond being human.

One may immediately react to the argument of this chapter with a mix of suspicion and incredulity. Indeed, some might ask whether extraterrestrials have faces or whether they exist at all. Is it even thinkable to take up this subject as a topic of research? To some, this may seem rather bizarre. However, in this chapter, I argue that asking these questions is relevant inasmuch as one cannot simply disregard the issue as irrational, illogical, implausible, mistaken, or simply impossible. On the contrary, there is a host of pivotal questions that arise from taking up this subject and that are worth exploring. Some of these issues fall outside the scope of the present chapter. It is, nonetheless, worth mentioning them in order to fathom the depth and significance of the issue at stake. The themes of make-believe and degrees or gradients of credulity (what is believable and what is not), the social construction of reality, simulation, and the question of veracity

and truthfulness through discourse, the issue of information and disinformation, the question of culture, counter-culture, and exo-culture, the problems of censorship and free speech are all relevant themes that make up an important corollary to this subject which cannot be disposed of in a few words and would deserve a separate and much lengthier elaboration.

7. Constructing otherness: the alien/human dichotomy and the construction of the 'us' versus 'them' narrative

From the viewpoint of the study of cultural phenomena, what we are dealing with are 'texts' of various nature – understood in the broad sense of the term as to encompass anything that has meaning – which by all means makes up the texture of a system. A broad definition of text encompasses

> not only written texts, literary in particular but any coherent verbal statement, oral, too. "Text" can even designate a vehicle of articulate global signification: painting, theater representation, dance, ritual. Finally, and this is the maximum extension, culture – besides textualized cultures – can be thought of itself as a text.
>
> (Segre 1982: 677)

Ultimately, what we are dealing with are "cultural units", that is, "simply anything that is culturally defined and distinguished as an entity. It may be a person, place, thing, feeling, state of affairs, sense of foreboding, fantasy, hallucination, hope or idea" (Eco 1976: 67).

Although some texts may be regarded as "non-texts" from the point of view of a specific culture and relegated to the fringes of cultures, this does not mean that they lose their status as texts and have no value at all. On the contrary, as much of the research in the field of the semiotics of culture has shown, the edges and the peripheries of culture are the places of more active semiotic processes, for the boundary "is the area of accelerated semiotic processes, which always flow more actively on the periphery of cultural environments, seeking to affix them to the core structures, with a view to displacing them" (Lotman 2005: 212).

Let me further qualify such statements. From the perspective of the semiotics of culture, cultural systems are dynamic systems that must be understood from a twofold perspective: from the inner and the outer point of view. The inner point of view is the conception of culture from the point of view of the culture itself, that is, from within. The outer point of view is the one of a scientific metasystem that attempts to reconstruct or describe that culture from an outside perspective. From the inner point of view, culture is linked to its opposition, non-culture. This opposition is also conceived of

as information versus entropy, order/chaos, and culture/nature. Moreover, from the inner point of view, culture does not need its outer, chaotic agent but can be understood immanently. As opposed to the consideration of the inner view given earlier, from the outer perspective, culture, and non-culture appear as two interrelated spheres. From the outer point of view, culture, and non-culture mutually condition each other, and they need each other. This is an important qualification to keep in mind because the theme of the alien is often couched in a dichotomic fashion, constructing an 'us' versus 'them' narrative.

The theme of the alien being thought of as a form of extraterrestrial life has a very enigmatic status. This is a very complex and controversial subject, almost without limit. Today, this subject resurfaces in many forms of public discourses that are quite distant from the other, from 'alternative' and 'truth media' to mainstream media. To these media outlets, one should not disregard the personal accounts of those referred to as "alien experiencers" or "alien abductees". Extraterrestrials are generally characterized by a physical appearance that makes them somewhat different or 'other' than human beings. Indeed, aliens encapsulate the idea of absolute otherness. The problem of the existence and appearance of aliens is shaped according to a twofold status. On the one hand, most of the representations in Western societies are mediated from works of science fiction and cinema that depict extraterrestrials as figures marked by a shape and a culture that sets them in opposition to the lore of the common person.

Taking up the *topos* of the monster as a creature without form – shapeless creature – and the archetype of the enemy that comes from the outside – the unknown – aliens are often depicted as ugly and malevolent beings. The alien and the enemy are quintessential representations of chaos. The alien comes from the edges of culture. It challenges rational thinking, violates the customs of civil society, contrasts with normality, and is an ultimate threat to humanity. Thus, the construction of the enemy and the demonization of the other are often welded to each other in the representation of the alien. This narrative is sometimes counterbalanced with another, less frequent, and chronologically more recent motif that depicts the extraterrestrial as a benign entity who intervenes to support humanity and often is enmeshed in an anthropomorphic dimension.

The link between alien, otherness, and foreign to a given culture also finds a correlation in the semiotics of culture. Lotman and Uspenskij, for instance, provide both a social and mythological reading of this phenomenon. For Lotman and Uspenskij, the starting point is the high degree of ambiguity that characterizes the concept of "alien" ("*čužoj*"), to which the term *izgoy* ("outcast", those who live at the margins of culture) is interlocked. The alien or foreigner comes from a different culture and dwells

in a society and a culture that are foreign to her/him. For this reason, the alien shows a certain ambiguity and has a twofold connotation, for she or he belongs to two domains, the outside and the inside, the 'own' and the 'other'. Undoubtedly, the alien can be seen either as an enemy, toward whom the 'own' community shows feelings of hostility and defense or as the holder of a particular knowledge (as in the case of shamans and sorcerers), that is, someone to be feared and respected with reverence (Lotman and Uspenskij 1985: 165).

8. Conclusions: the phenomenology of an alien

Today, the archetype of the alien has seen a reemergence through the widespread use of digital media and the massive proliferation of 'conspiracy theories'. Such matters are at the forefront of discussion, arousing interest among experts and ordinary people alike. In some of these theories, the existence of extraterrestrial entities is supported, and the present, past, and future role of alleged "alien races" in the evolution of human beings are discussed. These accounts pay attention to the outward characteristics of extraterrestrials and their physical appearance, including facial features, in order to identify them, sort them out, and distinguish one from the other as well as to set them apart from human beings. We could, therefore, speak of a phenomenology of the alien, which also includes a description of their outer appearance coupled with other characteristics: culture, language, telepathy, and other psychic abilities, and whether they are benign or malign. While phenomenology is traceable in contemporary public discourse, it is also at a crossroads between ufology, alternative history, anthropology of aliens, and personal accounts of "abduction experiences".

It is important to note that, in general terms, in such narratives, there are two energies, regarded as positive and negative, and this is taken as a rule of thumb that applies throughout the entire universe. Aliens, too, fall into one of these categories. Some have a positive agenda, others very positive, while others are very depicted as dangerous and negative. In these narratives, it can be found some explicit references to entities that are identifiably classified through their external characteristics and, specifically, through some facial features (shape of the face, shape of the body, and color of the eyes) and other characteristics of the body (height, color of the skin, the number of fingers). According to this premise, there are different types of aliens that have different physical appearances. Some illustrations of alien groups are the following: the "Reptilians", the "Mantis" or "Mantid", the "Pleiadians" (or Nordic aliens), the "Felines", and the "Andromedans". As for the common body structure into which aliens can be generally categorized, we can recall the following: "humanoids", "reptoids",

"insectoids", and "Greys". Reptilians are probably the most common and well-known species. They have been popularized, so to speak, by the many works of David Icke (1999). "Mantis" or "Mantid" has a green body, very large oval-shaped eyes, and a very small nose. "Andromedans" are thought of as having certain characteristic features, such as "a tall, slim body frame; very long arms; almond-shaped eyes and skin tones ranging from pale to olive-tinted. They are also said to have pointed ears and high cheekbones with a narrow face shape".[9]

The archetypes of UFO or aliens, in their positive or negative connotations, have often been used in literature and science fiction films so much so that it became a consolidated genre. This genre has often portrayed the encounter between human civilization and extraterrestrials, so much so that it crystallized in a particular *topos*, namely the encounter with extraterrestrial race and culture. One of the first works of literature that tackled the theme of contact with an extraterrestrial race is the well-known science fiction novel *The War of the Worlds* (1898) by the English author H. G. Wells. It is one of the earliest stories to detail a conflict between mankind and an extraterrestrial race. This novel thematizes the theme of the alien invasion from Mars, capitalizing on the fear of negative aliens coming from outside to subjugate the Earth and the human race. It is worth remembering that in 1938 this novel received a lot of attention from the mass media when a young actor, Orson Wells, based a radio show on this book. The effect on the audience was so dramatic and powerful that it triggered a massive panic in the listeners, who believed the alien invasion from Mars had really happened.

Another seminal text that brings us back to the theme of the alien invasion is the science fiction book *Who Goes There?* (1938) by the father of American science fiction, John W. Campbell. The alien is depicted as an elusive creature, hard to catch, who is able to infiltrate the human mind and take it over. In this connection, the film by Don Siegel, *Invasion of the Body Snatchers* (1956), should also be mentioned. This film was based on a book by Jack Finney. Phenomenal is also the transposition of the novel by Campbell mentioned earlier, which was made by John Carpenter, *The Thing* (1982). The idea of a non-hostile alien who is willing to cooperate with men can be traced back to the 1950s. The idea of the positive, non-hostile alien was put forward thanks to the contributions of writers such as Clifford Simak, Jack Williamson, and Philip Dick. I should at least mention a film that has put forward the idea of a benign, positive creature coming from another dimension: *Close Encounters of the Third Kind* (1977), directed by Steven Spielberg and *E.T.* (1982).

To have or to construct an enemy is important not only for building our own identity but also to have an obstacle against which to measure our

systems of values and beliefs. It is not important whether this enemy is real or nor (Eco 1993). What matters is the construction and the demonization of the enemy. Enemies are different from us, and they behave according to customs and lore that are not our own. The other, the person that is different from us, the stranger par excellence, is the foreigner. In the Roman bas-relief, the Barbarians were depicted as bearded and snub-nosed. Indeed, the term "Barbarian" derives from the fact that Barbarians spoke a different language than the Roman language and, as such, were considered outsiders and a person that is not able to talk. The enemy is usually depicted as ugly. There is a general cultural rule according to which the enemy must be ugly because what is good is identified with what is beautiful, and one of the main features of beauty has always been what in the Middle Ages was called *integritas*. This means that one must have everything that is required by the average representative of that particular species. Therefore, if you are a human being, you will be regarded as "ugly" if a limb or an eye is missing, if the skin color is different from the average, or if the stature is below the average.

Notes

1 This chapter results from a project that has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program (Grant Agreement No 819649-FACETS; PI: Massimo LEONE).
2 In this connection, see the special issue "Cultures of the Face" (Gramigna and Leone 2021) published in *Sign Systems Studies* 49 (3–4).
3 In this regard, see the abundant literature on face disfiguration (Rifkin *et al.* 2018; Skinner and Cock 2018).
4 My own translation from Italian.
5 A list of MA and PhD dissertations devoted to the UFO subject is available at: www.cisu.org/wp-content/uploads/2017/01/UFOTheses_by_Paolo_Toselli_updated_20170101a.pdf (last accessed 11 November 2019).
6 The bibliography on this topic is vast. Many recent pieces of research have delved into the issue from different perspectives philosophical, journalistic, and psychological. This shows that academics and scientists have begun to question why such theories persist even though they are improbable and unreasonable and, above all, how it is that we have reached such considerable proportions today. Among the most recent publications, and for those who wish to explore the topic further, I would like to point out the research by Aaronovitch (2009), Wheen (2004), Thompson (2013), Lewandowsky (2021), Lewandowsky and Cook (2020), Lewandowsky *et al.* (2017), Damiani (2004), Cohnitz (2017), Leone (2016), Butter and Knight (2020), McCrea (2004), Pipes (1996), Oreskes and Conway (2010), and Eco (1990, 2021).
7 An image of a quintessential representation of a "Grey" is found on the Wikipedia page devoted to UFOs: https://it.wikipedia.org/wiki/UFO (last accessed 21 December 2019).
8 Regrettably, I was not able to retrieve and consult this study.
9 http://starseedsigns.com/andromedan-starseed/ (last accessed 20 December 2022).

Filmography

Invasion of the Body Snatchers (1956), [Film] Dir. Don Siegel.
Close Encounters of the Third Kind (1977) [Film] Dir. Steven Spielberg.
E.T. (1982). [Film] Dir. Steven Spielberg.
The Thing (1982). [Film] Dir. John Carpenter.

9 Automatic faces

The transcendent visage of trans-humanity[1]

Gianmarco Thierry Giuliana

1. Faces and alterity

In the twentieth century, the West has had two great philosophers who have extensively dealt with the issue of otherness, and both have based the problem of the relationship with the other on the human face: Sartre's gaze and Levinas' face (Madou 2007; Legros 2017). This recurrence of the face is by no means a coincidence, and its capacity to undermine the "self" is part of common sense and knowledge: just think of the figure of the twins used in both ancient epics (Castor and Pollux in Homer's Iliad) and cinema (Lisa and Louise in Stanley Kubrick's 1980 *The Shining*; see Surace 2022).

This close relationship between the face and the perception of identity-alterity explains why the face is now an object of study at the center of the most advanced research on major social and philosophical issues. Think, for example, of the collaboration between the humanities and computer sciences to address the problem of identity recognition in artificial intelligence-based face-reading techniques and technologies (Voto 2021). Advanced academic research again goes hand in hand with a widespread critical social consciousness about the dangers of certain types of facial representation and reading: from the controversy over TikTok's "beauty filters" in our newspapers[2] to books on veganism that problematize how the removal of the face from the food we buy is a way of concealing the living being from which it came (Masson 2010). What's more, with the advent of the 4E turn (Newen *et al.* 2018) in mind sciences, the works of these philosophers and their philosophical debate on the "face-other" relationship have been continued and recognized as a critical one in our century in a more interdisciplinary context (Pawlett-Jackson 2022).

In this sense, the face is a philosophical, historical, semiotic, sociological, psychoanalytic, anthropological, and most of all an ethical object of study.

Building on this premise, this chapter seeks to address the contemporary tendency of extending the category of "human" and "person" to "nonhuman" beings and things by focusing on the role of the digitalization of

faces in such a process. Indeed, over the past decade, we have witnessed a fundamental rethinking and extension of the category of "human" within the semiosphere (Lotman 2005) of most cultures. On the one hand, this has occurred through the critique of anthropocentrism in relation to the ethics of the human-nature relationship (with the emblematic cases of sustainable development and vegetarianism as a cruelty-free lifestyle). On the other hand, we have become increasingly accustomed to qualitative interactions with anthropomorphic nonhuman agents (from Metahumans to Chat-GPT), and we are continuously exposed to narratives in which androids and robots are increasingly difficult to classify as nonhumans.

This last aspect is the one we will focus on in this work and with a particular attention to digital games which, from the point of view of both interactions with AI (Giuliana 2023b *L'intelligenza*) and of their stories (Giuliana 2021a *L'oggettuale*), are perhaps the most iconic example of such conceptual reorganization. The reflection on the contemporary resemantization of the human in the light of digital creation and manipulation of faces will be done in this chapter through the case study of the video game *NieR: Automata* (Square Enix 2017) and by devoting special attention to the comparison between the faces and visages of its androids, robots, and drones.

To do so, we will begin with a brief exposition of the general plot of *NieR: Automata* in the first section, summarizing the main events and highlighting story elements that challenge the distinction between humans and machines. In the second section we will analyze separately the faces of the game's three protagonist figures: androids, biomachines (robots), and pods (drones). We will thus see how these three different faces of the mechanical can take on a "personality" and become expressions of humanity in three different ways: through resemblance-identification, ambiguity, and projection. This analysis will allow us, in the third and final part, to come to two conclusions. The first will concern the rhetorical use of the face to convey the values of transhumanist narratives and undermine some of the key twentieth-century cultural distinctions. The second will concern the role of digital technology and in particular of digital faces in rethinking the human and the subject in a transcendental, ergative, and supra-individual sense.

2. The story of *NieR: Automata*

NieR: Automata (*N.A.* from now on) is a 2017 video game belonging to the genre of A-RPG (action role-playing game) conceived and directed by renowned game designer Yoko Taro. It is an award-winning game full of explicit philosophical references (From Pascal to Simone de Beauvoir and Sartre via Kant and Kierkegaard), and whose narrative has spawned both

the production of player interpretation/explanation videos viewed by millions of viewers[3] and recently a *NieR: Automata Ver1.1* series (2023 A-1 Pictures). The game is set in 11945 AD, and its story is about a stereotypical alien invasion of planet Earth by means of destructive machines called "biomachines". In order to survive this invasion, which occurred in 5012 AD, we are told that humans have created androids that can fight for them and have taken refuge on the moon. This gives rise to a proxy war that appears to have no way out. The current war against the biomachines is in fact the fourteenth, and the attempt to rid the Earth of the biomachines has now lasted for nearly 7,000 years.

At first, the player takes on the role of a special type of advanced battle android known as "YoRHa units" and specifically of a female android identified as "2B". She will then soon be accompanied by a second advanced "scanner" android in the guise of a male boy and identified as "9S". It immediately appears from the dialogues that these androids are advanced not only in terms of their combat capabilities but also in their intellectual and emotional capacities. In fact, distinguishing them from a human agent on a linguistic and behavioral basis is basically impossible. Nevertheless, behaving too similarly to a human, such as expressing emotions, is forbidden for androids. This is primarily because humanity (and its key characteristics such as emotions) is dysfunctional for the purposes of their mission, namely war. Moreover, although they are incredibly similar to their creators, the androids worship the humans on the moon as true "gods in the sky" and dare not compare themselves to them. After the first few hours of play, therefore, we can see that *N.A.*'s narrative is grounded in four identity oppositions:

1. Humans versus aliens
2. Humans versus machines
3. Humans versus androids
4. Androids versus machines

These oppositions appear from the very beginning when the protagonists encounter other characters who also share this "identity conflict" with them. An iconic example is the android merchant with a broken leg who refuses to replace it with a prosthetic one because then his whole body would be made of parts other than the original ones, and this makes him fear losing his true self (a clear reference to the dilemma of the Ship of Theseus). However, the deeper significance of *N.A.*, hence its interest as an object of study, lies precisely in the questioning of these oppositions. Indeed, during their adventures, 2B and 9S will soon discover truths that are baffling to them. First among them is that the story of humans on the moon is a lie invented by the head of the "YoRHa" units: humanity actually died out many years ago. In addition to undermining the meaning of the mission of the protagonists, who came to

Earth to fight for the future of humanity, this revelation effectively makes androids *the most human figure in existence*. This fact will push the androids to gradually abandon their self-imposed limitations, which will allow 2B and 9S to develop a deeply emotional relationship that can be classified as much in the category of "big sister – little brother" as in that of lovers.

