

# Digital Pinocchio

## Face and Fake in Contemporary E-Technological Societies

CYAS, Paris-Cergy Institute of Advanced Studies



Stemming from ERC Project FACETS (Face Aesthetics in Contemporary E-Technological Societies), led by CYAS 2020/21 Senior Fellow Massimo LEONE, the symposium revolves on the intersection between the face and the fake, with particular attention to new digital technologies of communication and artificial intelligence.

### Wednesday, June 23, 2021

8:30 – 9:00 – Welcome speeches by the Deputy Director of CYAS, **Flora Koukiou**, and by AGORA Research Center, **Catherine MARSHALL**, University of Paris-Cergy

9:00 – 9:30 – **Massimo LEONE**, University of Turin  
Introduction: The Digital Pinocchio

9:30 – 10:00 – **Julien LONGHI**, University of Paris-Cergy  
Detecting Facial Emotions and Analyzing Postures to Improve Discourse Analysis of Political Debates

10:00 – 10:30 – **Maria Giulia DONDERO** – FNRS – University of Liège  
Mannequins as Objects, Mannequins as Data

10:30 – 11:00 – (Virtual) coffee break and discussion

11:00 – 11:30 – **Cristina VOTO**, University of Turin  
Life is AI Cabaret: Deepfake, Face Posing, and Queering Data

11:30 – 12:00 – **Marco VIOLA**, University of Turin  
Trust & Fakemasks

12:00 – 12:30 – **Bruno SURACE**, University of Turin  
True Faces and Fake Age(ncie)s from Cinema to Progeria

12:30 – 13:30 – (Virtual) lunch break and discussion

### Thursday, June 24, 2021

9:00 – 9:30 – **Elsa SORO**, University of Turin  
“Plenty of (Cat)Fish”: How to Steal Faces in the Sea of Online Identities

9:30 – 10:00 – **Antonio SANTANGELO**, University of Turin  
Weird and Eerie Faces

10:00 – 10:30 – **Gabriele MARINO**, University of Turin  
Doppelgänger of Nobody: Exploring Post-Irony through Ambiguous Faces and Personae

10:30 – 11:00 – Virtual coffee break and discussion

11:00 – 11:30 – **Remo GRAMIGNA**, University of Turin  
Poker Face: On Concealing One’s Face and Outsmarting Others in Strategic Interactions



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11:30 – 12:00 – **Gianmarco GIULIANA**, University of Turin  
The Semiotics of Metahuman Faces

12:00 - 12:30 – **Sophie DUFAYS**, University of Leuven  
The Faces of Fakes and Alleged Culprits in Mexico

12:30 - 13:00 – **Silvia BARBOTTO**, University of Turin  
UnTruth Faces Written with Light

Leaflet image courtesy of Mimmo Paladino.

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## ABSTRACTS.

### **Massimo LEONE, University of Turin** **The Digital Pinocchio**

On June 10, 2014, Ian J. Goodfellow (et al.) published the seminal article "Generative Adversarial Nets". The article proposes a new framework for estimating generative models via an adversarial process, in which two models are simultaneously trained: a generative model that captures the data distribution, and a discriminative model that estimates the probability that a sample came from the training data rather than from the generative model. The generative adversarial model has led to revolutionary applications in artificial intelligence and deep learning, including the creation of 'artificial faces' (Leone 2021) and deepfakes. A semiotically-oriented philosophy of digital communication aims at reading technologies of meaning in the long period of the history of human signification systems, in order to detect implicit ideologies in the creation of new devices, processes, and artifacts of meaning. Artificial intelligence is not an exception. Its development is characteristically underlain by specific preconceptions about what intelligence is, how it should work, and what kinds of results it should beget into the world. When read through the lenses of a semiotics of artificial intelligence, then, three aspects in Ian J. Goodfellow et al. (2014) are particularly striking: first, the conception of artificial intelligence that it expresses is based on the idea of antagonism (neither cooperation, nor mere competition); second, the metaphor that best explains the new deep learning architecture is that of the struggle between the forger and the connoisseur (in particular, in the forgery of fake money); third, the first ever proposed application of GANs consists in the generation and discrimination of 'fake faces'.

### **Julien LONGHI, University of Paris-Cergy** **Detecting Facial Emotions and Analyzing Postures to Improve Discourse Analysis of Political Debates**

Within the framework of the #Cicero project, a platform for linguistic analysis of political discourse (video recordings), we will exploit the information obtained using OpenPose, around the study of the face and postures of political candidates, as a source of information in the multimodal consideration of interactions. We will try to show how it would be possible to automate and tool the analysis of the para-verbal aspects, in order to obtain a more refined consideration of these corpora.