The second revelation concerns the rebellion of the biomachines, which have killed their own creators and are therefore no longer fighting for them but to survive. In this sense biomachines and androids find themselves in an incredibly similar situation: both without their creators, both fighting only for themselves, and both *capable of changes* and afterthoughts that during all these years have made them different from what they were initially. This similarity between androids and biomachines becomes also physical through the figures of Adam and Eve: two advanced biomachines that look like humans. Not only that, but during the first finale we will see 9S abandon his android body and transfer all his consciousness, personality, and memory right into a biomachine in order to be able to survive a virus that would otherwise destroy him.

The third revelation is that some biomachines disconnected from the central network, developing an independent form of intelligence as a result. To make sense of the world, hence, these biomachines used everything that human culture had produced and left on Earth. Thus, 2B and 9S witness villages of pacifist robots, philosopher robots, religious sects formed by biomachines, biomachines with customs and traditions of human communities, robots with a parental sense, robots developing amorous and aesthetic dilemmas, repentant and suicidal robots, and even an "orgy" of machines desperately trying to reproduce themselves by emulating the positions and movement of human sexuality. In short, even biomachines become human through culture and an *encyclopaedia* (Eco 1975) which is not only intersubjectively shared with humans (Paolucci 2010) but also *produced* as humans (Violi 2007).

The fourth and final revelation concerns the battle drones, called "pods", that accompany the "YoRHa" units. At the beginning of the game, pods are actually very similar to machines in the sense that they are weapons with minimal logical and linguistic capabilities. Just as with biomachines, however, the pods accompanying the protagonists develop a kind of consciousness, free will, and a consequent evolution of their language. In fact, the secret "positive" ending of the game will actually depend on this very transformation. The pods, together with the biomachines, thus emphasize the idea that even the "simplest" machines can develop complex thinking and even a will: two traits typical of the human species.

For the purpose of this chapter we will not examine further the plot of the game, which is very complex as much in its structure (multiple endings, story divided among three characters, and so on) as in its many happenings and their symbolic readings. We merely highlight here how these

revelations make *N.A.* a cult of transhumanist narratives and philosophies (Ross 2020), with an obvious problematization of the definition of the human and with a substantial critique of the presumed necessary correlation between being human and having a certain biological origin and history. In short, we see how in this kind of narrative the "human" category loses its oppositional nature and becomes a participative one (Paolucci 2010). Additionally, other scholars before us have also highlighted how the narrative of *N.A.* is fundamentally rooted in a problem of belief and in an issue of revalorization by having the players "playing on behalf of nonhuman, soulless individuals like the ones they believed they were fighting against" (Idone Cassone and Thibault 2019: 83). The question for us here will therefore be what role the face plays in this identity crisis of the category of "human" and how it is used to give the quality of "person" to what we would today still consider to be of the order of the mechanical.

3. Faces of *NieR: Automata*

As we pointed out in the previous section, the faces at the center of *N.A.*'s narrative are mainly three:

1. The faces of the androids
2. The faces of the machines
3. The faces of the pods

Figure 9.1 Square Enix. 2017. *NieR: Automata*. Detail of 2B's face during a cutscene. Copyright: Square Enix (Fair Use).

We will therefore now make a separate analysis of these three faces to understand how they are the rhetorical elements par excellence of this transhumanist narrative.

3.1 The face of androids

As we can see in Figure 9.1, the level of definition of the android face is absolutely comparable to that of a human person (in comparison to other human faces represented in video games, that is): we can observe the details such as the smoothness of the skin and thickness of the lips, the specific shape of the nose, and even a mole. Therefore, it is not necessary to dwell here on how this android face is depicted in such a way as to be perceived as a person's face. More interesting, however, is to see in what way at the beginning of the game the android's "personhood" and individuality are denied, namely precisely through an obscuring of the entire upper part of the face (or the lower part in the case of "operator" androids on the moon). That of the denial of humanity through the denial of the face is in fact a well-known semiotic construction with very antique religious origins (Volli 2021). As events progress, however, the discovery of the truth about the world will also correspond with an unveiling of the face and with a stronger sense of the self allowing 2B and 9S to make personally significant choices in the narrative of *N.A.*

This unveiling of the face will reinforce an idea of a person not only from the point of view of their physiognomic features but also from the point of view of a symbolic reading of the face that accompanies their words and behaviors. Indeed, this function of the face is absolutely fundamental to the recognition of individual members of human communities from the perspective of the cultural values and patterns by which the face is connoted (Giuliana 2021b Funzioni; Santangelo 2021). The symbolic dimension of the face thus gives 2B and 9S a supra-individual and collective dimension.

But the unveiling of the face has not only a symbolic role but also a very pragmatic one. Indeed, it allows the viewer-player of *N.A.* to be "touched" by the facial expressions of the protagonists at the most significant moments. Not only that, but in the specific cases of 2B and 9S this face also becomes that of a highly erotic object with a real "cult" that has arisen around its figure of 2B as a "waifu" and 9S as a "yaoi" character. As evidence of this, it is very easy to find a large production of fan-made erotic and pornographic products that have sprung up around them. In other words, from a rhetorical-experiential point of view, the unveiling of the face transforms 2B and 9S into "persons" through their pathemic agentivity on the off-screen human subject: completely outside the narrative

there is *actually* a human who, through the face, empathically relates to a machinic object (2B's 3D model) in a manner similar to how he usually behaves and relates with flesh-and-blood faces. Such questioning of the *unicum* of the human through questioning of the empathic *unicum* of the biological face is today the basis of the social meaningfulness of hyper-defined digital faces such as those of metahumans (Giuliana 2022b What) and is possible here thanks to the narrative of *N.A.*

Last but not least, the faces of 2B and 9S are also the player's mask that interprets the story and at the same time the *prosthesis* (Eco 1997) that allows the player to see and be watched. The key moment here is the opening scene in which 2B's new body is "programmed" (by setting various parameters) by 9S,[4] who addresses the player in the second person and comments on his choices as if s/he were 2B. Among these settings are all the visual parameters, and thus in essence vision, which corresponds in every respect with the vision of the player who has no other way of seeing the world than through the eyes and face of his or her avatar. In the most recent semiotic theory, it has been demonstrated very well how these prosthetic devices have subjectivity effects (Paolucci 2020), and we can therefore speak of a real pragmatic hybridization between faces. In conclusion, we see that in *N.A.* the face plays a key role in the attribution of "humanity" through its ability to define the "person" through six different functions:

1. Definition
2. Unveiling
3. Symbolism
4. Affectivity
5. Mask
6. Hybridization/prosthesis

Figure 9.2 Square Enix. 2017. *NieR: Automata*. Screenshot of 2B next to a bioma-chine. Copyright: Square Enix (Fair Use).
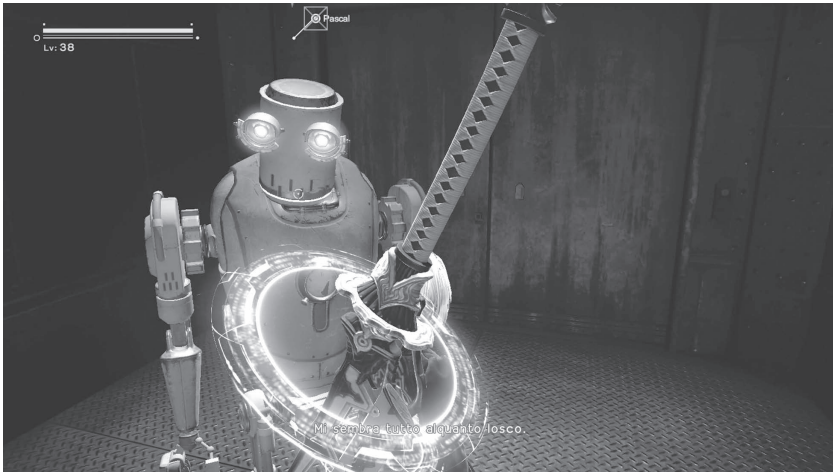
Figure 9.3 Square Enix. 2017. *NieR: Automata*. Screenshot of the machine "Pascal". Copyright: Square Enix (Fair Use).

3.2 *The face of machines*

Unlike the case of androids, recognizing the face of biomachines as having a "personification" role is far less obvious. In fact, in their most common form, biomachines look like this:

As it is evident, the only features that can be traced back to a human face are the roundness of the head and two eyes. With respect to these machines, the first interesting thing to note is how those with advanced language abilities, such as Engels[5] and Pascal, often have some additional features such as a kind of eyelid and a kind of mouth.

Secondly, the face of the biomachines is humanized through culture in the form of makeup and clothing[6]: tube hats, tribal masks, clown disguises, ties, suits, ribbons, and so on.

Thirdly, being the anti-subjects of the game and having a strong agentive power over the player (they can determine the player's defeat) the biomachines' faces constantly objectify the player's avatar. Every time a machine looks at the character (it matters little whether it is 2B, 9S, or the third playable character A2) to address or to attack him or her, by virtue of the prosthesis previously illustrated, the biomachines turn their gaze to the player. So much so that to win, the player must constantly try to *read* the biomachines' faces. Returning to Sartre, it is precisely this objectifying capacity that characterized the face for the French philosopher and distinguished him strongly from Levinas (Watson 1986; Jopling 1993). Now, the main property of the inanimate (such as the mechanical) is typically to belong to what is objectified by humans in virtue of their agentive power over it and, specifically, through the human *gaze* upon it. So we see here how the mechanical comes out of the domain of the

object, which does not necessarily coincide with entering the sphere of the human but certainly admits it as a possibility in terms of semiotic implication.

The last point concerns the heterogeneity and ambiguity of the faces of the biomachines, which have at least two occurrences of explicitly human faces: the siblings Adam and Eve looking exactly like the androids and the "Red Girls",[7] the ego of the Machine Network (AI at the head of the biomachines), who takes the form of a white little girl with big blue eyes, long black hair, and a small nose and mouth with features typical of a child. An ambiguity reaches its climax when the face of 9S, an android who in that context represents what is most human in the world, becomes that of a biomachine. This occurs the first time when 9S takes control of a machine (by hacking into it) to help 2B trapped in a factory full of enemies. In that first occasion 2B almost kills 9S, unable to recognize his usual visage. But it also occurs a second time in the first ending of the game when, because of a virus, he has to abandon his body by transferring his whole consciousness and memory into one near enemy. At that point only a green light coming from the eyes at that point marks his "nature" and can distinguish him from all the other biomachines. However, we have actually already seen that the biomachine Pascal has also green eyes, so this "trait" cannot actually distinguish an android from a biomachine as a general rule. It is rather the tender caring gaze of 2B toward the face of that machine that makes it "human".

In conclusion, we see how the machinic face takes on the connotations of a human face through a series of ambiguities and potentialities. Recognizing the potential humanity of the machinic face is thus not a question of emulating facial expressions or of physical resemblance, instead such acknowledgement depends on the undermining of a natural correlation (an interpretative *habit*) between a certain *expression* of the face and its hypothesized subjectivity as its *content*. The continuous representation of biomachines as culturally human constructs and the continuous subject-to-subject relation with the faces of biomachines, during the tens of hours of the game and within its narrative, is a key part of N.A.'s message and meaning. This face-centered effect of humanity is then put into crisis toward the end of the game through the deliberately *uncanny* faces of Eve and of the AI that symbolically represents their increasingly hostile and "crazy" (therefore nonhuman) behavior. In the first case the "Red Girls" assume a very disturbing smiling facial expression during a final cutscene, while in the second case the natural face of the humanoid biomachine assumes red eyes and has its skin being tainted in black patterns that redefine the original visage and consequently the identity.

Figure 9.4 Square Enix. 2017. *Nier: Automata*. Screenshot of a white pod hovering next to 2B. Copyright: Square Enix (Fair Use).

3.3 The face of pods

Thus, we come to the last and perhaps most problematic case: the flying drones known as "Pods". Is it possible to say that these objects have a face? At first glance, it would be counterintuitive to say so. Indeed, they present four completely flat surfaces without any characteristic element of the face and with almost only arms to distinguish a "front" from a "back".

We have seen, however, that pods have a key role in the narration through a process of language and thought development that, by the end of the game, makes them characters on whom the happy ending depends. This "personality" opposed to their apparent objecthood then finds its counterpart in gameplay in two different aspects. Firstly, the player controls the pod separately from how he or she controls the androids. In this sense, although according to the lore these pods are controlled by the will of the androids, they are actually another machinic manifestation of human intentionality and agency. Secondly, there is an option in the game to "pet" or "high-five" one's pod to "compliment" it, just as if it were our own domesticated animal. In these very moments there will be a real face-to-face interaction with the pod. A face-to-face was then re-enacted during some cutscenes of interactions between pods.[8]

Not only looked at and acted upon but also looking at and acting upon, here, within *N.A.*'s transhumanist narrative, it becomes extremely difficult to deny a face even to the pods. Both the player's avatar and the player

project the face as a transcendental structure onto the pods' top upper surface, associating their plastic features with their personhood (expressed through verbal language) and non-predetermined agency.

4. Conclusions

In light of this essay, we can draw two conclusions about three different themes touched upon in the different sections. The first conclusion concerns the rhetorical use of the face in transhumanist narratives as an expedient to represent the semantic extension of the category of human and the semantic hybridization between person and object. Such hybridizations of the face have already been observed and described by us in other video game and science fiction narratives such as in *Cyberpunk 2077* (Giuliana 2023a *Faut-il*). Above all, however, they are a real stylistic trademark of the work of Yoko Taro, perhaps the most important transhumanist author in the video game field, who already presented such a view in the previous game (Square Enix 2010) outside any explicit reference to androids. In this prequel to *N.A.*, the author imagines that humanity has developed a technology capable of temporarily separating people's souls and consciousness from their bodies in order to be able to survive an incurable disease that would lead to the end of the species. For this purpose, replicants, genetic and soulless copies of living humans, are created to be able to withstand the disease so that, when life on Earth will be possible again, the "souls" (called *gestalts* in this state) would be reunited after the end of the disease.

Due to an accident in the transformation process, however, it happens that the replicants themselves develop a consciousness and personality that prevents the souls from returning to their original bodies. This results in a loss of consciousness of the souls/gestalts who become hostile toward the replicants, taking on an appearance of shadows and merging together to form monstrous beings:

The protagonist of the story, however, is unaware of this: he believes himself to be a human and considers the "gestalts" to be monsters that, through the player's actions, he kills mercilessly throughout the game. So much so that he and his companion Emil destroy an entire village of "shadows", effectively committing genocide. Without going into further detail, we also see here how the theme of the transformation of the human is at the heart of the story. And here, too, the author constructs a series of agents with nonhuman faces who look at and recognize each other as people. There is the face of the replicant protagonist Nier, that of humans turned into gestalt, that of the human co-protagonist "Emil" who undergoes terrible experiments and becomes a head-shaped object, that of "Grimoire

Figure 9.5 Square Enix. 2021. *Nier Replicant ver.1.22474487139* . . . . A monstrous giant gestalt (Hook) fighting against the protagonists. Copyright: Square Enix (Fair Use).
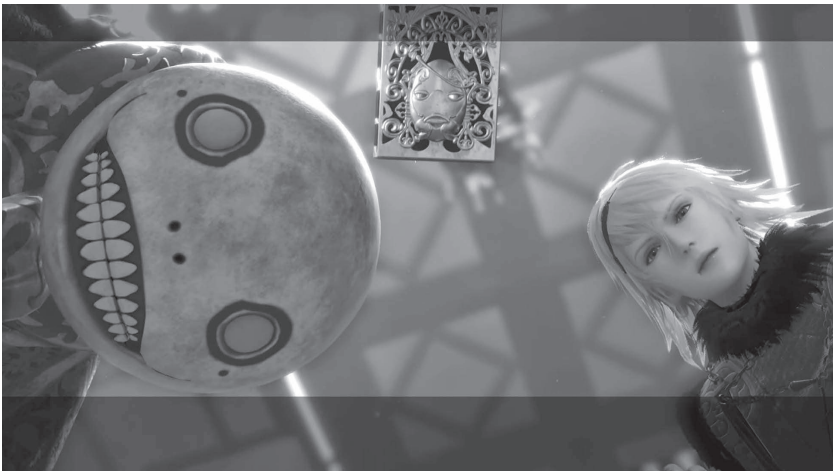
Figure 9.6 Square Enix. 2021. *Nier Replicant ver.1.22474487139* . . . . In order from left to right: Emil, Weiss, and Nier in a cutscene. Copyright: Square Enix (Fair Use).

Figure 9.7 Square Enix. 2021. *Nier Replicant ver.1.22474487139* . . . . A shadow
relates face to face with a robot with rudimentary artificial intelligence.
Copyright: Square Enix (Fair Use).

Weiss" which is a human turned into a talking magic book, and even that
of some rudimentary intelligent machines. All these faces stand out and
resemble each other at the same time, constantly confronting each other,
representing the transformativeness of humanity understood as a set of
emotional and reflective capacities.

The second, and more theoretical, conclusion concerns the relation
between the meaningfulness of digital faces and the complex and hetero-
geneous human process of semanticizing faces (Leone 2022b Volti). Nar-
ratives such as those of *N.A.* make great use of the digital face understood
both as an image (the face of 9S with whom we empathize as in a film)
and as a mask (the face we assume in the narrative as we act as of the
characters in that story) and finally as a face prosthesis (the face through
which we look and are looked at). In all three cases, the digital technology
behind the video game allows us to relate to and even recognize ourselves
with a digital face that is something undoubtedly other than the biological
face and yet we are able to feel it is ours and to some extent true. From a
semiotic point of view, this phenomenon can be explained from two dif-
ferent perspectives. The first concerns the cognitive dimension (Paolucci
2021) of the face as *habit*, that is, as an open semiotic structure capable
of multiple adaptations and translations, which in the case of the game
finds full meaning in the ludonarrative dimension (Thibault 2020) given
by the intersection of *N.A.* history and its interactive-procedural mechan-
ics (Bogost 2007). The second concerns the sociocultural dimension of the
face that is increasingly showing itself as a secularized object through its

manipulations and decompositions made possible by digital technology. Indeed, the digital era is also culturally and epistemologically shaping our "mindset" (Bankov 2022) in this sense. This is quite evident by looking at the works on the digital face produced by the semiotic community in recent years, most of which seem to be moving in this direction (Viola and Voto 2023). Both of these points lead to the conclusion that the face has a strongly transcendental and ergative nature, as exemplified with the attribution of a face to pods. If a face may not have eyes, mouth, nose, ears, or forehead, then what are all these elements? A narrative like *N.A.* shows us how the elements we usually believe to be characteristic of the face, and therefore determinative, are actually overdetermining. Rather, the essential features of the face would turn out to be transcendentally and semiotically functional in its pointing to a being looked at and looking at that does not lend itself to immanent decompositions. That is, the characteristic elements of the face do not indicate what is essential but a *surplus* of meaning (Volli 2008), making it a perfect semiotic object. Biological generation and semiotic construction, one might even say semio-narrative generativity, seem to have co-determined themselves without us realizing it. The immanent-differential marking of the face as human, according to which, for example, what does not have eyes or what has hair on its nose is not human, reveals behind its obviousness an axiological structure. On the contrary, there is a *virtual* face in common with humans, animals, intelligent machines, and even "things" (think of pareidolia). Indeed, this is how in *NieR: Automata* the three faces which are clearly distinct in the beginning become equivalent in the end (a different expression of the same content). The recognition of this latent face in all the agencies of reality is socially problematic because it undermines the historical connotation of the human face as the one belonging to the subject of an object-world. Indeed, it undermines its duties and rights because it coincides with a collective and transcendental vision of a fully agentive subject (Volli 2013). Reconnecting with what we were saying in our introduction, this is what is happening with animals (Leone 2021b *On Muzzles*) with whom we have always been face to face but whose visage we only recently recognize. That is why in cultural and communicative artefacts we will always continue to have faces appearing on what, *apparently*, has none in order to bring out a certain political idea of humanity. As scholars of human thought and culture, our task is, perhaps, not simply to highlight all the cases in which this phenomenon of resemantization occurs but also to suggest that this "addition" of faces (as trivial as a child drawing two eyes on the Sun) is not necessarily and not *a priori* ideological in a negative sense of distortion of reality (a forceful attribution of a new content to an existing expression). On the contrary, the emergence of visages on nonhuman agents may also be a way both to make us critically reflect on our own identity and to recognize an

intersubjectivity that is *already there* but is hidden behind that we fail to grasp and recognize not because of *what* it looks like but because of *how* we look at it from a given situation. It is indeed only through pragmatics and re-situation, two key characteristics and the main value of games, that *N.A.*'s post-humanist narrative assumes its full meaningfulness via the player's gaze recognizing the *visible transcendence* (Pertseva 2017) of humanity in the faces of androids, machines, and pods.

Notes

1 This chapter results from a project that has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program (Grant Agreement No 819649-FACETS; PI: Massimo LEONE).
2 www.theguardian.com/lifeandstyle/2022/jan/02/is-that-really-me-the-ugly-truth-about-beauty-filters
3 www.youtube.com/watch?v=63PzQIbTrM8
4 www.youtube.com/watch?v=b6WjJdwPTXQ
5 https://nier.fandom.com/wiki/Machine_Examination_2?file=Machine_Examination_2.png
6 https://nier.fandom.com/wiki/Category:Amusement_Park_Machines
7 https://nier.fandom.com/wiki/Red_Girl#Gallery
8 https://nier.fandom.com/wiki/Pod_042

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10 Algorithmic faces

Reflections on the visage in artistic translation and transition[1]

Silvia Barbotto

1. Introduction

On the one hand, the dimensionality of contemporary living lies in the semanticized expectation of the physical, ontological, and phenomenal entity and, on the other, in its digitized and realized synthesis in the ethereal zone of e-society. The substantial polarities between the tangible and the intangible, between the phenomenal and the epistemic, matter and energy, physical and algorithmic, between the extremities of different events, are part of the same interconnected fabric. We think of categorical fractioning, typological definitions, and the intent of necessary objectification as parts of a functional but provisional phase: the imbalances caused by isolation with respect to a broader scenario need referential extension, integration, and completeness in order to fully realize their ephemeral independence.

Among the fractional inferences there is the alternative of staying: *in between* is manifested the sense of a hybrid, pulsating, creative, extended world. In this space we find the nucleus of this chapter, whose basic proposal is to problematize the face as a solid entity in its own right in order to enhance instead its shaping context, identifying a field of research linked to an environment as well as an object. Without excluding the face as a set of elements with a compact and well-defined architecture, we position ourselves in that landscape that delimits its dialogical dimension, the scenery of senses, and effects but also that of data and clouds.

Our objective consists in defining the points of contact and estrangement with respect to which the relationship of the encounter between the face and the situation in which it is immersed is generated; at the same time, we also have to probe what this situation generates, in terms of expressiveness, agency, and relationality. Hence, it is necessary to unravel the following issues, the resolution of which will be imbricated in the text:

- identify the manifesting media of the human face and describe its expressive formants

- recognize the circumstantial dimensions and outline their compositional syntax
- unravel the relational configurations of the face in contemporary society through a process of categorical association.

In this way, we bring to light the vehicles of signification by which the meaning of the face is generated and shared in this intermediate space, thus procuring new perspectives of structured procedure, that is, new investigative *methods*.[2] Semiotics, as a discipline specialized in the study of signs and in the stabilization of fluid categories, is invoked to deal with the relationship and transition between the magnitudes of binarism, fundamentally composing the mediation in which the processes of reading, writing, translation, and transition between one sphere and the opposite one take place: signification thus sediments in the incorporation and unbundling of the spaces traversed, of physical-algorithmic magnitudes articulated individually and collectively in the interlude that such dynamism generates and propitiates.

> *Binarism* and *asymmetry* are the laws binding on any real semiotic system. Binarism, however, must be understood as a principle which is realized in plurality since every newly-formed language is in its turn subdivided on a binary principle. Every living culture has a "built-in" mechanism for multiplying its languages. . . . For instance, we are constantly witnessing a quantitative increase in the languages of art.
>
> (Lotman 1990: 124)

Interdisciplinarity in research leads us to hybridity as one of the theoretical models: is the vacuum part of this place of transition? According to the Dirac sea model, the vacuum was an infinite space of negative-energy particles (electrons) which, by making a quantum leap, transformed themselves into positive energy and thus left a gap, which was later found to be filled by the antiparticle, a virtual particle called the positron. The faces in the void bring us back to the investigation of occupied space as well as the material entity we refer to: virtuality becomes actualization after a quantum leap into the *in-between*. The leap between binarisms, the dialogue in the living dichotomy, and the crossing into the void are bridged by everyday living in which the multiple languages of art proliferate and create the field.

This space needs to "summarize the properties of quantum happenings", as Merrell would say (2010: 83): paraphrasing his words, we must remember that quantum particle-happening, as a *possible possibility*, can be in many places; moreover, we know that it does not live in an ordinary space-time "until it *interdependently interrelates* (and *interacts*) with something/

somebody else". The chronotope of the face within the paradigm of quantum physics is never the same: "you can never step into the same semiosic stream twice" (Merrell 2010: 82).

Attributing to the body, and especially to the face, the predominant space in which to study these transitions, we see that since ancient times the human being has conciliated the interactions between aesthetics and materiality as integrated proposals. Inasmuch as they can be considered natural platforms, faces can be thought of as semiotic apparatuses that lend themselves not only to constant reading but also to the continuous intervention, direct or mediated, of human doing in relation to human and nonhuman doing and being: they are therefore predisposed to becoming cultural, social, artificial, and somehow *algorithmical* from the day they are born, in both proprioceptive and exteroceptive ways, becoming *possible possibilities*. To say nothing of the nonhuman faces, specifically the face products of machine agency, which are certainly and completely artificial and which give rise to a whole series of contemporary questions to which it is urgent to find answers. Taking up the etymological sense of the fundamental component of artificiality, we see that its roots in human action are also related to the paradigm of art as "ars facere": we thus refer to the scenarios of a complex landscape, to the contemporary artistic condition of highlighting certain trends, especially in terms of intelligence and creativity, both human and artificial.

Some of these issues, void-polarities-artificialities, have already been addressed in a few open-access articles within the FACETS research project: the Socio-cultural Habits and Inflections of Faces Across Time and Space (SHIFT) program contains titles such as "Artificial Face and Transhumanism in Contemporary Art", "Art, Face and Breathscape: From Air to Cultural Texts", and "Trace and Traceability in/of the Face. A Semiotic Reading Through Art" regarding the topic of art/artifice, while the Visage Intelligence Systems From Antiquity to the Genesis of E-Societies (VISAGE) program includes, for instance, "Reading and Writing in N-dimensional Face Space", concerning the intrinsic relationship between facescape, emptiness, and the neutral mask, with reference to Jacques Lecoq and the neutrality of expression as a result of the search for the *in-between* space.

The syntagmatic configuration of faces constitutes an environment that we could call the facescape: while the embedded face tends to give evidence of the material substance whose form it conveys, the virtual face, on the other hand, tends to become the spokesperson for a transitory dematerialization destined initially to occupy the ephemeral state of binary language and then, at times, to slide into that of disappearance.

> All figurative syntax is based on the interaction between matter and energy, and the stable or unstable balances of this interaction produce

identifiable figures. From the moment objects are treated as interacting bodies, and not only as abstract forms, further integrated into a figurative syntax, the interaction between matter and energy takes on the aspect of an interaction between the movements of one and the sheathing of the other.

<div align="right">(Fontanille 2008: 226; our translation)[3]</div>

While the digital images of faces perpetuate, proliferate, and, fleetingly, are sometimes illusorily forgotten, the data linked to them instead establish real material mechanisms. The physical-algorithmic extension therefore interests us from various points of view concerning above all its heterogeneous and multiform entity: we would like to understand what gradients, intensities, and varieties of physical-algorithmic bodies we know; how they are generated and developed; what types of corporeity they include or exclude and, above all, in what spaces such syncretisms take place, how they are grafted into the real and digital territory, and how their habitability is constituted. The content is structured in the following subchapter:

- Art and artificiality, the physical-digital body-face;
- The semiotics of living;
- Datafication and matter in the contemporary ecosystem;
- Dwelling *in-between*.

2. Art and artificiality, the physical-digital body-face

The human being, a kind of *arkhano*[4] exposed to artificiality and, therefore, also to making art dialogues and interacting with materials of various kinds, from the heaviest to the most ethereal, from the most evident to those that are invisible, in an approach *of modalizing* like that of the alchemist.

> The alchemist was called the "creator", this science was commonly called the "Great Art" and the alchemical process, the opus, took the name of "Great Work". . . . Just like the opus, the process of art finds simultaneously its own outcome and its own configuration on several levels: the physical one of the materials treated, the visual and harmonic one of the forms, and the ideal one of the spirit, and finally the "sapiential" one of the complex and numerous meanings, also brought back to the perfect iconological unity of allegory.

<div align="right">(Calvesi 1986: 10–19)[5]</div>

"Formativity", a term dear to Umberto Eco [1970 (1968): 13–16], could integrate the notion of artificiality by emphasizing the material dimension and in some way the physical one in a sort of isotopy identifying in the

organism the synonym of form and in the producing (more than in the expressing) the *forming action*. The performative dimension linked to agency in either human or non-human typology as well as a modeling and transforming function are inherent to the sphere of artificiality. Referring to Pareyson, Eco recalls:

> In the work, the person forms "his concrete experience, his interior life, his inimitable spirituality, his personal reactions in the historical environment in which he lives, his thoughts, his customs, feelings, ideals, beliefs, aspirations". This does not mean that the artist simply narrates himself in the work; in it he exhibits himself, he shows himself as a mode.
>
> [Eco 1970 (1968): 14, our translation]

Art, having undergone enormous fluctuations on every scale, as has society, is of its own disposition inclined to contribute to meaning, methodology, spatiality, and temporality in order to retrieve old narratives and, at the same time, to build new ones. Art, as a story-telling which identifies in *saying also a form of doing*, is not only a rhetorical way of reducing the speaking process of re-producing something preconstructed but also a manner of contributing to the production itself, as a continuous reference to the extra-societal setting. At the same time, recalling Deleuze's view, in this posture there is not necessarily an intention to communicate; according to him, the relationship between art and communication is nonexistent:

> The work of art is not a tool of communication, it has nothing to do with communication, the work of art does not contain information, but on the contrary, there is a fundamental affinity between the work of art and the act of resistance (previously defined as the only plausible possibility of counter-information).
>
> (Deleuze in "Art as an Act of Resistance")[6]

Visual anthropology, aesthetic ontology, biopolitics, and biosemiotics of culture and body are some of the disciplines which, without necessarily resorting to the paradigm of communication, deal with the artistic text, its production and proliferation, and the mechanisms that the text triggers directly or indirectly as a fundamental aspect capable of casting a bridge between tangible and possible societies. A dimension of potential, and therefore linked to the future, is often impregnated in making art whose objective, however, is usually far from the directive function of being a unilateral trajectory, coming closer instead to embodying indexical and certainly evocative suggestions. Jury Lotman, one of the major exponents of cultural semiotics, refers to art as a secondary modeling system, whose

dialectic focuses, as in the games paradigms, on the inventive dialogue between the primary language, certainly communicative, and multiple natural-cultural instances.

Art, as a paradigm of reference on which to base oneself and from which to unfold, "is a singular composition of chaos through form, gesture and environments that take on a concrete corporeity in the space of communication, vision and projection" (Berardi 2018: 29, our translation). As a preponderant part of the implicit epistemic foundations, these are discursive ruptures of monolithic criteria whose distancing from the pre-established amplifies horizons within a liberation in the alternative. Art as an alternative created language, evident avant-garde work, and constant method represents a process very similar to science as in Heisenberg's affirmation, quoted by Formaggio:

> Both science and art give form over the centuries to a human language by means of which we can speak about the most remote parts of reality, and the coherent series of concepts such as the different styles of art are the different words or groups of words of this language.
>
> (Formaggio 1976: 80, our translation)

Thinking of art as a semi-systemic world but also extending the inclusive perimeter, as an aestheticized panorama and a widespread means of evident artificiality, leads us to the necessary untangling of the spatial morphogenesis of digitality and analogy, which will be the second part of this chapter. The philosophical contribution of this text consists in conjugating the analysis of works of art with assumptions and deductions about how the echo generated from artistic awareness is pervasive, insofar as it is a signification of the potential *actualized* through the recognition of existing otherness, the fundamental crossroads of an immanent congruence, the combinatorial designation of sensitive variables, and co-possibilities.

In 2001, Strauss and Fleischmann academically presented their artistic project *Murmuring Fields*, the prototype of an informative universe in which real space becomes a diffuse and hybrid environment, interfacing and interacting with the virtual, enabled *by* and *with* the body, defined by the researchers themselves as "a physical interaction space filled with data" (Strauss *et al.* 2001: 2). Mixed reality, they explain,

> signifies the interconnection of the real and virtual producing a new framework for communication and interaction possibilities . . . amplified through the notion of a shared environment: a situation in which participants discover their interdependence in exploring, perceiving and creating the world.
>
> (Strauss *et al.* 2001: 3)

Already in *Liquid Views*[7] – *Narcissus Virtual Mirror* (1992–93/2007), Strauss e Fleischmann had created a compelling avant-garde work, where the *virtual touch* played the role of an interface between digitality and corporeity, where sound and image interacted and blurred. It consisted of an artificial water platform in which, when used as a mirror, one's own portrait was reflected as in a real surface: the action of looking was accompanied by the sound of water movement. The body, its contemporary action, and its inhabitation are to be contemplated in close connection with its variant and virtual, algorithmic integrations: the data and matter of which they are made are not merely a binary series of abstract numbers but are also founding elements of devices in which to mirror and construct one's own identity in relation to that of others. This subjectivity is in co-construction with the changing world and its *systematizing devices*.

We observe the human being in their *trans-subjective* and inhabiting extension in the environment, including both the tangible, terrestrial dimension, and the digital dimension of cyber space, made up of data and information matter. During the *Cuerpo, sujeto y reflexiòn semiotica*[8] congress at the University of Granada (2022), there were numerous opportunities for reflecting on the cyborg dimension. In the round table *El cuerpo Ciborg: del mito al sujeto posthumano*,[9] presided over by Domingo Sánchez-Mesa and Nieves Rosendo, the process of *cyborgization* was considered as one of the possible ways of overcoming the dual gender, as well as approaching the establishment of a new, primarily political paradigm.

Filippo Silvestri, too, in his contribution titled "Body and mind, their lives in extension. Phenomenologies and semiotics of the new post-pandemic cyborgs"[10] profiled how the new subjectivizing dynamics are necessarily and a priori cyborgs. Let us recall, for instance, artists such as Manuel de Aguas with his implant on both sides of the head designed to perceive and measure specific qualities of the environment such as atmospheric pressure and temperature, or the eyeborg Rob Spence, a filmmaker with a prosthetic eye consisting of a micro-camera inserted in the eyeball.

"In the perspective of a semiotics of text and discourse – says Fontanille (2003: 3) – the body is above all a site of meaning, and of a meaning that takes shape from the sensations and impressions that this body experiences in contact with the world". In experiencing the inhabited, the body situates itself by occupying a place that in turn welcomes it, envelops it, expels it, and that, in any case, assumes it as cohabitant: the human–environment relationship, according to this inclusive perspective, is bilateral. Technology has since ancient times interposed itself on this connection.

3. The semiotics of living

The semiotics of living, the matter of the world and nature, of the visible and the invisible, as well as bodies of all kinds and species, also change in

contact. It is a question of appraising the receptivity of the environment from which the human being intervenes and acts, plastically and figuratively, in the interpenetration of a mutual synergy. Emerging and showing, subtending and concealing, protruding and welcoming, dichotomies of apparent extremes interpenetrate with individual and social tendencies in which these and other polarities mingle and alternate with further semiotic axes: those of narrative structures intrinsic to cultural determinisms, those of textual independence that treads unthinkable paths, those of gestures without a category because they are inchoative in poems where rhythm and harmony do not reflect norms but become confused exceptions.

The face, besides being a physiological and bodily, poetic, and alchemical *punctum*, is also the central core of today's digital society: its agentive and expressive gradients in relation to ipseity and otherness, whether living or nonliving, human or nonhuman, must be considered. It deserves to be recognized for its narrative value and embedded variant. In analyzing the face within the environment that we have just described, it is necessary to consider the topological instance, identifying internal, external, and tangential face-world relational forms and thus elaborating the trichotomous arrangement of

- the face in the face
- the face in the world
- the world in the face

Considering instead the aspectual instance, there are practices and trends that occur, over time, between the body-face-real and the body-face-artificial by means of technologies and prostheses. A kind of measurement and in some cases alteration (on incremental or decremental scalar gradients) of sensorial, aesthetic, and communicative properties on a pragmatic basis therefore takes place: this will spill over into the *typologization* of macro-areas (which stabilize and categorize, obviously simplifying, the man-machine relationship) with particular attention to the intervening thresholds. Marcello Ienca spoke of this in proxemic terms: suggesting a human-technology (and face-artificial intelligence) relationship based on cooperation rather than competitiveness, he divided the navigation space into enhancement, transformation, and recombination.

> Whatever exists – says Lotman (1990: 132) – is subject to the limitations of real space and time. Human history is but a particular instance of this law. Human beings are immersed in real space, the space which nature gives them. Human consciousness forms its model of the world from such constants as the rotation of the earth (the movements of the sun across the horizon), the movements of the stars, and the natural cycle of

the seasons. No less important are the physical constants of the human body, which posit certain relationships with the outside world.

The limitations to which Lotman refers imply the conscious demarcation of a circumscribed dimensionality, the basis for any analysis as a semiotic configuration. The reference to the immersive grandeur of real space denotes the position of the bodies of living beings within this context and necessarily contemplates forms, rhythms, and densities whose limits are partly unknown: the real, physical, tangible, accessible space interpenetrates and integrates with the liminal, fictitious, mythical, virtual, unintelligible space.