### **Maria Giulia DONDERO, FNRS — University of Liège** **Mannequins as Objects, Mannequins as Data**

In this talk, my goal is to contrast the representation of mannequins in photography with the average faces constructed by algorithms for identifying and reproducing beauty. What are the similarities and differences between inanimate objects, characterized by faces without singularities and which can be compared to angelic faces, and the algorithmic parameters through which beauty is calculated?



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**Cristina VOTO, University of Turin**

### **Life is AI Cabaret: Deepfake, Face Posing and Queering Data**

“The zizi show” is an interactive digital drag-cabaret project where from the performer to type of performance the user gets to choose the show. It is a deep-fake drag act that allows the creation of a bespoke drag experience on a virtual stage. The show is part of the <http://zizi.ai> project (by Jake Elwes) that aims to tackle the lack of representation and diversity in the training datasets often used by facial recognition systems. In this regard, the data set of the project was made by training a machine learning system with portraits of different drag persons with particular attention on face posing as a territory where to stage and perform identity fluidness. This causes the weights inside the neural network to shift away from the normative rhetoric of authenticity of the face, the faces the neural network was originally trained on, into a space of queerness, a performing-fake face. The result is a fluid and always changing monstification of the face capable of focusing on the aporia between gender and genre as a performing technology of the identity.

**Marco VIOLA, University of Turin**

### **Trust & Fakemasks**

We are natural born physiognomists: when we see an unknown face, we formulate a judgment about it in the blink of an eye. Is she angry? Isn't he beautiful? Is she feeling unwell? How old is he? These are but a few examples of the questions that our mind seeks to answer when we see someone's face. Very often, those answers are unbeknown to our conscious self, resulting in implicit judgments (that often may turn out to be *mis*judgment!) about the (transient) mental states and of the (enduring) mental traits of the observed face-bearer, steering our interaction toward her (Todorov et al. 2015). Far from being perfectly dissociable dimensions, such states and traits are highly correlated. One of the most studied is a face's perceived *trustworthiness*, which seems to depend upon a face's perceived valence (signaling the will to harm) and dominance (based upon heuristic assessment of physical strength, signaling the potential to harm. Oosterhof & Todorov 2008). In this study, I will first survey the meaning and measurements of the construct 'trustworthiness' as it is framed in social psychology, with a critical eye toward its generalizability across contexts. I will review a small but consistent effect that showed up in different recent studies of face perceptions with facemasks: all things being equal, masked faces are rated as slightly more trustworthy than their unmasked counterpart (Olivera-La Rosa et al. 2020; Calbi et al. 2021; Marini et al. 2021). This suggests that facemasks' do not only subtract some social information (resulting e.g. in impairments in emotion and identity recognition), but also add novel information that bias our social judgment, likely on the basis of cultural influence (see Liu et al. 2016; Leone 2020). **Finally, I will briefly describe an ongoing experiment in which my colleagues and I explicitly test whether facemasks actually increase their bearer's trustworthiness by biasing the subject in deeming fake information true.**

**Bruno SURACE, University of Turin**

### **True Faces and Fake Age(ncie)s from Cinema to Progeria**

There is undoubtedly an “anagraphic” semiotics of the face, which makes it an approximate indicator of a person's age. It is common to falsify this natural datum, through the application of cosmetics, surgery



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and other treatments designed to camouflage one's age. These interventions, however, only work on a certain age range (typically one can "lose a few years", but certainly not decades), and they tend to be retrospective: in ordinary life the dominant tendency is towards an aesthetic rejuvenation. However, there is a peculiar semiotic universe in which face and age do not seem to correspond in such a linear way. Children's faces can conceal alienating "twists of age", as in the case of Baby Herman in *Who Framed Roger Rabbit* (Zemeckis 1988), a toddler who smokes cigars, swears and pats women on the buttocks; alternatively, elderly faces can be worn by infants, as in *The Curious Case of Benjamin Button* (Fincher 2008). Then there are the faces of aging actors which are digitally rejuvenated – Will Smith's in *Gemini Man* (Lee 2019) or Robert De Niro's in *The Irishman* (Scorsese 2019) – or even, if necessary, *resurrected*, like Peter Cushing's in *Rogue One: A Star Wars Story* (Edwards 2016). In the world we aim to investigate in this paper, where it is possible to falsify facial registers in various ways, there is also a peculiar space in which it is nature that creates faces which *lie* about the age of the "wearer". This is the case with the faces of patients suffering from progeria, a very rare "premature aging syndrome", known today above all thanks to the extraordinary work of people like Sammy Basso.