In the uncertainty of unpredictability, vector tensors are made up of forces and factors that influence the functional field which, together with the structural field made up of notions as well as geometries and models, gives rise to the semiotic universe of *fundamental interactions*. The spacing of the face is not limited to the material circumscription of the human, physical face, but it is from there that the generation of a complex argumentative textuality arises, branches out, and proliferates, which is unsettling and involving, but distinguishable and examinable. If, on the one hand, we accept the constitutive naturalness of human physiology and the physical apparatus in which it exists, on the other hand, we know that the steps for the definition of the natural are cultural, social, and intersubjective, and, in their multiplicity, an interpretative and generative process of meaning is involved, which actively participates in the process.

Physical naturalness brings us back to discursive naturalness; the naturalness of data signs, even algorithmic ones, is a utopia: "the mythical algorithmic disintermediation, in practice, seems to be of variable geometry" (Airoldi and Gambetta 2018: 36). Naturalness is intimately linked to neutrality, and its illusion and nonexistence from an algorithmic point of view are addressed in the text titled "On the myth of algorithmic neutrality" in *The Lab's Quarterly*. What elements are contained or excluded in the face from a computational point of view so that algorithms can do their job, namely discern and process data? What factors enter the selective range allowing for definitions and dictionaries, historicization, and analysis in the process of discretization, and how do mathematics and geometry come into play by subjectivizing rather than objectivizing? What ethics apply to the new materiality of *dataified* signs where we sometimes refer to indexical faces of flesh and bone and sometimes instead to embedded pixels?

In this material transition, the body takes on a digital life implying settlement in an elusive shadow space, where transient movements allow for a spasmodic coming and going, where the concreteness of the real is only partially brought back into the digital presence, striated, layered, and diffused. Granting the face the meaning it occupies is not only an interpersonal

matter but also trans-personal, realized between tangible bodies and the concrete environment through new mediations, through their intangible subtle versions. The genealogy of spatial management and gestation in faces, and between faces and their dwellings, is relevant to understanding algorithmic mechanisms within a complex society and possibly counteracting affirmative pulsations by seemingly infinite progressivisms and quantitatively accumulating codified, meticulously structured knowledge. The face is an interface and has always mirrored itself in the devices at its disposal to recognize itself, to find the counterpart that corresponds to it: in the reverberation, spatiotemporal residues are created, which we attempt to probe by propitiating the critical and innovative arrangement of transversal materialities that cross its structural plane.

4. Datafication and matter in the contemporary ecosystem

Contemporary ecology is evidently hybrid, a compendium of a shared field between the analog and the digital, of matter that is body and data, embedded data, *datafied* body: it is a space that expands in the inhabited but is conformed in and with the inhabiting body.

> To consider the face as a device that tells transmedia stories implies not only allowing oneself to be guided by the inchoative stimuli dictated by its surface, but also propitiating access to the deep levels and stratifications of form and content. Such storytelling is, therefore, identified, processed, clustered, archived.
>
> (Barbotto 2022: 140)

The metaverse, a romanticized extrapolation of a digital universe, is one of the contemporary versions of the aforementioned mixed reality: transmediality emphasizes the inclusion of the thing, the object, and the matter in the sphere of the knowable and not merely in the abstraction of the distant ephemeral. If we continue to discern and polarize dimensions such as body and mind, external and internal, real and digital, and subject and object, we drastically reduce the possibilities inherent in intermediate states and the contemplation of an embedded vision, that is, the subjectivation of a thinking body that conforms synchronously in the process of materialization.

The environment, the terrestrial setting, or the space we are used to referring to as our surroundings is foregrounded not as a passive social medium but as a systemic foundation in which human beings wander and establish themselves, often brutally imposing themselves on the established situation. This stabilization has brought about catastrophes and disfigurements, but it has also questioned itself as it has made way for welcome rather than domination, allowing the inhabited space to be the sustenance

with which to collaborate, rather than the pivot on which to erect illusions of infinitude. We are surrounded by data, but in turn we surround them: Massimo Leone speaks in these terms in relation to pixels:

> We are surrounded by pixels. And we surround them. As soon as we wake up, we look at our e-mails, web pages, social networks in our mobile phones; we interact with the liquid crystal displays (LCDs) of household appliances in the kitchen, in the bathroom, in the car; the screens of our computers "speak" to us through patrons of pixels; as we travel, giant panels in airports and train stations tell us the times of arrivals and departures, pixel by pixel.
>
> (Leone 2018a: 5)

It is this inter-penetrating circumstance that interests us: how we intervene in the data, how the data intervene in us, and how to unveil the mechanisms of this media co-action even though it is often concealed, compressed, and obfuscated.

Parikka's geology of media (Crawford 2020: 32) comes close to the theoretical proposition that media are a kind of extension of the earth, rather than of the human being. And this seems even more pronounced if we consider the relationship between media and artificial intelligence established in the COVID-19 pandemic and partially maintained to the present day:

> [W]e all know that AI has entered practically all domains of our lives and will continue to do so; the current crisis has only made the move to AI speedier. Universities all over the world collaborate with governments and corporations to build stronger AI units to analyze big data, to operate machines, to augment reality and create 3D learning environments. Many of these new AI applications will help in providing solutions for the challenges of the (near) future, such as controlling disease and the consequences of climate change. But all of this is not self-evident. In these new AI centers, there is sometimes an ethical committee that advises on the possible risks and benefits of specific applications.
>
> (Eugeni and Pister 2020: 92)

In Chaosmosis, Guattari (1992: 15, our translation) responds negatively to the question of whether we should consider the semiotic production of mass media, information technology, telematics, and robotics as a separate entity from psychological subjectivity: "The consideration of these machinic dimensions of subjectivation leads us to insist, in our attempt to redefine it, on the heterogeneity of the components that make up the production of subjectivity." In considering the category of the nonliving active and tensive, of the animated object and dynamic media, which assume

a performative and coactive role in the environment and experience, we introduce the conception of *thingness* as pertaining to the sphere of the living: to do so implies attributing a presential breath capable of unraveling vibration and movement in a kind of distributed transversal propulsion to any material form, even those generally considered inert. Does a stone vibrate?

The data perform a process of depersonalization, which amalgamates unitarities to form clusters and sequences, anonymous, heterogeneous, and multidimensional meanings, interpretations that create gaps and which, almost denying subjectivity, declare and datify by negation. The data perform: in the exhibition *The performing data* Fleischmann and Strauss (2011: 49) show their interactive media artworks from 1980 to 2001. "The Data Performers are involved in space-time environments which we call enterable spaces of thoughts (*begehbare Denkräume*), within which the viewer becomes the participant of an interactive plot. Inspired by Aby Warburg's neologisms such as 'space of thought' (*Denkraum*) or 'psychological containers of energy' (*psychische Energiekonserven*), we develop aesthetics of virtual spaces of knowledge and thought.

Interactive data networks have enlivened everyday life: their interest lies in understanding mixed reality and capturing technological intermediation through media art to make users more active and reflective.

> In order to transform information into knowledge, people need to make choices, compare, evaluate, and interact with others. Instead of intellectual and technical automatization for the processing of information into alleged knowledge – as computer science does – media art combines automatism of the machine with an act of uncovering of its structures. Data Performers, data mapping and visualization are used in order to give a new structure to the already existing knowledge, and, thus, to rediscover it (reference to works *Home of the Brain, Semantic Map, Media Flow*)".
>
> (Fleischmann and Strauss 2011: 53)

The sphere of digital data seems to have expanded and gained ground in the space of meaning, penetrating the forms of everyday life, and revealing itself to be matter as well as concept and event: automation transcends the industrial and military sphere, and artificial intelligence reaches all contemporary spheres. Data and the digital information society are increasing exponentially and magnifying their scale, so much so that they are considered by some to be the fifth element, a new manifestation of the mass-energy aggregate: according to physicist Vopson of the University of Portsmouth, "currently, we produce ~ 1021 digital bits of information annually on Earth. Assuming a 20% annual growth rate, we estimate that

after ~350 years from now, the number of bits produced will exceed the number of all atoms on Earth" (Vopson 2021).[11]

In his latest publication he proposed an experimental protocol to test the validity and consistency of the mass-energy-information triad by proving both the information conjecture, that is, the observability of information matter in the universe and the existence of information as the fifth state of matter in the universe. Building on the principle of Landauer, who as early as 1961 claimed that bits had a precise physical consistency and associated energy, and combining Shannon's information theory with the laws of thermodynamics, the author extends these insights to the principle of M/E/I equivalence, that is, matter/energy/information.

Of course, to think that a piece of limestone has the same substance as an artefact made of cotton, a concrete structure, an electroacoustic transducer, a light sensor or a set of data and big data, and that in turn all these elements are subjectivized to the extent that they play a coactive and proactive role, is a risky step as well as a simplistic attitude. Digitality, as an instance of *modalizing*, a medium of interactive processes, a resilient approach that adapts an original package of signs into a conventionally adequate new script, is certainly a mechanism of invention. Its history can be dated in fairly recent terms: a few dozen years have been enough to allow it to pervade our daily lives. In this discreteness there is an incessant *cymatic* translation, from the text to a new format of itself and again from the new text to the semiosphere of interpreters; at the same time digitalization has allowed *transversality* to prosper more easily, enabling a horizontal inclusion of the users: interpretants and producers become the foreground of the sphere of digitality englobed in one identity, the prosumer. The act of enunciation is increasingly digitalized in its production, reception, and, of course, during the transition where a meaningful field takes shape, with its own consistency characterized by flowing waves captured by structural mechanisms known, in general terms, as medias. It is of great importance to recapitulate the role of the media which, as the etymology of the word itself points out, consists in offering a platform of mediation that, it should be noted, is always filtered, politicized, and, in a single word, semiotized not merely by individuals but by large corporations.

It is inevitable to contemplate our contemporary entangled field as a contorted but extremely organized (also) digital one, where a continuous encoding and recoding takes place, where authority is partially dissolved but where even the identity procedure (construction, narration, sharing) is somehow disintegrated, distorted by new characteristics in the process of definition and understanding. Its material constitution and the contact of the *enveloped* body-faces with their interaction devices, the energetic and therefore material conformation of the binary codes, their remains, their disappearances, the visual but also epidermical and synthetical impact of

a virtual body-face with a flesh body-face, the highly prolonged use of certain cervical muscles when using technological apparatuses essential to making digitality live, are, among others, some potential topics for new research. The digital domain, which now seems to be going hand in hand with the analog world, does not require separate or preferential treatment but instead becomes the warp of a weft with which it constitutes an inevitable weaving of our contemporary and future times: the face is, ipso facto, an intense conglomerate of both. To consider space as an agent and digital data as coauthors of this agency, we need to understand their exponential growth, their functioning within digital citizenship, their massive energetic constitution, and their extractive nature.

5. Dwelling *in-between*

Each set of molecules has its own construct of natural frequencies depending on their structure, materials, and delimiting peripheries. In music, for example, the normal modes, and therefore the natural frequencies that emerge from the vibration of instruments, are called harmonics. And this makes us notice how the normal and the natural seem to belong to a similar semiospheric circumscription, which interpenetrates the artificial aspect. The matter, therefore, the materials that come into contact with each other, propose a semiosis attractive to interpretation. The artificiality of the face and the interaction between matter and flesh, analogical or digital, tangible or intangible, lead us to think of material pluralism as a substantial need of the human being: Jacques Fontanille's studies of the semiotics of the body have thoroughly examined this field, and by combining his suggestions with insights from the domain of art, a syntactically readable narrative landscape of the face can be constructed. The ways in which some artistic proposals have interacted with various degrees of artificiality in both a performative and a representative way are possible topics to be analyzed: portrait depictions, olfactory/sound essences, make-up, masks, prostheses, from the embodied face to the digitized face, from the creation of stochastic virtual identities to bots and cyborgs. And in part we will do so. However, it is necessary to understand how the artificial face moves beyond the artistic sphere and is instead diffusely installed in everyday life until it reaches isomorphic pervasiveness in artificial intelligence, which stimulates us to ask ourselves the following questions: how do art and artificiality interact in the contemporary world and how did they do so in the past? How are artificial faces articulated? What kind of relationships is formed when faces and other materials come into contact? What type of materials are those? Is the digital world also endowed with material that dialogues with the face? Is the virtual face also a material face? In this chapter we answer these questions using ethnographic, inferential-abductive, and

argumentative-narrative methodologies based on a selection of the numerous bibliographies/videographies existing in the semiotic and literary fields.

To deny the spurious entity of digital experience and corporeality would procrastinate the necessary and indeed urgent reflection on the *in-between*, on the evolution and crystallization of this hybrid reality. Homi Bhabha speaks of inter-mediality (*in-between*) as an internal difference, a vivential edge, an interstitial intimacy: "It is an intimacy that questions binary divisions through which such spheres of social experience are often spatially opposed" (Bhabha 1994: 13). We would be dealing with an *other* space: "by exploring this Third Space, we may elude politics of polarity and emerge as the others of our selves" (Bhabha 1994: 39).

Besides, the intermediate space, as the place of non-dual being, is at the heart of many philosophies and cultures across the centuries: in "Being. Approaches to non-duality",[12] Jean Klein (1989), a musicologist and doctor of the modern Advaita Vedanta school, brings together the writings of various authors who reflect on the consistency of non-duality and refer to consciousness as instantaneous and direct perception of the self and thus of the world, syncretism between knower and known object, between perception and perceived thing.

The simultaneity achieved in interstitial positioning is still mediated and semiotized, but performative competence and presential disposition contribute to the immersive grasping of knowledge. Now, the point is not to seek consciousness in the alternate dimension of digitality, and especially AI, but rather to set up ethical philosophical mechanisms whereby consciousness as a subjectivizing entity manifests itself transversally, embedding itself in the matter. In Chapter 5 of his book *AI and Consciousness* (2015: 117–150), Murray asks whether the aspiration of AI to resemble human intelligence is also reflected in the possible tendency of AI to achieve a state of consciousness and brings the reflection back mainly to the plane of the body and the transhuman extension of life. *Vitalists of matter* seek to recover this forgotten union with the beginning of progress understood as intensive production and tend to recognize the stratification of living in matter, in its multiple and sometimes ineffable forms of life, predisposing the liberation from the anthropocentric posture and approaching a – almost animistic – transversality of living: "I think it is both possible and desirable to experiment with the idea of an impersonal agency integral to materiality as such, a vitality distinct from human or divine purposiveness" (Bennett 2010: 125).

6. Conclusions

The twenty-first century is characterized by the predominant presence of a new increase in digital space, which is also the gateway and receptacle of a new materiality: under the long-standing influence of a capitalist

system attracted by privatization, one can imagine how the races for the privatization of this space and this new materiality are conspicuous: the artistic ensemble IOCOSE spoke about this during the presentation titled "Lip-synched Stardust"[13] at the Academy of Fine Arts and Design of the University of Ljubljana. The ethereality that is thus often attributed to AI omits, erroneously, both the *soft* and the *hard*[14] apparatus made of heavy materials and minerals, the founding elements of privatizing, sometimes authoritarian and violent geopolitics: the creation, movement, and archiving of this corporeity would, according to Vopson (2021), constitute an informational catastrophe. Jane Bennett, opting for the intrinsic vitality of matter, asks:

> How would political responses to public problems change were we to take seriously the vitality of (nonhuman) bodies? By "vitality" I mean the capacity of things – edibles, commodities, storms, metals – not only to impede or block the will and designs of humans but also to act as quasi agents or forces with trajectories, propensities, or tendencies of their own.
>
> (Bennett 2010: 10)

To understand their trajectories, we must understand their movements, and to do so, we have to take a step forward: we can no longer consider the data we consume and generate as continuities lost in the cosmos. Instead, we are dealing with practices whose existence is an attempt at quantification that renders the abstract categorizable, that creates object bodies with magnitude; we are handling collective agglomerations stored in enormous centers of *virtualized* and, in some ways, already *actualized* if still latent meaning. How does the process by which information bubbles are formed work? Algorithms are the linguistic processes that underpin the functioning of artificial intelligence: they are computer developments dictated by human programming and based on a binary code whose intricate combinations give rise to complex problem-solving processes. Bits are the basis, bits are data, and following the logic just adopted, data are matter and energy.

The innovation of recent years thus lies in thinking of the information system as part of the ecosystem as well, thereby recognizing the material experience of data. At the same time, a major change is taking place concerning the origin of the instructions dictated to machines, which can now act *retroactively*[15] and process information whose instructions are internally self-generated: this cumulative process conveyed by recursive neural networks is endowed with memory and is the basis of *deep learning*. In acquiring the capacity for mnemonics, as well as for classification (as in the case of supervised learning) and pattern analysis (as in the case of unsupervised learning), the machine equips itself with predictive mastery and thus

co-constructs the arguments on which it is prompted: although on the one hand this constitutes great functional potential that we witness as a daily occurrence, on the other hand there are also numerous ambiguities and possible degenerations. The fact remains that we are increasingly turning to computational knowledge to construct models in which human intervention is then almost peripheral or, in any case, posthumous.

Similarities and contrasts between intelligences based on human and artificial neural networks, characterized mainly by retroaction and automatism, are a topic for reflection. It is necessary for us to consider data as multilevel aggregations whose value, besides being numerical with binary composition (at the basis of any algorithm there is a postulate based on +1, -1) is also and above all a social and cultural value. In fact, in order to arrive at such a label, the data must take an elaborate route, which often involves new forms of extractivism. This phenomenon is the thematic focus of Aksioma's "Tactics & practice: new extractivism" talk series[16] in which researcher and artist Vladan Joler models and visualizes various elements of the new engines of extractivism, enumerating, explaining, and graphically representing them. The narrative path he proposes, which is rather dysphoric and alarming, sees the gravitational force as the starting point from which to establish a relationship with the environment, which is then fueled by social forces marked by the "new colonization": algorithms are the transversal skills that order and determine the prescriptive modalizations based on the modal value of power (what can and cannot be done). Interfaces constitute the mediation between the visible and the invisible; data are extracted, studied, sold, and aggregated into new bodies inhabiting new territories: everything we create conforms an extracted and collected content into an information bubble of great potential but enslaving, made up of fractals and new waste currently ingested.

This reflection therefore has to do with the openness of the world, with eco-systemic action and performativity, and with the disposition and dedication of the body. The physical-algorithmic face is the result of this hybrid becoming, the encounter of the environment and human-non-human interaction. In *Other Possible Dwellings. Nomadological Architecture*[17] the researcher Laura Rodriguez affirms that, despite the conflict generated by immersion in this dualism of parallel societies (real and virtual), the technological subject is a participant in its own transformation and in the places it inhabits, marking a real architectural breach between the two worlds from the point of view of habitability.

"The technological subject, also known as the neo-nomad, makes use of technology to transcend time and space through the use of bodily extensions or interfaces that extend the limits of the senses and connection and interaction with other spaces or subjects. He is a subject

for which the concept of habitability no longer means being physically in one place or another, insofar as the new human-computer relations developed in today's society have transfigured its concept, giving rise to changes in the relations between the local and the global, between places and spaces. [. . .] Architectures must begin to be designed taking into account multiplicity, the invisible space of the immaterial and its flows of connection, the cyberspace that constitutes the virtual city. The need for an architecture of interfaces and nodes makes the development of a rhizomatic structure essential".

(Rodriguez 126, our translation)

In the hybrid and contemporary environment, the participating bodies, living and nonliving, are constituted in otherness through the topology of the limit that is both extension and retraction, that has a diffuse perimeter because it is the semantic seat of both intrinsic facts and writings and of propulsive and receptive tendencies: that is, it is on the threshold of the limit, in the conflict that is generated in it, that hybridity develops. The thing, the object, the nonliving opens its boundaries to cover dimensions that were previously excluded and solitary in that virtuality, so present on the screens, but so distant as consistency and material existence: the tendency to have exiled the data that we create and that, at this point in the evolution of artificial intelligence, are self-created from the most innovative algorithmic formulas has generated a sort of social and environmental psychosis of a schizophrenic kind. The solidified boundary is now fading, integrating in both senses. Reflecting on the semantic depth of digital space, including through the study and visibility of material backgrounds as well as through the analysis of the underlying transpersonal and sociopolitical dynamics, implies a new awareness of common sense, a propitious gateway to the humanistic and artistic spheres. Contemporary bodies move between hybrid dialogic tensions whose decentralization from anthropocentrism is necessary to fertilize the integration and cooperation of physical-analog and digital-algorithmic experiences and to facilitate, therefore, a critical but cooperative habitability in the *meaningful consciousness* of new ecosystems in the making.

Notes

1 This chapter results from a project that has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program (Grant Agreement No 819649-FACETS; PI: Massimo LEONE).
2 The etymology of the word "*method*" comes from the Greek language as a composition of *μετά* (meta) and *οδός* (odos, path).
3 Original text: "Toda sintaxis figurativa se apoya en la interacción entre materia y energía, y los equilibrios estables o inestables de dicha interacción producen figuras identificables. Desde el momento en que los objetos son tratados

como cuerpos en interacción, y no solamente como formas abstractas, integrados además en una sintaxis figurativa, la interacción entre materia y energía adquiere el aspecto de una interacción entre movimientos de unos y envolturas de otros" Fontanille (2008: 226).

4 Veiled by a kind of mystery intrinsic to its very nature, "arcane" also means occult and scenario of the playing field of making (*Ars + Khano*).

5 Original text: "L'alchimista era chiamato 'artefice', questa scienza era comunemente definita la 'Grande Arte' e il processo alchemico, l'opus, assumeva il nome di 'Grande Opera'. . . . Proprio come l'opus, il processo dell'arte trova simultaneamente il proprio esito e la propria configurazione a più livelli: a quello fisico dei materiali trattati, a quello visivo e armonico delle forme, e quello ideale dello spirito, infine a quello 'sapienziale' dei complessi e numerosi significati, ricondotti anch'essi alla perfetta unità iconologica dell'allegoria."

6 Deleuze, *El arte como acto de resistencia*, videoconference available in web: www.youtube.com/watch?v=Cq_zP4LSyik. Last consult 5 of September 2023)

7 https://youtu.be/bjq13wyjhA8 (Last consult 5 of September 2023)

8 *Body, subject and semiotic reflection.* https://congresos.ugr.es/aes2022/

9 *The cyborg body: from myth to post-human subject.*

10 Original title: "Il corpo e la mente, le loro vite in estensione. Fenomenologie e semiotiche dei nuovi cyborg post–pandemici".

11 Possible integration for further study: "Each day on Earth we generate 500 million tweets, 294 billion emails, 4 million gigabytes of Facebook data, 65 billion WhatsApp messages and 720,000 hours of new content added daily on YouTube. In 2018, the total amount of data created, captured, copied and consumed in the world was 33 zettabytes (ZB) – the equivalent of 33 trillion gigabytes. This grew to 59ZB in 2020 and is predicted to reach a mindboggling 175ZB by 2025. One zettabyte is 8,000,000,000,000,000,000,000 bits. To help visualize these numbers, let's imagine that each bit is a £1 coin, which is around 3mm (0.1 inches) thick. One ZB made up of a stack of coins would be 2,550 lightyears" (Vopson (2021).

12 Original title: "Essere. Accostamenti alla non dualità".

13 https://aksioma.org/lip-synched-stardust

14 Please refer to the chapter titled "The Mineral Layer" in *Atlas of AI. Power, Politics, and the Planetary Costs of Artificial Intelligence* by Kate Crawford (2020) for more details.

15 Retroaction is often used in physics, but it can apply to any dynamic system that is capable of actively considering the results produced by itself and thus possibly altering its future, even prompting systemic changes.

16 https://aksioma.org/new.extractivism.exhibition

17 Original title: "Otros habitares posibles. Arquitectura nomadológica".

11 Dating faces

The facial space of belonging in online (dating) communities[1]

Elsa Soro

1. Introduction

Social networking services (SNS) have emerged since the early 2000s as the primary platforms for the exhibition and representation of digital faces. Facebook, commonly referred to as "the book of faces", has significantly established a new visual paradigm for presenting, circulating, evaluating, and modifying faces in the digital realm. The rise of digital photography, coupled with editing filters and applications, has enabled the infinite replication and alteration of digital faces. Consequently, the role of selfies, especially with the introduction of forward-facing smartphone cameras, has been extensively explored at the intersection of visual studies, media studies, and semiotics. The act of posting self-portraits on social media, often associated with narcissism, has been reframed by drawing on Foucault's concept of the culture of self and McLuhan's (McLuhan, 1964). media theories. Self-portraiture and its distribution through social media have become catalysts for understanding the relationship between the self and physical space. Notably, the *Selfiecity* project led by Lev Manovich and his team at CUNY (Tifentale and Manovich, 2015) has provided insights into this dynamic, such as producing rankings of the most smiling cities based on selfie visualizations. Social media platforms serve as vast archives of faces, subjected to various haptic operations like scrolling, exploring, swiping, saving, and deleting digital facial avatars.

The expansion of such digital face space has been further accelerated by the global COVID-19 pandemic, which forced people into isolation and transformed social and private spaces of interaction. Traditional social gathering places were temporarily or permanently closed, leading to a surge in digital remediation. Screens became the medium through which static digital profile avatars or dynamic fragments of the body captured by cameras on platforms facilitated interactions during periods of global confinement. Notably, screenshots of video calls on platforms like Zoom have emerged as digital traces of facial interactions, forming new mosaic compositions that garner attention on social media. Such phenomena have

sparked researchers' interest in exploring the aesthetics of the digital face as exposed by different social and digital communities.

While social media like Facebook and Instagram have been extensively studied as sites for identity representation and new aesthetic regimes, online dating platforms have not received comparable attention. Although research has examined self-presentation in online dating environments (Fiore *et al*. 2008; Ranzini and Lutz 2017; Degen and Kleeberg-Niepage 2023), impression management related to profile pictures (Gibbs *et al*. 2006), and users' motivations for using such platforms (Hobbs et al. 2016; Blake *et al*. 2022), a specific investigation into the facial space produced by dating sites could contribute to a broader understanding of visual digital culture transformations. In such a vein, this study aims to explore the processes of digital image storage, production, and manipulation within dating sites and applications. Specifically, it will examine dating site interfaces as spaces that facilitate the remediation and recreation of face-to-face encounters. On the basis of such premises, the work aims at approaching a wider facialization of the users' "life" operated by the ecosystem of commercial marketplace; in such regard the case of the most popular short-term rental platform, Airbnb, will be embraced under the notion of home facialization.

This research builds upon the author's previous examinations of online dating platforms (Soro 2021; Soro *et al*. 2021; Soro 2019) where she examined how tourism discourse shapes different modes of self-presentation in online intimacy. This time, the focus is how the architecture of popular dating sites invites users to browse through streams of facial images in search of attractive mates, thus commodifying the digital face. The analysis does not concentrate on a specific sample of apps but aims to understand online intimacy as a community discourse shaped within the polyphonic landscape of various dating sites and platforms. Through different forms of self-exposition, platform interfaces generate distinct processes of "reading the face" (or looking beyond the face). In line with Umberto Eco's concept of *intentio operis*, this research aims to uncover the visual patterns of meaning created by different platforms using the archive of users' uploaded and stored digital faces.

To achieve these objectives, this work will be structured as follows: The following section will provide an overview of algorithm-driven online platforms as "platforms of the face", which involve processes of facialization beyond Facebook. Then, the example of Airbnb, which combines stylized face symbols with place symbols in its logo (Bélo), will be briefly discussed to illustrate the creation of a facial space. The popular short-term rental platform will be interpreted as a "Facebook" of homes and domestic environments displayed in photo albums and subject to a reputational system.

The second part of the text will examine online dating discourse as a marketplace, incorporating the dual connotation of market and place.

The commercial nature of dating platforms as intermediaries facilitating asset exchanges will be explored, along with the necessity of an intermediary space for such exchanges to occur. The core of the study will involve reinterpreting the dating site interface, a topic extensively addressed by semiotic approaches. By delving into the etymological connotation of "interface" as being between faces, this notion will be analyzed as a temporal waiting mechanism and a spatial distance machinery that facilitates the production of online intimacy. The dater's narrative programs (semiotic versions of user experience), ranging from selecting profile pictures to engaging in swipe-and-match mechanisms, will be scrutinized. Lastly the piece will critically examine the curious resemblance between the Elo (the alleged profile score algorithm used by the popular dating app Tinder to group daters based on desirability) and the Airbnb Bélo logo.

2. Face-platforms: Airbnb and the facialization of home

The face as a meaningful dispositive and its controversial relationship with the notion of individuality has been the object of inquiry from different disciplines, from psychology to art theory, from neurophysiology to physiognomy, throughout history. In the present, the advent of the algorithmic face recognition technologies has revamped reflection on the politics of face (Gates 2011; Edkins 2015), often nurtured upon the notion of faciality introduced by Deleuze and Guattari (1980a).[2] In such a vein, one of the main controversial issues regards the alleged objectivity of face recognition systems that according to a critical reading[3] of this technology responds to existing power and class structures in the new surveillance systems.

At the same time, in the context of the platform society (Van Dijck *et al*. 2018), marked by so-called platform capitalism (Srnicek 2016), algorithms have regulated subjectivity processes, performances, and representations through reputational mechanisms, rating, and data surveillance, and self-quantifying practices (Lupton 2015). In such a vein, platform studies have excavated the setting, the interface mechanisms, and the correspondent discourse, engaging with uncovering strategies of self-commodification (e.g., Fisher and Fuchs 2015; Fuchs 2014; Langley and Leyshon 2017). The boundaries that a platform provides and its algorithm-based function determine the user agency within it and its behavior models. Furthermore, besides the intrinsic nature of the assets at stake and their potential monetarization, platforms enable space for storage and circulation of images crowdsourced by the users. Arguably those images constitute a new series of digital archives consumed under different scopic regimes enabled by the different platforms. In such a vein, it is not coincidental that Facebook, both metaphorically and literally, acquired Instagram in 2012. Through this acquisition the company initially owned by Mark Zuckerberg centralizes

the bonds and the interpersonal relationships and interactions under a unique social media aesthetic that regulates a sort of *facialization* of the self by driving the transformation of the user life in a chapter of a *facebook*.

Beyond the aforementioned social networks whose initial core model has been centered around the profiling of users, a process of "facialization" arguably interests a wider range of digital platforms that are based on a totally different business model. In such a vein, Airbnb constitutes an illustrative example of the aforementioned process. The Bélo, the Airbnb logo introduced in 2014, is graphically a geometric combination of a face that stands for the people, a location icon to represent place, a heart for love, and then an A for Airbnb. According to Airbnb rhetoric, the community of belonging, visually illustrated by the Bélo, is inhabited in the platform by the figure of the host who interacts with the guest, through their facial avatars, by showing them their most intimate spaces, the home. Airbnb marketing proposition can be interpreted as a *facebook* of rooms and domestic ambiances "nicely" exposed in the user profile photo albums and subjected to a reputational system. Under its narrative of authenticity and diversity – as an alternative to the standardization of hotels – the brand arguably fosters a sort of mirror effect among the actors, both human and nonhuman, who inhabit the platform.

Such reflexive logic embedded in the platform interface induces a visual homologation aimed at provoking in the members of the community a "generic global familiarity": host and the guest can easily recognize each other through the common aesthetics of their profiles and their assets. Not only the furniture and the style must be adequate to a certain comfortably exotic common culture but also the micronarratives epitomized by the platform fosters a sort of "cultural homologation", as shown by existing research on the racial biases promoted by the platform (Edelman *et al.* 2017; Kakar *et al.* 2016, 2018; Leong and Belzer 2016). Findings from research done by two researchers at Harvard University (Edelman and Luca 2014) show a widespread segregator usage among Airbnb hosts who were found to discriminate against potential "Black-sounding" renters.

Lastly, such mirror effects can be extended beyond the domestic walls to the neighborhood and the cities where the properties advertised through Airbnb are located. In the 1990s, the urban sociologist Sharon Zukin (1995) crafted the notion of "domestication by cappuccino" to refer to a scenario in which urban public space is designed to be consumed through events and entertainment and by so doing rendered a space of surveillance and control against any form of urban conflict and resistances. With the disruption of platform capitalism, since the first decade of the 2000s, under the guise of its alleged reaction to tourism standardization, the Airbnb model progressively occupied housing units in contemporary tourist cities

encouraging gentrification and segregation processes (Guttentag 2013; Ball *et al*. 2014).

Within the fancy Airbnb aesthetics, people and spaces (at different scales, from houses to cities) "mirror" themselves within the border of a "trust-worthy community". The motto of the face-to-face encounter with the locals, as epitomized by the creative tourism discourse, produces a comfort vision field that excludes undesirable landscapes, homes, and faces. Seemingly, the online dating discourse, embedded in the site's visual figures, themes, and architecture, produces tensions between inclusion and exclusion logics.

In the following section, the face-to-face intimacy remediation enabled by dating apps and sites will be explored.

3. Phenomenology of a date

Grammatically speaking "dating" is the present participle of the verb to date and, according to the *Cambridge Dictionary*, means "regularly spending time with someone you have a romantic relationship with". Such a non-complex definition highlights yet at least two important aspects of the dating phenomenology: the act of meeting with someone for a certain time for a not better specifically "romantic" purpose. According to the different adjectives attributed to dating (for instance, casual) "dating" semantically moves closer towards the relationship domain of which dating represents the weak and uncommitted version. Dating then, in turn, represents a more "romantic" version of other intimate practices such as hanging out and hooking up.

Despite the phenomenology of the different practices included in the vast domain of intimacy across cultures, the majority of them entail an encounter between two or more actors in a given space. In turn, narratively speaking, the encounter implies a previous phase that consists in the "search".[4] Such a quest, in turn, implies an intermediation agent, which logically precedes the supposed immediacy of the actual intimate encounter. Throughout history and across cultures such an intermediation role has been discursively performed by different actors, from the family, passing through wedding agencies, to the Internet, and finally artificial intelligence.

In such a vein, the different studies on modern and contemporary courtship (Adair 1996; Hirsch and Wardlow 2006) have stressed the substitution of the familyhood intermediacy with other agencies and actors, both human and nonhuman, who are responsible for supervising mating processes. The commercial nature of such intermediacy has been increasing, given the professionalization of mating activities and the advent of wedding agencies. Love and sex as consumption activities and the role of the market in shaping love, sexuality, and intimacy within the neoliberal paradigm have been

at the center of several critical analyses (Duggan 2002; Illouz 2007). Such interpretations implicitly or explicitly evoke the Foucault (1976) theory on sexuality as the pivotal factor in the proliferation of mechanisms of discipline and normalization and the gender disciplining of sex frequently theorized by Judith Butler (2004). Furthermore, the advent of the Internet gave birth to "old" neologisms, such as cybersex (Blair 1998), paving the way for new online articulations of mediated intimacy till the appearance of such "new" neologisms as sexting. These increasing virtualization processes of sexuality have provoked different reactions among scholars, just to mention a few, from the enthusiastic Giddens (1992) who advocated for its decentralization, freed of reproductive needs, to the pessimistic theories of Bauman's liquid love (2003) that entails a dissolution of traditional bonds.

4. The facial marketplace of dating

Within this debate, the irruption of online dating practices stemming from Web Personals, the first online dating site invented by Andrew Conru in 1994, has represented a milestone for pushing further the analogy between dating and marketplace. The emphasis on the commercial exchange of goods has nurtured the main strand of literature on digital intimacy. In such a vein, studies on online dating (Heino *et al.* 2010) explored the ways in which the marketplace themes and figures resonate with online dating practices and how the market influences how users assess themselves and the others. The same dating apps and sites reinforce such an interpretation, playing with commerce metaphors: in such a vein the French site Adopte-UnMec logo represents a woman pushing a shopping trolley that contains a man; the parody of Amazon Dating pretends to offer "Hot Single Near You" for selling within the same e-commerce Amazon frame.

"Marketplace" is a composed noun that implies the presence of a spatial dimension for the commercial exchange of goods. In this regard, leisure studies in turn have put the emphasis on the "place" part of the expression by stressing the role of spatial dimension as pivotal in understanding the progressive commodification of intimacy within the digital sphere. By considering sex as a core aspect of leisure (Hardwick 2008; Devall's 1979) and accounting for its pleasure-seeking dimension, leisure studies have initially explored the intermediacy role played by spaces of leisure such as bars and nightclubs, labeled as sexy spaces (Caudwell and Browne 2011), and how leisure practices produce space and inform the construction of place and community (Johnson 2008). Within this view, the role of the Internet has been referred to mainly within the transformation of place production.

In such a vein, since the Internet has become a common tool used to seek friends and romantic and sexual partners, concerns have been raised about

the desertification of "real" places traditionally devoted to hook-up culture in favor of cyberspace accessed from desktop machines. Authors, especially in gay and queer communities (Mcglotten 2014), report a sense of loss for the replacement of public spaces for sex that "afforded rare opportunities for interclass contact and communication conducted in a mode of good will" (Delany 1999) with the advent of the Internet. Then, the advent of location-aware apps and the transformation of online dating to mobile dating marked a disconnection from a static computer and a return to allegedly physical spaces (de Souza e Silva 2013) to enable a new configuration of the intimacy marketplace.

The marketing discourse of the different dating apps emphasizes the possibility that a potential partner is nearby or has just crossed paths and consequently turns the current location of the user into a potential courtship or hooking-up space (accordingly to the scope of the usage). In opposition to the dating desk activity, the location-aware devices would enable an alleged reappropriation of physical space, augmented by the presence of potential digital partners. The marketplace can also be interpreted as the setting for the production and exposure of self-presentation. In that regard, academic literature on social media (Chambers 2013; Bullingham and Vasconcelos 2013) extensively analyzed the process of production and presentation of the self-online, evoking Goffman's self-presentation theoretical framework: one of the main interrogations has been whether the Internet has reinvented the social norms that guide us in everyday life. Against such a background, as Kalinowski and Matei (2014) noticed, "online dating websites are qualitatively different from many other online settings because of the anticipated face-to-face interaction" (p. 7). Such an assertion suggests an important shift in the intermediation agency. In contrast to social networks and social media such as Facebook, Instagram Twitter, and Tik-Tok, in dating apps, the online "operations" are prompted to lead to a face-to-face encounter.