**Elsa SORO, University of Turin**

### **"Plenty of (Cat)Fish": How to Steal Faces in the Sea of Online Identities**

Almost everyone these days has adopted at least one online identity with which she or he perform her or his digital self(s). The Internet and social media in particular seem to be populated by billions of individual personas. Yet, many of them are fake. INTERPOL (2020) recently published revealing figures about the vast number of fake identities on the Internet, which included trolls, scammers and catfishes. The latter operate mostly in two kinds of online communities: dating apps and p2p platforms, where they pretend to be (fake) lovers, landlords, retailers, hosts and so forth. In particular, the industries around online courtship and travels/hospitality seem to be ideal spaces for performing under a fake identity in order to perpetuate against other users different kinds of fraudulent activities ranging from simple financial gain to cyberbullying and sexual abuse. Often, the first step of creating a fake online identity is to steal someone else's face and to convince others to believe that they are the person portrayed. This piece will explore the phenomenon of stealing faces for fraudulent purposes in the above mentioned fields. Ultimately, the figure of the catfish, a fish that is no appetible in the sea of online identities, allow to enrich the debate about face falsification processes in the online realm.

**Antonio SANTANGELO, University of Turin**

### **Weird and Eerie Faces**

In his book entitled "The Weird and the Eerie" (2016), Mark Fisher deepens his analysis of the semiotic systems that direct our reading and our assignment of meaning to the everyday, which he had already begun in "Capitalist Realism: is there no alternatives?" (Fisher 2009). After pointing out that the narratives and values at the basis of capitalist thought have imposed themselves as a principle of reality that can be unhinged, the British scholar shows this unhinging at work in a series of films, novels, short stories and musical works, both past and contemporary. All of these texts are characterised by the fact that they recount "strange" realities, where the normal flow of everyday life gradually shows ripples, behind which something apparently absurd is hidden, often with a disturbing agentiveness, but which allows us to realise that the true meaning of things is not what we had always thought. All of a sudden,



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the old way of conceiving the world, the one that had always been used, turns out to be false, while it becomes clear that a new key of interpretation must be adopted. Some features of this new interpretative key can be found in the afterword to the Italian edition of "The Weird and the Eerie", in which Gianluca Didino (2018) contextualises Fisher's research within a broader current of thought called "speculative realism" (De Sanctis, ed., 2017), which has its roots in the Anglo-Saxon philosophical and literary context, taking its cue from Jameson and critiquing contemporary society (Didino refers to the work of Ray Brassier, Simon Raynolds, Tomas Ligotti, Eugene Thacker, Nick Land, Nick Srnicek and others). But many distinctive features of "weird" and "eerie" narratives are still to be highlighted, especially by using a sociosemiotic method of investigation, which shows clearly what sense the structure and language of these stories have in the contemporary Western cultural context. The idea of my talk is to reflect on how the faces of the characters analysed by Fisher are made, those that, thanks to their "weirdness" and "eeriness", reveal the falsity of our old models of interpreting reality, inducing us to see things as they really are. The codes with which the faces of these subjects are represented will then be related to those with which the protagonists of a recent film, which perfectly embodies the theories of speculative realism, are represented: "Little Joe" (Hausner, 2019). Here, a beautiful, seemingly sterile flower, made in a laboratory to be sold and enrich its creators, seems to take over the minds of its owners in order to reproduce itself. The interpretative effort imposed on us by the author of this work, in order to understand whether the plant is good or bad and whether humans are fully in themselves or not, will serve as a metaphor to explain the meaning of a certain way of telling the faces and identities of people, in contemporary times.