In this sense, Tinder's former slogan "Match. Chat. Date", clearly indicated a narrative path from the online ("match" and "chat" phase) to the offline ("date" phase) which was supposed to be the venue of the final *performance*, whereas the online space was considered as the space for the *competence* construction. The expected passage from the marketplace (online) to the face-to-face (offline), sponsored by the dating app discourse, foresees the role of an *interface*.

5. Interfaces

Commercial researches on social media interfaces have been extensively analyzing the composition of the page to promote the engagement of users (user interface), while the notion of UX (user experience) refers to

the feeling a user gets while navigating the page. Recently the human-computer interaction (HCF) has also caught the attention of the qualitative approaches aimed at focusing on the interpretation process entailed by such interaction. In particular under a semiotics lens, the study of interface "should also focus on interface sense production system and interpretation processes" (Scolari 2009: 4). Scolari, in his interrogation of the meaning production process in reference to a blog, has singled out different levels of analysis (plastic, figurative, communicative, and meta-communicative) and stresses the importance of the identification of the author ("the designer") "'footprints,' marks, and instructions (affordances) inside the interface".

Following the theoretical tradition of visual semiotics, Reyes-García (2017) has studied interfaces as images by focusing on "the visual meaning behind the construction of any authoring and exploring environment" (2017: 11). With the complexification of the WIMP paradigm (Windows Icons Menus Pointers) and the introduction of different types of media, the interface would transform the user into a media producer who interacts with other users through enunciative acts. In the interactive space of a social networking site, the semiotics approach to the study of the interface should aim at examining the way in which interfaces organize, enhance, or constrain the interactions not only between human users and computer-based systems but also between the users themselves.

Thanks to the pivotal role of its visual patterns, the platform interface can be considered a text provided by a semiotics agency that shapes subjectivity and affective bodily and more importantly facial experience. Relying on such literature, in this chapter the online dating interface(s) are referred to as a time and machine machinery for the production of online interactions, aimed at producing an intimate encounter. In order to do so, we refer back to the etymology of interface. The noun "interface", composed of "inter-" + "face", was recoined by McLuhan and defined as "place of inter-action between two systems" (1962). According to the Cambridge Dictionary, it refers to a connection between two pieces of electronic equipment or between a person and a computer.

The prefix "inter" by meaning "between" thus implies the presence of a space between (a third) two actors, two sides. Synchronically the space in between makes user interaction happen by connecting the two parts within the platform space; diachronically such a gap can be interpreted as a lapse of time to spend inter (digital) faces within the platform border while waiting to leave the digital space and perform the "actual" encounter outside the platform. Such a time-and-space gap stages the presence of an outside as the ultimate scope of the platform service. In the next section, such spatial and temporal betweenness, embedded in the platform, will be analyzed, following the narrative path marked by a dating app site.

6. The user narrative journey interfaces

6.1. Choosing the best face

By drawing on the Greimassian narrativity terms (1966, 1970, 1974) and interpreting within such a framework the user experience in "standard" online dating sites, the dater narrative programs experience starts with a competence construction phase that consists in the login operation, the identity verification, and, most importantly, the registration process with the uploading of photos and the filling in of question forms in order to enrich the self-presentation details and allegedly increase the probability of finding affinities among users. According to the most common dating sites' instructions and the interface visual patterns, in order to complete the profile, it is inescapable to choose a face. In the case of some famous dating apps, such a request is visually enabled by an empty face silhouette to be filled in with a digital portrait.

On the topic of pictures used for one's dating profile the Internet contains lots of buzz: from a rough scanning of the first blog entries within the search "Picture for self-portrait dating app", all of them agree on a point that can be summed up as follows: the profile picture should "really be like you". The importance of authenticity in the commercial online dating discourse partly arises from the attempt of contrasting deceitful practices such as the catfishing, which in mere visual terms entails the stealing of someone's portrait. Beyond the fake profiles, users can freely and originally reinterpret the space devoted to self-portraits. Empirical observations from a digital netnography on Tinder (Soro 2019) showed that a significant number of profiles browsed post a variety of alternative images to the face, such as food, pets, famous characters, or other objects with which to identify their identity. Such images are thus subjected to a process of *facialization* by performing the same functions that a self-profile does.

6.2. Swiping faces

Following the narrative program of the dater, once the "best" face (or its surrogate) has been chosen and the profile operations have been completed, the user is able to actually kick off the matchmaking procedures. In such a vein, each popular dating app arguably presents its own "semiotics of passion" (Greimas and Fontanille 1991) with which the site manages the face-to-face remediation and the relative emotions involved. The interactions during the matchmaking are therefore regulated by specific aspectuality strategies that emphasize in turn either the duration of the path toward an allegedly offline face-to-face meeting or the terminative point where an interaction stops. Profile swiping, the key navigation gesture popularized

by the dating site Tinder and also present in other dating apps (Bumble, Hppnen, HER, and so on), represents the iterative action that determines the potential beginning or ending of an interaction between users. While a swipe right (according to Tinder function) and a consequent match open to an indefinite time of waiting before an allegedly face-to-face meeting (that can be either undermined or punctual or constantly delayed), the swipe left marks the termination point of a potential interaction and consequently the exclusion of a given user profile from the vision field of the swiper.

In particular, according to Tinder grammar, the swiping gesture is embedded in an environment similar to playing cards. As a result of the swiping, some "cards" containing users' faces are stored in the list of matches; others are excluded and (at least in theory) never seen again. The serendipity of running again into a face in the offline world is thus avoided by the cancellation of the less desirable profiles (according to a given dater vision) and thus reduces the database of the selected pictures to the crush-at-first-sight ones. Following the performative stage of the narrative program, after the match between two faces (or their surrogates) has occurred, the daters are allowed to text each other in a chat box or in certain cases exchange supplementary pictures or videos or enable video calls. It is noteworthy that the range of possibilities has recently been expanded by some dating companies in order to cope with social distancing rules.

6.3. Out of the interface comfort zone

It is common to encounter in the digital sphere (i.e., in social media and in dedicated blogs) users' stories about the disappointment caused by first offline meetings after chatting and flirting online for a certain time. Surely this chapter is not focused on the dater's behavior (*intentio lectoris*) or on the intentions of the dating site designers (*intentio autoris*). The focus is rather on the meaning effects enabled by the text and how the text architecture shapes and induces certain usages and interpretations (*intentio operis*). However, regarding the aforementioned disillusionment effect it can be inferred that the platform and its interface tend to create a comfort zone provided with its own borders, its own rules, and its meaning-making processes.

The practice of sexting represents, in such a vein, the magnification of online dating as a leisure activity per se. Etymologically a portmanteau of sex and text, the practice became popular during the COVID pandemic, as shown by the data provided by same dating apps that registered an increase in new subscribers. At the same time, some popular applications such as Bumble and Hinge provided users with new features for publicly sharing their COVID-related dating preferences, and not surprisingly, including indirect references to sexting among the possibilities. Beyond the

contingencies due to the pandemic that forces both offer and demand to design new creative practices in the field of intimacy, "sexting" embraces a complex semiotics. It semantically combines two incompossibles *lexema*, at least in their literal meaning, since the action of text necessarily requires a medium and, on the contrary, the sex denies such intermediacy. In such terms sexting represents the ultimate figure of facial leisure, the interaction interface.

Furthermore, following the reasoning mentioned earlier, sexting would finalize the narrative program performed by the dater within the dating system interface. This way, such practice stresses the paradox of the user retention encrusted in the domain of online intimacy, a service allegedly purposed for letting go of their users to the offline world but, in doing so, at the same time, leading them to lose their customers.

6.4. The gaze of the Elo

Lastly, the interface is responsible for enabling a certain gaze upon the other by embedding a certain scopic regime that determines the visual aesthetic components of the interactions. It is noteworthy that the agency of a platform system in influencing user behavior and his or her "way" of seeing rests on an algorithm. In the earlier years of Tinder, the Elo, in a surprising assonance with the aforementioned Airbnb logo Belo, has been known as an algorithm responsible for scoring and rating the daters on the basis of their desirability. According to speculations, since Tinder has not publicly disclosed the specific details of their algorithms, a dater profile attractiveness is based on how many people swiped right on him or her; the more right swipes that person had, the higher his or her assigned score went up. According to the alleged Elo logic, a dating system serves and matches users with similar scores, creating a sort of internal communities clustered by their higher or lower desirability.

Just as the Belo watches over the Airbnb community of belonging composed of trusted hosts and guests, with similar interior design tastes and lifestyles, the Elo seemingly guards the daters, grouping them in comfort zone communities, each of these characterized by a similar level of facial desirability. Following such an interpretation, the *facialization* of the intimacy as designed by the platform architecture structures of meaning provokes a reflection effect among the dater faces: arguably they looked back at themselves as in a collective selfie.

7. Conclusions

In its attempt to contribute to the comprehension of the extension of the digital face space within the realm of digital intimacy, this chapter acknowledges several limitations. Firstly, it lacks user data, relying instead on

references to previous research conducted by the author that involved interviews and netnography. The focus of the current study is on the meaning-making processes facilitated by the architectural design of dating sites rather than on user experiences. Secondly, the analysis does not concentrate on a specific platform or a set of platforms in contrast to the prevalent literature on online dating that often examines a single app or site. Instead, the research considers online dating as a discourse shaped by the collective presence of various commercial sites. Thirdly, the piece does not differentiate between mobile and desktop platforms, despite the significance of the spatial dimension in semiotics. The study does not directly address the differences in usability between portable and fixed devices.

Lastly, and perhaps most importantly, the article takes a broader approach in delimiting the scope of the study, aiming to construct a discourse on the production of online communities rather than focusing solely on specific business models or services offered by individual platforms. While platforms like Airbnb and Tinder, mentioned in the piece, exhibit clear differences in terms of services offered, communication methods, user demographics, and more, a comparative analysis of different platform models would yield a better understanding of the strategies of inclusion and exclusion facilitated by these platforms.

Future research should aim to address these limitations by incorporating a systematic collection of data. Additionally, a comparative analysis of different platform models is necessary to comprehend how the digital face undergoes tension and re-symbolization within the online sphere. The concept of digital intimacy should be further explored as a field of negotiation between cultural and social narratives, encompassing not only courtship and sexuality but also broader discussions about the body and gender. Ultimately, it will be crucial to examine digital intimacy as an observation point for the emergence of new biopolitical aesthetics shaped by practices such as artificial intelligence and machine learning.

Notes

1 This chapter results from a project that has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program (Grant Agreement No 819649-FACETS; PI: Massimo LEONE).
2 Visagété [Faceness] is a section of *Thousand Plateaus*, where the French authors juxtapose the head and the face incompossible.
3 Kelly Gates in *Our Biometric Future* claims that the pursuit of facial recognition technology, ruled by the priorities of law enforcement and state security agencies, has destructive social consequences.
4 In the actantial model, within Greimas theory of narrativity (1966, 1970), the actant subject aspires to join to an object.

12 Evanescent faces

A semiotic investigation of digital memorials and commemorative practices[1]

Federico Bellentani

1. Introduction

Memorialization is a fundamental and omnipresent human practice that is increasingly articulated through digital technologies. Digital memorials and the application of digital technologies in commemorative practices are thus spreading very rapidly at both institutional and vernacular levels. Digital memorial here refers to the usage of digital technologies and online platforms for remembrance and mourning after the end of physical life of one or more individuals or to commemorate an event or a place. They can be institutional or vernacular, static or dynamic. They can be digital-native, that is designed exclusively with the use of digital technology or a transposition of a physical memorial into digital forms. Finally, there are memorials including both physical and digital elements. As physical ones, digital memorials are designed by one or more authors (hereafter designers). Besides their purpose of commemoration, digital memorials inevitably represent the designers' intentions and narratives, who decide what is to be remembered and what is not (Tamm 2013). The contents of the memorial are thus subjected to the designers' control and curation (Moncur and Kirk 2014: 968).

However, digital memorials are open to a myriad of interpretations depending on the points of view that the users take towards them. Despite design strategies being available to entice users along a specific interpretation, designers do not have complete control over the interpretations of digital memorials. Users thus interpret them following their opinions, beliefs and feelings. Today's digital technologies and platforms stimulate the collaboration of users, being thus far from traditional authorial logic and constraints. Yet their promise of diversity and participation needs critiques and explanations (Section 3.1). The human face is a central element in digital memorials as it was for the offline ones (pictures on tombstones, funeral keepsakes, public statues and so on). Many digital commemorative practices are also centered around the face: portrait pictures on electronic

memorials are often the *inter-face* through which users can access data of the dead (Section 4). Exploring the connection between memorialization, face and digital technology experience, this chapter investigates digital memorials and commemorative practices and the meanings of faces within them. To do so, it first develops a semiotic-oriented framework for the design of digital memorials to ensure that digital technology remains centered on human needs and meanings (Section 3). This framework helps to sensitize designers to focus on participatory engagement that they can exploit in the development of new digital memorial technologies and platforms. The chapter then goes on applying this framework by analyzing three kinds of digital memorials and commemorative practices, especially focusing on but not limited to those centered on the face: (i) institutional digital memorials (Section 4); (ii) open, creative and playful solutions to reimagine contested monuments and memorials (Section 5); (iii) institutional and vernacular digital-native commemorative practices (Section 6). Before this, the next section explores the increasing digital transformation of our life and outlines the main developments that have made semiotics hold a significant position in the study of digital media, communication and technology.

2. Semiotic approaches to digital media, communication and technology

Digital technology has brought about many changes in society and continues to do so by increasingly integrating into more and more aspects of our life. The concept of digital transformation has been introduced in 2000 to refer to these changes (Patel and McCarthy 2000) and has become broadly used by both researchers and practitioners since the 2010s (e.g. Reis *et al.* 2018). Digital transformation refers to the adoption of digital technology by organizations and businesses to improve value, efficiency and innovation, but it can be seen as a broader process impacting all aspects of life. Numerous definitions of digital transformation have been proposed, but there are two common features that are common to all: it is a continuous process, and it triggers changes and potential disruptions by combining "information, computing, communication, and connectivity technologies" (Vial 2019: 1).

   In today's neoliberal global political economy, there is a positivist idea of digital transformation, a general tendency to consider it a hopeful evolution of human capabilities and abilities. According to the Anderson and Rainie (2018), digital life enriches family and community relations, improves work creativity, and provides health and wellness. In this view, digital technology is seen as a problem solver, an education tool, a travel

companion and a memory aid helping humans to reach a higher quality of life. Beyond this, critics have focused on the dark sides of digital transformation, seen it as a process that is not sustainable nor equitable, creating new (digital) divides at the societal level (e.g. Barekat *et al.* 2017; Hörl *et al.* 2020). These critical studies provide theoretical and methodological frameworks to assist researchers, practitioners and policymakers to shape a more human-centric digital transformation. Hence, new digital humanities approaches are appearing focusing on ethics and philosophy of technology, the relation between technology, humans and the arts, participation and democracy on digital platforms, the digitalization of tangible and intangible cultural heritage, and so on (Werthner *et al.* 2022).

Still today there is a gap between enthusiasts and catastrophists of digital transformation which is difficult to overcome. In his essay *Apocalittici e Integrati* (1964), Umberto Eco defined intellectuals through an opposing category: as apocalyptic and opposed to mass culture or as integrated and dedicated in keeping with mass culture. This category has often been applied to define a general attitude towards digital transformation, new digital technologies and media: on the one hand, tech catastrophists believe that every technological advancement will put an end to human characteristics ("*Social media destroy human relations!*"); on the other hand, tech enthusiasts consider new technologies as superpowers helping humans doing something previously impossible for them. Digital humanism positions itself in an intermediate way between these two poles: it aims to design a human-centered technology able to provide value to humans. In this, it is essentially semiotic: to provide value to humans, tech professionals need to understand their (own) cultural meanings, ways of interpretation and culture (Lagopoulos 1993: 255).

Semiotics has provided tools to address the meaning-making and interpretations of digital communications and practices, presenting several examples taken from the present-day digital semiosphere, that is the application of the semiosphere to the dynamics of today's globalized digital media systems (Hartley *et al.* 2021). Focusing on how people make meanings and exchange value within the digital semiosphere, semiotics has provided innovative approaches to digital technology capable of negotiating increased decision-making power in the users. Semioticians have largely focused on digital media and communications (e.g. Cosenza 2014; Ferraro and Lorusso 2016). Giacomazzi (2022) proposed a methodological framework for integrating semiotics into the cultural analysis of digital media. He addressed the textual and experiential dimensions of digital media and discourses, considering the processes of digital textual production and translation, where users constitute themselves in relation to others.

Recently, semiotics has expanded to include in its study the practices of digital culture and the digital technologies that withstand them. Some

research has empirically contributed to the design of digital solutions by proposing design methodologies taking users' meanings and interpretations in mind (e.g. Sanna 2020; Dall'Acqua and Bellentani 2023). Santangelo and Leone (2023) edited a collection of essays proposing semiotic perspectives on the impact that artificial intelligence has on how human societies and cultures manage meaning. A line of semiotic research has also appeared focusing on specific digital marketing practices, such as digital storytelling, web design and usability, user interface and experience, online virality, gamification and video gaming, and branding digital communication (Marino 2022b; Cosenza and Bianchi 2020). *Digital Age in Semiotics & Communication* – the journal from the Southeast European Centre for Semiotic Studies at the New Bulgarian University founded by Kristian Bankov – aims to provide a space for researching phenomena in the digital world. Among others, topics have included gastronomy (Mangiapane and Bankov 2021; Stano 2021), love and sex (Leone 2019b; Soro 2019) and brand communication in digital culture (Kartunova 2018).

Much interdisciplinary research has been done on the face in the digital era, mainly carried out by semioticians within the ERC research project FACETS. This research has focused on practices of face exhibition in social networks and in new visual technologies for face recognition, detection, representation and manipulation (Leone 2018c). At the same time, this research community has advanced the understandings of the semiotics of digital era looking at face-related topics such as digital dating (Leone 2019b; Soro *et al*. 2021), deep fake (Leone 2022a; Santangelo 2022; Gramigna 2022c), metaverse (Gramigna 2022b; Giuliana 2022a *Faccia*; Barbotto 2022), e-learning (Leone 2021a), digital cosmetics (Leone 2020a), digital forensic (Leone 2020b), selfies (Santangelo 2020; Surace 2020c; Leone 2019a), virality (Leone 2020e; Marino 2022b), emojis and memes (Marino 2022a), and software for the creation of digital characters (Giuliana 2022b).