**Gabriele MARINO, University of Turin**

### **Doppelgänger of Nobody: Exploring Post-Irony through Ambiguous Faces and Personae**

We are obsessed with authenticity: on the one hand, we always need to distinguish between fiction and non-fiction, real and unreal; on the other hand, we always need the link between a textual persona (implied or ideal reader, enunciator) and an extra-textual, empirical one. Nevertheless, semiotics does teach us that a semantic category is not identified by contradictive oppositions (X vs. non-X) only, but by contrary ones (X vs. Y) as well; furthermore, we know (according to Lacan) that there are not only the realms of the real and the imaginary, but also the symbolic. As a matter of fact, more than often, we are not able to verify whether something is true or not, serious or not, and we cannot accomplish such a cognitive and hermeneutic task due to inherent features of the semiotic object we are confronting with. In other words, some semiotic objects are not merely just real or fake, true or false, serious or ironic. They are in-between. The paper delves into this classic subject matter for semiotic scholarship – falsehood, lying, deception, forgery (see the work of Eco) – by scrutinizing the still under-investigated and imperfectly defined "post-irony", a category that is being employed, mainly in the field of digital/online aesthetics, since the mid-2000s. Case studies will be provided by examples of ambiguous communication in online discourse (most notably, Internet memes) and ambiguous public personae we may provisionally call "impersonators" (hence the question: is the performer *in character* or not?).

**Remo GRAMIGNA, University of Turin**

***Poker Face: On Concealing One's Face and Outsmarting Others in Strategic Interactions***

The expression 'Poker face' refers to the ability of concealing one's thoughts and ideas and it is used strategically in a poker game. One pivotal aspect in the dynamic of deception and counter-deception is the gathering and management of information. Information sources can be either linguistic or extra-linguistic and the human face is a case in point. Face is the 'message board' where information can be gleaned, but also dissimulated and faked. Within the frame of game theory originally formulated by Von Neumann and Morgenster, the term *Bluffing* refers to a maneuver used by experienced poker players in order to manipulate the opponent's impressions, to mislead them and gain a strategic advantage. The player who resorts to *Bluffing* is driven by two main motifs: to give a false impression of strength whilst he actually is in a position of weakness, or vice versa, to give a false impression of weakness when in reality the player is in a position of strength. These are both strategies of deception that have the intention of misleading the opponent. Cases like this one provide a privileged field for the study of fakery and deception as an example of the mind-reading process that goes on in strategic interactions in different social settings. *Bluffing*, understood as a form of strategy aimed at misleading the other, is not limited to the game of Poker but is a strategy that can be extended to other social settings and to interactions that are non-cooperative or conflictual (from sports to wars). Through a range of references to examples in which the element of deciphering the moves of others is essential, the present study aims to identify a semiotic specificity of the study of faking for the purpose of deception.

**Gianmarco GIULIANA, University of Turin**

**The Semiotics of Metahuman Faces**

On February 2021 the well-known company Epic Games released the trailer of their new software "Metahuman Creator", entirely dedicated to the creation of astonishingly realistic and fake digital faces. This is the result of a now twenty years old R&D project which, within both cinema and videogames, has one very specific and explicit goal: the creation of the perfect digital human and of a digital lying face which cannot be distinguished from a real one. During our talk we will briefly reconstruct this history to highlight the main values behind such millions-worth development and to propose an updated theoretical ground to redefine through semiotics the very notion of "fake face".

**Sophie DUFAYS, University of Leuven**

**The Faces of Fakes and Alleged Culprits in Mexico**

In Mexico, the fabrication or factory of (fake) culprits is a well-known phenomenon, but it has not been investigated from the perspective of the staging/performance/*mise en scène* of faces. I will contrast the media-judicial presentation of the faces of alleged culprits of crimes in two emblematic judicial cases (the Cassez-Vallarta case and the Ayotzinapa case), with the (audio)visual tagging/performance/*mise en scène* of the faces of false culprits in various artistic and activist media (fiction films, documentaries, videos, posters...). I will analyse the strategies used to make a face associated with the idea of guilt and those used to denounce these "falsifications" or to question the limits between the expression of the true/fake, the authentic/deceptive and the innocent/guilty in a face".



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**Silvia BARBOTTO, University of Turin**  
**UnTruth-Faces Written with Light**

Photography is the instance analyzed in this essay. After proposing a brief genealogy, tracing the semiotic lines thanks to the accurate study of many authors (Barthes, Calabrese, Dondero, Fontcuberta, Mitchell, Dubois etc.) and introducing the concept of *post*- and *meta*-photography, we will enter into the management and deepening of the statutes of the true and false through the involvement of some examples in which the processes of expression of the untrue and falsification emerge. We will go into the management and deepening of the statutes of the true and false through the involvement of some examples in which the expressive processes of the untrue and falsification emerge. We will find in the art and in the genre of the portrait the main sources of inspiration to be able to conduct such a path and we will share, therefore, both examples from history and contemporaneity, and examples coming from personal practices and collective workshops.



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