Leone (Forthcoming b) addressed the impact of digital technology on the presence and meaning of the human face in the city. This topic relates to the second section of a roadmap that the author developed for the interdisciplinary study of the face and facial representations in urban contexts, which is divided into four sections: (i) "Faces in the city" relates to the presentation and representation of faces in urban space; (ii)"Faces around the city" investigates digital facial assemblages as processed by facial technology; (iii) "Faces on the city" refers to old and new practices of face inscription on urban surfaces; and (iv) "Faces of the city" looks at the metaphor of cities as organisms endowed with individual faces (Leone forthcoming b). Between the first and the second category, Thibault and Buruk (2021) adopted a transurbanist framework to explore the relationship between faces, technology and urban spaces. The authors looked at issues of identity and self-expression, surveillance and practices of resistance, focusing

on strategies of covering and modifying the face to avoid facial detection and recognition.

Semiotic research has also appeared on the digital representations of the city in cinema and online social media networks. For example, Dimitriadis (2018) analyzed how the filmmaker Tasos Boulmetis combined digital elements to reconstruct a virtual experience of his own sense and memory of Istanbul through computer-generated imagery (CGI): digitally reconstructed, the urban landscape becomes a hybrid space made of historical and personal memories, experiences, and emotions. Here digital technology is used to bring to life urban spaces from the past, as well as it impacts our experience of reality, our cognitive, axiological, emotional and pragmatic dimension. Bellentani and Arkhipova (2022) presented a biosemiotic approach to the study of the built environment, its representations and practices in social media. They identified five main topics representing the interplay between the natural and the built environment: the interaction of nature and architecture, urban parks, urban agriculture, digital environmentalism, and ecotourism.

Thibault (2020) edited a collective book including semiotic contributions on urban gamification. The semiotic interest on this topic has three reasons: firstly, representations of the city in Western culture have always been objects of play and illusion; secondly, there are many successful games which has the city as their object (Lego, Meccano, Monopoly, video games such as SimCity, and so on); thirdly, play and gamification are now pervasive practices characterizing many different aspects of our life in the city: transport, shopping, sport, tourism, eating and so on (Volli 2020).

Despite this significant and still growing research on various aspects of the digital culture in the city – together with the compelling semiotic research exploring the relationship between space, memory and identity (e.g. Mazzucchelli 2010; Pezzini 2009; Machin and Abousnnouga 2013; Bellentani and Panico 2016; Violi 2017; Panico 2019) – there is still not much semiotic research on digital memorials and commemorative practices. This chapter aims to overcome this limitation by developing a semiotic-oriented framework for the design of digital memorials to ensure that digital technology remains centered on human needs and meanings.

3. A semiotic-oriented framework for the design of digital memorials

Digital memorials have existed since the advent of the Internet, which has become both a "vehicle of memory" to collect, preserve and display traces of the past and a "supplement" to traditional forms of commemorations (Haskins 2007: 401). However, digital memorials depend on four categories that go beyond the mere preservation and translation of traditional

memorials into digital forms and that, to date, have been little explored: (i) the interplay between designers and users; (ii) the interplay between the purpose of commemoration and contents; (iii) the cultural and political context; (iv) the sacred and secular dimensions. This section analyzes each of these categories.

3.1. The interplay between designers and users

As their physical counterparts, digital memorials are designed by one or more designers: these can be institutions, individuals or groups of people (Moncur and Kirk 2014: 966). Inevitably, the memorial is intrinsically linked with the designers' intentions and narratives that decide what contents to create to present the purpose of commemoration, a selection of what is to be remembered (Tamm 2013). However, digital memorials are always open to a myriad of interpretations depending on the points of view that the users take towards them. Despite design strategies being available to entice users along a specific interpretation, designers do not have complete control over the interpretations of digital memorials and thus users interpret them following their opinions, beliefs and feelings. Therefore, the interpretations of digital memorials lie at an intermediate point between the designers' and the users' interpretations (Eco 1990).

Digital technologies and platforms offer and stimulate the collaboration of different users and are thus far from traditional authorial logic and constraints. Memorialization of deceased people through digital and social media platforms is designed to be interactive and to stimulate the active contributions of users in terms of content generation, reactions and commenting. Offline vernacular commemorative practices such as rituals, parades and performances have typically been of an ephemeral and temporary nature (Haskins 2007); with the digital, everyone can participate in and generate memorials that can reach a potentially limitless audience and that can last long. For this reason, the digital has helped to overcome the division between official and vernacular memorials and increase their participatory nature:

> The line between official and vernacular memory practices, however, is becoming blurry, as designers, museum professionals and art critics begin to ponder how "permanent" memorials might engage their popular audiences instead of imposing on them the ossified values of political and cultural elites. . . . Instead of only official accounts disseminated by mainstream media and the government, all kinds of stories can now become part of an evolving patchwork of public memory. Formerly limited in time and space, ephemeral gestures can be preserved in still and

moving images, ready to be viewed and replayed on demand. Previously banished to dark storage rooms, mementos left at memorial sites can be displayed for all to see. The boundaries between the official and the vernacular, the public and the private, the permanent and the evanescent will cease to matter, for all stories and images will be equally fit to represent and comment on the past.

<div align="right">(Haskins 2007: 404–405)</div>

A notable example of the interplay between designers and users can be found in the National September 11 Memorial. The memorial normally represents the voice of the Foundation responsible for it, but it also includes a website, a mobile app and an online audio repository with oral histories (Moncur and Kirk 2014; see also Section 4). A single organization designs its functions and reviews its content, but the emails, texts, pictures and audio are from those affected by the 9/11 attack. Digital memorials are thus multimedia texts constantly evolving, a product of the collaboration of different users, far from traditional authorial logic and constraints. Yet their promise of diversity and participation needs critiques and explanations. Firstly, "the scale of collecting increases in inverse proportion to our depth perception" (Gillis 1994: 15). Data are growing dramatically and exponentially due to the increasing number of data-generating devices. While digital devices record every piece of information that can be instantly recalled through advanced search systems, the individual need to remember fades away if not stimulated by participatory engagement (Haskins 2007: 407). Secondly, online platforms have been largely shaped by commercial and business interests, stimulating individualism and spectatorship rather than meaningful engagement and participation (Haskins 2007). Moving from technocratic and commercial discourses proposing to treasure personal memories, stories and sensibility of users in a social and participatory manner – against logics of commodification, control, standardization and commercial exploitation – can help to make digital memorials more friendly to popular participation. Thirdly, despite allowing participation of potentially limitless audiences, the digital creates new divides and inequalities around the access to information and resources (see Van Dijk 2006). Finally, the tendency towards selective nature of national politics of memory and identity (Tamm 2013) also manifests itself in the digital semiosphere: government institutions and its affiliates can decide on whose heritage will be digitalized and whose not, selecting relevant audiences and granting (or less) access to specific online memorial contents. This topic is closely related to the issues of security and how digital memorials are misused and hacked during political conflicts and wars (Rutten *et al*. 2013). Cyber-attacks are also often used during traditional memorial wars: for example, a series of cyber-attacks targeted several Estonian websites following the removal

and relocation of a Soviet memorial in Tallinn, the so-called Bronze Soldier (Bellentani 2021).

While discussing the interplay between designers and users, "digital self-memorialisation" (Moncur and Kirk 2014: 967) should also be considered: anyone can author their own memorial *pre-mortem* influencing the way they will be remembered. Specific services, such as the plugin *If I Die* by Facebook, help users to record a video or text testimony that is published online after the user's death.

3.2. The interplay between the purpose of commemoration and the contents

Digital memorials are meant to commemorate and remember an individual, a group of people, an event or a place. Besides the actual purpose of commemoration, the contents of the memorial are subjected to the designers' control and to the users' interpretations and reuses. The historical narrative which memorials represent is then a construction, inevitably selective and subjective. Overall, history is not a repository of past facts, events and identities, and it does not have an ontological status: historical narratives are not a passive delivery but powerful media able to establish specific discourses on the past, present and future (Ricoeur 2000). Undoubtedly, when speaking of institutional memorials, shaping historical narratives facilitates the contemporary exercise of power by promoting the dominant world views and determining the social dynamics of inclusion and exclusion of those who design them (Bellentani 2021). Selection, editing and omission come into play in the (re)writing of history and thus in its representation in digital memorials. In brief, while the purpose of commemoration is guided by past circumstances and the urge to commemorate, the actual contents of the memorials represent the designers' perspectives. Users can always refashion the designers' intention in multiple ways through their interpretations and practices.

3.3. The cultural and political context

Digital memorials cannot be analyzed separately from the cultural context. Culture shapes the designers' and the users' interpretations and influences the ways they use them.

> The ubiquity of the memorial is bound up with cultural modes of practice, which dictate how we might orient to memorials, how we acknowledge them, sanctify them and interact with them. . . . It is also influenced by how individuals and groups understand the experience of bereavement, even within the same cultural group.
>
> (Moncur and Kirk 2014: 965)

In turn, digital memorials convey cultural meanings contributing to the shaping and reshaping of the digital semiosphere. The semiotic concept of culture is structured in different levels of organization. Eco (1984) divided culture into the global level, which included the cultural knowledge as a whole, and the local level, which defined the routinised ways to use that knowledge. He introduced the notion of encyclopedia to indicate the stock of shared signs that interpreters use during their interpretative processes: at the global level, the encyclopedia contained all the potential interpretations circulating in culture; at local, there was the routinised set of instructions to interpret specific portions of the sociocultural space, that is "encyclopedic competence" (Eco 1984: 2–3).

Torop (2002: 593) defined culture as a "mechanism of translation" characterized by the constant interaction between its global level and its local manifestations. The specificity of a culture originated from the friction between these two levels. Lotman (2005) described this process through the center-periphery hierarchy, one of the mechanisms for the internal organization of the semiosphere. Central cultures continuously attempted to prescribe conventional norms to the whole culture. Most members of culture embodied these norms and perceived them as their own reality. However, peripheral cultures could always arise and variously refashion the central norms. In doing so, peripheral cultures were vital sources for the definition and the development of the central culture itself. The center-periphery hierarchy by Lotman can be useful in explaining the interpretative dynamics of digital monuments. Memorials "possess a powerful and usually self-conscious symbolic vocabulary or iconography that is understood by those who share a common culture and history" (Hershkovitz 1993: 397). Every culture defines its own digital design models and practices to convey this symbolic vocabulary in space. But the ways in which memorials are designed can elicit a range of different interpretations and practices from the users. Culture thus consists of different interpretative communities (Yanow 2000), each one having its way to frame social reality based on specific cultural traits, political views, socio-economic interests as well as contingent needs.

Institutional digital memorials (Section 4) become part of those elements of culture that are defined as canonical by an institutionally sanctioned group of experts and professionals. They are thus important tools for the national politics of memory and identity; that is, the elite attempts to promote a uniform national memory and identity through legal, institutional, commemorative and monumental means (Tamm 2013). As such, they are particularly useful in contentious political circumstances as they serve to "strengthen support for established regimes, instilled a sense of political unity and cultivated national identity" (Whelan 2002: 509). National elites can manipulate memory and identity for political purposes, helping to

promote a uniform national memory and reinforce sentiments of national belonging. Physical and digital memorials are tools helping elites to legitimate the primacy of their political power and to set their political agendas. However, they embody the agency of generations and assume different functions in different time periods: memorials legitimizing elite power can turn into digital spaces for resistant political practice, creativity and recreation. As opposed to physical ones, digital memorials can adapt and be updated more easily than the physical one, and digital technology can help in dealing with contested physical memorials (Section 5).

3.4. The sacred and secular dimensions

Blue plaques in the United Kingdom are permanent markers installed in public places to remember the link between a location and a famous person or an event, for example, the plague "*Freddy Mercury (Fred Bulsara) 1946–1991 Singer and Songwriter lived here*" at 22 Gladstone Avenue, London. These are secular memorials working as a "signifier of importance" (Moncur and Kirk 2014: 971) of a place or building. Equally, the material possessions can become memorial tools to remember individuals after their death. Personal belongings can have an emotional content and be important "markers of significance" (Moncur and Kirk 2014: 971). These can be clothes, personal object and elements closely related to the face, as the face is a unique and recognizable sign of identity belonging to the deceased (Peraica 2021): eyewear, hats, face cosmetics and so on.

These memorial elements are important yet mundane. Other memorials can have a larger spiritual dimension and can be designed to have a higher emotional impact on the users, as their physical counterparts such as tombs, crypts, cenotaphs, precinct, memorials to soldiers and battalions, and so on. Digital technologies and religious traditions have often been regarded as distinct, but today this gap is being reduced: digital platforms are being permeated with more and more sacred contents, and religious practices are increasingly becoming digital. An iconic moment demonstrating this is in January 2019 when Pope Francis presented the app Click to Pray during the Sunday Angelus prayer in St. Peter's Square.

3.5. The framework for the design of digital memorials and methodological note

In summary, digital memorials are multimedia texts brought about by a designer's intention but constantly evolving due to the reworking and collaboration of multiple users. Besides their purpose of commemoration, their contents are curated by designers which decide what memorial element to display and which memorial practices to stimulate. Inevitably,

users differently interpret and use digital memorials according to their specific cultural traits, political views, socio-economic interests and contingent needs. Culture shapes the designers' and the users' interpretations and practices. In turn, digital memorials convey cultural meanings contributing to the shaping and reshaping of the digital semiosphere. They can have secular or sacred aspects.

As our life becomes more and more digital, the categories presented here describe how digital technology intersects with a fundamental aspect of our life: how we memorialize. The intention was to present a semiotic-oriented framework including the described categories to consider when designing digital memorials: the interplay between designers and users, that between the purpose of commemoration and contents, their cultural and political, secular or sacred dimensions. The next sections will use this framework to analyze three kinds of digital memorials and commemorative practices centered around the face: (i) institutional digital memorials (Section 4); (ii) open, creative and playful solutions to reimagine contested monuments and memorials (Section 5); and (iii) institutional and vernacular digital-native commemorative practices (Section 6).

These research objects were identified by conducting one year of digital ethnography and studying the research literature. Digital ethnography (Miller 2018) on relevant websites and social media was used to gather empirical data on digital memorials. It also aimed to analyze the online behavior and digital communications of a diverse sample of online communities to practices of commemoration, remembering and mourning. Real-life cases were taken from the research literature on memorial technologies (Brubaker *et al*. 2013; Moncur and Kirk 2014; Klastrup 2014; Gotved 2015).

4. Institutional digital memorials

Official memorials are designed by an institution to help users to "make sense of national tragedy" by sharing a public sense of loss (Cohen and Willis 2004: 591). They can commemorate and remember victims of war, ethnic cleansing, mass violence, terrorism, or natural disaster. While doing so, they inevitably represent the intentions of the designers. For this reason, as physical ones, digital memorials have both commemorative and political functions (Bellentani 2021). While articulating specific historical narratives, they convey the world views of those who design them, representing a whole set of meanings, identities and events while concealing others. Therefore, they define what and who is to be remembered of the past and how.

The National September 11 Memorial is frequently cited as a prime example of institutional digital memorial, which aims to represent a national

loss through a consistent narrative (Moncur and Kirk 2014). Constantly updated, new functions are added from day to day by the Foundation that is responsible for it. A single organization thus designs its functions and reviews its content. The memorial includes a website, a mobile app and an online audio repository with oral histories of those affected by the 9/11 attack (Moncur and Kirk 2014), yet it is the Foundation's responsibility to weave these materials (emails, texts, pictures, voices and so on) into a single narrative. Conversely, the September 11 Digital Archive deliberately represents multiple and sometimes opposite voices from the users, creating a more heterogeneous memorial (Moncur and Kirk 2014). From its old-fashioned home page, we can read that the memorial includes "more than 150,000 digital items, a tally that includes more than 40,000 emails and other electronic communications, more than 40,000 first-hand stories, and more than 15,000 digital images" (https://911digitalarchive.org/).

Institutional memorials and museums can integrate both physical and digital elements. In the 9/11 Museum in New York, there is a memorial corridor displaying the pictures of the faces of the victims on its walls. Those pictures are also included in interactive displays: by clicking on them, one can access the personal data and stories of the 9/11 victims. The victims' face on the digital displays thus becomes an *inter-face* to enter their private life with a purpose of commemoration and mourning. Invisible to the subject, the face is normally an interface with the others, a tool for intersubjectivity (Leone 2021c). Mostly smiling faces are represented. People are mainly in elegant clothes or in their professional uniform: one can easily recognize the firefighters, the cops, the guardians, the cook, the waiters and so on.

A similar example of this is the digital Wall of Faces honoring every person whose name is inscribed on the physical Vietnam Veterans Memorial in Washington, DC, through pictures of their faces. In these cases, it becomes clear the face is not only an interface but a text through which personality, identity and character are signified (Leone 2021c). In the digital Wall of Faces, the text is interactive and arranged by multiple authors since it allows family and friends to share memories, post pictures and connect with each other. As part of the 9/11 Memorial and Museum, Postcard is a memorial where faces become physical. The memorial honors Staten Island residents killed in the 9/11 terrorist attack and the 1993 World Trade Centre bombing. On the memorial, victims are memorialized on individual postcards, remembered through their unique profile silhouette (Figure 12.1). Faces, cast in store and highlighted by light passing through them, here become symbols of distinctiveness of the remembered victims.

In Tallinn, Estonia, there is a case of landscape memorial incorporating digital and physical elements outside the boundaries of the museum: the Victims of Communism 1940–1991 memorial, unveiled in 2018 to

Figure 12.1 The victims' profile silhouettes on the memorial Postcards by architect Masayuki Sono in Staten Island, New York. Copyright: Creative Commons.

commemorate Estonia's victims of communism during Soviet rule. The memorial consists of three main parts, two physical and one digital: a memorial corridor consisting of two walls bearing plaques with the names and other data of over 22,000 Estonians murdered during the Soviet rule, a ceremonial square and the online database to search for information regarding the victims, compiled and administered by the Estonian Institute of Historical Memory (Bellentani 2021). The database can be accessed online and from a display on the site of the memorial (Figure 12.2). Research on the victims is continuous, and the list of names is never final: new names are periodically added to both the online database and the memorial walls. Through it, everyone can make a new entry for a name to be added to the wall and give feedback on corrections and improvements. Here digital technology allows users to update the electronic database of the memorial, thus widening public participation. The online database of victims is accessible to all, anytime and from anywhere: the users of the memorials are thus not passive spectators but active learners and co-creator of it (Bellentani 2021).

The Digital Memorial Cemetery by designer Hadas Arnon is a peculiar case of physical-digital memorial. Online identities and digital data survive
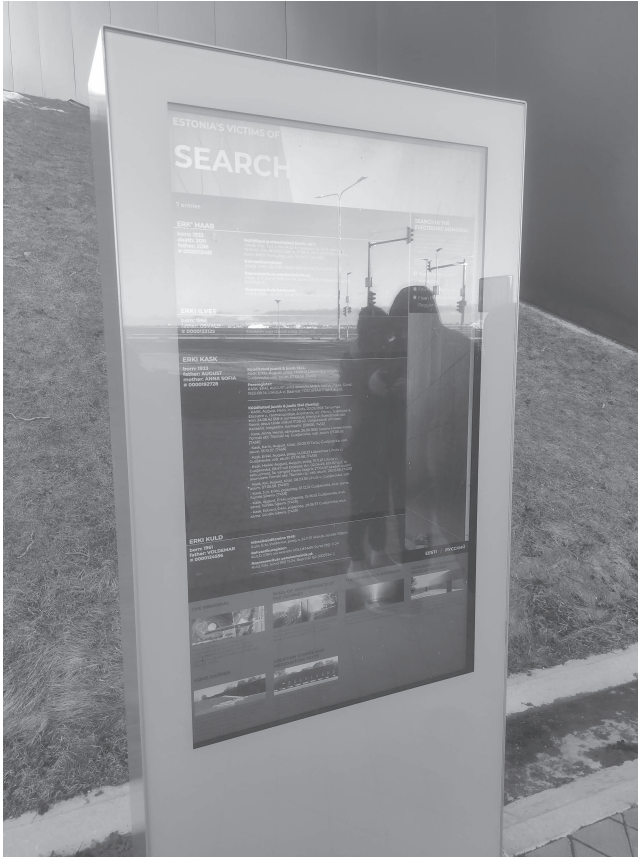
Figure 12.2 The interactive display to access the online database of the Victims of Communism Memorial in Tallinn. Copyright: Photograph taken by the author on 26 February 2022.

the dead, leaving family and friends with difficult decisions on the appropriate ways to treat them: Arnon's digital cemetery holds them on memory sticks and allows the loved ones of the deceased to access them, as in a real cemetery which it virtually resembles (Figure 12.3). The tombstone sticks are gathered into a memorial archive where people can find them through a computer search.

QR codes are other tools between the digital and the physical dimensions used to memorialize the dead. Online services providing QR codes as digital extensions to headstones, grave markers, urns, memorial benches and plaques can be found. By scanning them with smartphones, family and friends can access a password-protected or public webpage with the

Figure 12.3 Hadas Arnon's Digital Memorial Cemetery. Copyright: photography from www.designboom.com/project/digital-memorial-cemetery/.

memories of the deceased for many years, shareable with anybody unable to visit the grave in person. Despite the Covid-19 pandemic causing a resurgence of the QR code as a touchless technology to display information, its usage as digital memorial is still evolving (Gotved 2015). The project *Scan Memories* used to work with a similar logic: it created geographically distributed physical memorials in meaningful locations which gave access to digital contents (Moncur and Kirk 2014).

Cases of digital and physical memorials have been analyzed in the extensive literature on digital (and digitalization) of cultural heritage. In recent years, there have been many research projects at the intersection of computing, digital technology and humanities aimed at digitalizing tangible and intangible cultural heritage. A CORDIS Results Pack specifically focused on the digitalization of cultural heritage collects research results from 16 EU-funded projects designing digital technologies to protect and preserve Europe's cultural heritage (e.g. ARCHES and DigiArt). Some projects are in between the institutional and the vernacular dimension: for example, during the Covid-19 pandemic, historians and digital humanists initiated several projects aiming to create digital memory banks by inviting people to upload on dedicated online platforms personal stories, pictures, videos connected to their life during the pandemic and its impact on everyday life (e.g. Zumthurm and Krebs 2022). These projects have different aims and

objectives, rely on various methodologies and use different technologies. Yet they are based on an overarching narrative seeing digitalization as a powerful means to ensure the preservation of Europe's cultural heritage from natural and human-derived threads to ease the access and make available cultural artifacts for digital-native future generations, enhancing participation and inclusivity. However, these projects have often started from the power of technique and digitalization, rather than fostering a more humanistic idea of memory by designing digital solutions that consider its multiple nature, the coexistence of different interpretations of the past, spatial representations and practices of commemoration. For this reason, the digitalization of cultural heritage is still in a transitional phase: many projects remain rather abstract, away from the memorial needs of users and far from fostering their engagement and innovative use. Hence there is still a gap between digital and traditional memorials, a gap that is unknown to many other aspects of our life.

Digital technology has also been used for a long time in monuments' design, from digital master plan proposals to digital techniques underpinning their construction. Used in urban planning documents and online, digital representations have appeared to generate "models" of memorials in the future (Remm 2016: 35). Digital archaeology has also used digital photography, 3D reconstruction, augmented and virtual reality, digital twins and GSI to collect archaeological data to avoid invasive or complex fieldworks, aiding the preservation of archaeological artifacts (e.g. Forte and Campana 2016). Video games have sometimes been used to help the restoration of damaged monuments. When Notre Dame de Paris was devastated by a fire in April 2019, it seemed reasonable that the designers of the video game *Assassin Creed*, which carefully recreated an accurate depiction of the cathedral, could contribute to its reconstruction. Eventually the plan was not realized, since the digital construction of the cathedral was not as accurate as to follow logics related to the gameplay.

As the "face" of monumental buildings and architectures, facades have been repeatedly used as canvas for digital and video mapping, light shows and laser game, often accompanied by digital sound. These projects can have site-specific connections with the building: for example, in 2022 the Basilica of San Petronio in Bologna, Italy, hosted a video mapping show on its incomplete façade showing all the plans to rebuild it, from the Middle Age up to today. Digital sound was added for the nights when the show was on. In other cases, digital and video mapping can have an artistic or political aim. During the 21st climate conference held in Paris in 2015, Naziha Mestaoui's project *Virtual Forests* was projected onto the most famous monuments in Paris, Rome, London, Berlin and Brussels: the project allowed people to create through an app a digital tree that they will be able to see growing on monuments following their heartbeat, detected

through a sensor connected to the smartphone. The same technologies have also been used for more general purposes, such as Christmas lightings. Digital projecting has also been used during protests and resistant practices as the projecting of the faces of Afro-American heroes on the pedestal of contested Confederate statues (Section 5).

Digital technology project also showed virtual memorials and monuments that were never built or completed. An example can be found in the digital recreation of Democracy Uniting the World, a never-built memorial in San Pedro, California. Drawing on the idea of spreading democracy around the world developed during the 1950s, this monument was planned to showcase democracy in a grandiose way so as for all the people to see it. The monument would have been 480 feet tall, on a 46-foot-high pedestal, topped with a bronze globe 125 feet in diameter, with three figures representing statesmanship, education and art. Again, a digital reconstruction shows the original plan of Mount Rushmore in Keystone, South Dakota, where figures of the presidents included their bust, and a timeline of American history was inscribed next to them. In narrative semiotics, the concept of virtuality is central, referring to the values that underlie narratives and, especially, how these values establish alternative models of functioning of the narrated world, characters and actions. Far from being mere fictional, virtual narratives function as a primary modeling system of our experience of reality (Ferraro 2015), and so it is the digital reconstructions of never-built or incomplete memorials.

5. Open, creative, playful solutions for contested monuments and memorials

Once designed or published online, digital memorials become "social property" (Hershkovitz 1993: 397), and thus they can be used and reinterpreted in ways that are different from the designers' intentions (Hay *et al.* 2004). Firstly, digital memorials embody the agency of generations and assume different functions as time passes. Originally designed to preserve the memory of specific events and identities, digital memorials of a bygone era can remain static in their out-of-date digital forms. In other situations, digital memorials representing outdated cultural values or reflecting the ideology of a bygone regime can become contested.

Digital technologies have also been used on both institutional and vernacular levels to provide open, creative and playful solutions for contested, physical monuments. These solutions are meant to rethink the contested meanings of monuments and to reimagine them as venues of encounter and active learning, rather than spaces inspiring controversy. Most of these practices are centered around the face: the most striking example of this is during the 2020 George Floyd protests when artist Dustin Klein

used digital projection to show the faces of Afro-American citizens killed at the hands of police, as well as Afro-American men and women who have shaped American history. Faces were projected on the pedestal of the Robert E. Lee Monument, the only remaining Confederate monument in Monument Avenue Historic District in Richmond, Virginia (Figure 12.4). Through this project named *Reclaiming the Monuments*, Klein aimed to change the meanings of the statue to the commander of the Confederate States Army, translating it into a space of Black empowerment. In the artists' words:

> From what started off as a memorial to police violence has now become a theme of Black empowerment. . . . We have the attitude that the statue has cast dark energy towards Black people in this space since 1890. We started striving to find content that we felt could re-contextualize some of the negative energy with positive Black energy. We started projecting historical Black figures. . . . We also worked to include Black visual artists such Basquiat, Gordon Parks, Jacob Lawrence, and other national and regional artists. We plan on continuing to attend protests and work with the [Black Lives Matter] movement to create new appropriate content on a daily basis. I'd like to continue the projections until the statue is removed.
>
> (Klein in Stewards 2020)

Another digital project of historical reclamation is the *Hidden Black Stories*, which allows visitors of Trafalgar Square in London to discover the stories of Black British who served at the Battle of Trafalgar via an immersive lens through their smartphone. The technology, realized by Snapchat and Black Cultural Archives, allows visitors to see the text and image carousels offering an instant Black history lesson. In all these cases, digital technology is used to add the missing elements of minority or forgotten histories to the memorial landscape which had not included them until now. At the institutional level, digital signage has often been referred to as a simple tool to recontextualise contested monuments without removing it from their original location, easily giving new information context to them. Not always a contested monument is removed, for lack of economic resources, religious reasons, potential ethnical threats – or simply because the monument looks controversial only to a small part of society. In this case, adding signage can help to give more context to the position of institutions towards the identities and meanings it represents.

Physical monuments and memorials are largely represented in social media communications and images. Vernacular commemorative practices and rituals can be reported on social media feeds and later shared and commented on. Moreover, it is common for tourists to take pictures of
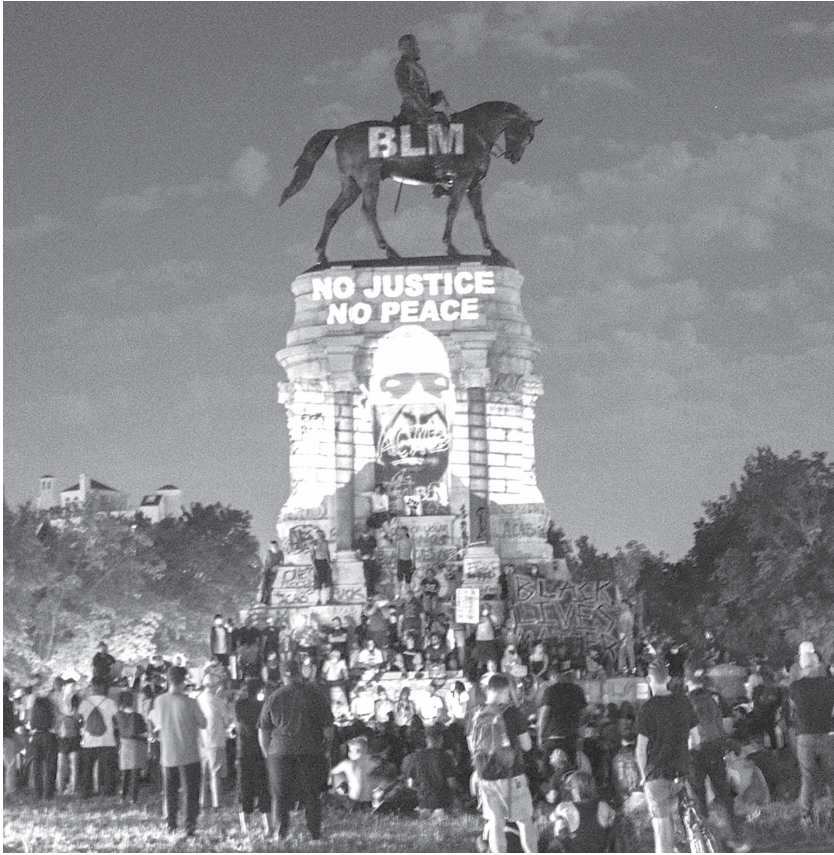
Figure 12.4 The projection *Reclaiming the Monuments* on the Robert E. Lee Mon-
            ument statue. Copyright: photograph from Dustin Klein's Instagram
            profile.

memorials that are part of the city's cultural heritage and share them online.
The tourist practices can create controversies when they do not recognize
or respect the publicized sentiments of mourning of memorials. The Berlin
Holocaust Memorial, for example, has often brought together playful and
leisure practices, as well as a general consumption of its space. Institu-
tions and the public see this as disrespectful practices, far from the actual
purpose of commemoration of the memorial. The writer Shahak Shapira
challenged these practices through the artistic project *Yolocaust* (https://
yolocaust.de/), a website with photo collages combining the visitors' selfies
and photographs from German concentration camps. As a result, people
end up smiling in a mass grave or jumping over piles of corpses. The project

has helped to reflect on commemorative culture and the gap between the publicized purpose of memorials and the interpretations and practices of users, who always resemantize the space of memorials through a myriad of different practices.

6. Institutional and vernacular digital-native commemorative practices

As research on the design of digital memorials abounds, there is less exploration of the modes of commemorating and mourning by way of digital platforms and social media, at both the institutional and vernacular levels. Digital-native commemorative practices originate online through digital communications and tools that are meant to stimulate them. The creation of online funeral services and rituals is a typical example of institutional digital-native commemorative practice. The state funeral of Elizabeth II on 19 September 2022 was a mass event globally broadcasted and one of the United Kingdom's most-watched television broadcasts. During the days following the death of the Queen, the royal website and many other institutions set up an online book of condolences where people could post their grieving thoughts. Some allowed users to register for a newsletter summing up the collected commemorative material or to see from where commemorative posts come from through interactive maps. Still today on the website of the Church of England, it is possible to submit a message to an online book of condolence and access audio prayer and liturgical resources. All these constantly updated institutional platforms expect users to interact and react with their contents, as well as to generate new ones. Other examples include fully digital institutional memorials, for example the Palestinian Holocaust Memorial Museum, a virtual exhibit entirely created on *Second Life* by the US Holocaust Memorial Museum.

Vernacular digital-native practices include multifaceted online reactions and responses to news of death. Social media, forums and online groups on WhatsApp or Facebook have increased the visibility of mourning and commemorative practices. Large-scale outflows of grief commonly occur following any notable people's death. These are not a phenomenon typical of the Internet era, but social media have made mourning quantifiable: a trend related to a celebrity is probably caused by the news of his or her death; that is why faking the death of a notable person (even multiple times) is a common way to get traffic to websites or social network accounts. Funeral services of notable people are often broadcasted online, as it was for Queen Elisabeth in 2022 or for the comedy performer Barry Chuckle in 2018 that could be followed in live reporting on the BBC news website. Another practice that is becoming more popular is to digitalize pre-digital pictures and videos, demonstrating the growing urge to create

individual deposits of memory to share with friends and family members and to transmit them to the next generations. This is made easier by the growing availability on the market of scanners and smartphone apps, as well as online services dedicated to this purpose.

Common digital-native commemorative practices are inspired by and interact with physical ones, often having the face as a central element. As in tombstones and funeral keepsakes, the face of the dead is represented in the digital memorial as his or her element of distinctiveness and recognizability. Besides this, unconventional, playful and even resistant practices exist. Alongside institutional display of grief, Queen Elisabeth's death became the object of scorn and ridicule as ironic memes with her face spread all over the Internet, aiming to partly invalidate the sacredness of the moment. Civil disobedience can also grow around contested digital memorials that represent outdated cultural values or reflect the ideology of a bygone regime. Memory wars can originate online and are constantly fuelled during contentious times on social media, blogs and forums. For example, the 2007 relocation of the Bronze Soldier of Tallinn led to large-scale ethnic riots, one fatality, several injuries and thousands of arrests. During this time, the Russian Federation's online media tried to justify the riots with fake news: an online blog reported that the memorial was cut up to allow its removal, and the picture of the cut memorial was shared online. Moreover, cyber-attacks were organized targeting Estonian websites of the parliament, newspapers, banks and so on.

7. Conclusions

Digital memorials appeared in the late 1990s with the growing availability of the Internet and developed since then due to the increasing integration of our lives with the digital. Commemorations and mourning have since diversified significantly in different digital memorials and digital-native practices that have contributed to democratize mourning: anyone connected to the Internet can share condolences and memories from anywhere. Yet their promise of diversity and participation needs critiques and explanations, as explained in Section 3.1. As our "primary social image" (Thibault and Buruk 2021: 185), the face is a central element in digital memorials and commemorative practices, being it both an inter-face providing access to the memories of the dead and a text constantly invested by many different interpretations and practices. The face thus becomes a tool for commemoration, remembrance and mourning, that is working "*perimortem*", supporting and expanding users' practices and experiences during the time surrounding death (Brubaker *et al*. 2013: 152). After all, as future studies will show, faces are central elements even in physical,

offline commemorative practices, as tombstones, funeral keepsakes, icons and public statues demonstrate.

Unlike most other aspects of our life where digital transformation was more pervasive, digital memorials and commemorative practices are still in a transition stage between physical and digital experience. Besides the examples seen in Section 4 and the extensive literature on the design of institutional digital memorials, there are only a few cases of them that stimulate meaningful engagement and participation. Also, the incorporation of digital technologies in physical monuments counts only a few cases around the world: perhaps, the material dimension of memorials and their sacredness have so far slowed down their migration to the digital in comparison to other elements of our life. One area of potential strength of digital technology in this context is its usage to deal with contested, physical monuments and memorials, as seen in Section 5. Section 6 showed some institutional and vernacular examples of digital-native commemorative practices. Among them, open, creative, playful – and even resistant – practices from the users always create new ways in which *postmortem* identities and ideas of the past continue to be negotiated.

No doubt, digital memorials represent an opportunity to expand – socially, spatially and temporary – public commemoration and mourning. They allow users to gather *around death*, "in preparation, at the moment of passing, in the discovery of the death of a friend, and in the ongoing memorialization and grieving" (Brubaker *et al.* 2013: 152), to interact with and react to the grieving process generating new narratives for the dead. However, the design of actual digital memorial leans on the side of technology, focusing on technical functions and databases rather than purposing to treasure the personal memories, stories and sensibility of users. This chapter proposed a semiotic-oriented framework for the design of digital memorials to ensure that digital technology remains centered on human needs and meanings. This approach focuses on human memory, rather than that of databases, and puts digital technologies to the service of users' memorial needs, not the other way around. As such, it promotes and enables a humanistic idea of memory and connection focusing on the four categories described in Section 3: (i) the interplay between designers and users, (ii) the interplay between purpose of commemoration and contents, (iii) the cultural and political context and (iv) the sacred and secular dimensions. This approach will create the ground for more open and public digital platforms against pervasive logics of commodification, control, standardization and commercial exploitation.

The intention was not to be definitive in proposing this framework, but rather to explain the potential of the design of digital memorials and the breadth of digital-native commemorative practices, promoting reflections among both humanities and HCI research communities using real-life

examples. Abundant opportunities for future work exist in this topic. The framework we presented here is inspired by examples from the Western perspective. More work is needed to explore other cultural perspectives of digital memorials and commemorative practices. Further studies, which take into account the framework here presented, will need to be undertaken on the potential of digital technology in the field of cultural heritage and on heritage industries and policies.

Note

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