

# The Janus-Face of Facial Recognition Software

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## Abstract

The human desire “to know the face in its most transitory and bizarre manifestations” was stimulated by the use of photography, argues film historian Tom Gunning. [1] Subsequently, it also inspired the invention of motion pictures. The drive to “know the face” and to decipher its diverse characteristics and manifestations continues to inspire scientists, health and advertising professionals, as well as law enforcement experts, in their efforts to develop automated facial recognition systems. Such systems are used for identifying human faces and distinguishing them from one another, and for recognizing human facial expression.

This tendency to teach computers to “see” the human face is part of a broader effort to automate vision – to create machines that not only can generate images, but also analyse their content. As artist and geographer Trevor Paglen asserts, most images produced today are created by machines for machines to decipher. [2] For Paglen this “machine-to-machine seeing” is dramatically changing many spheres of human lives. Machine vision systems and digital images have permeated and are now transforming economy and transportation, industrial operations, law enforcement and urban lives, in autonomous cars and “smart” cities.

The rise of machine-to-machine seeing apparatuses has also impacted art. We now hear of machines making art, almost independently of humans. But machines and machine learning (ML) are also affecting the art world in a more immediate way. Since various manifestations of artificial intelligence (AI) and ML have become a cultural phenomenon, artists and designers are responding to them, and are already investigating ways of harnessing ML and computer vision to their arsenal.

This paper contextualizes efforts made by artists and designers to reinvent facial recognition technology so that it can be put to other uses than computerized forms of surveillance. I examine artworks that take automated face perception technologies, reverse-engineer them, re-appropriate them and reveal their biases. These include, for example, Adam Harvey’s “DIY Camouflage” (2010-), Shinseungback Kimyonghun’s “Cloud Face” (2015), and Trevor Paglen’s “A Study of Invisible Images” (2017). I then go on to explore examples from art, fashion and design that propose an alternative visibility, one that renders faces *unrecognizable* to computer vision systems: Zach Blas’ “Facial Weaponization” (2011-2014) and “Face Cages” (2013-2016), or Hungry’s distorted drag (which can also be seen in the body of Björk’s recently released album *Utopia*). Inspired by drag, theatre and religion, and drawing on queer ideology, these masks, jewellery and make-up can be considered as anticipatory of future avant-garde practices designed to make faces informatically invisible and inaccessible to the machine, empowering us to choose between and play on our identities.

Ironically, the right to disappear from the machinic gaze, to fly under the surveillance radar, straddles the line between what is socially acceptable and what appears grotesque or inadequate. The right to disappear also demarcates what computers and humans can or cannot see - or rather, make sense of. This paper proceeds by undermining the concept of having one stable identity, of one’s face as an “unchanging repository of personal information from which we can collect data about identity,” as feminist theorist Shoshana Amielle Magnet puts it. [3]

Going beyond the vantage point of contemporary AI and machines’ ability to detect

and decode faces as means of power and control, the emerging technical developments call for possibilities much less familiar, and perhaps much more exciting, than government surveillance. Such possibilities promise to reassess the expressive capacities of the face, and its multiple features and qualities, inviting a revolutionary outlook on culture and acceptability, identification and social interaction. Can we conceive of new uses and new narratives for facial recognition technology?

### **References**

1. Tom Gunning, "In Your Face: Physiognomy, Photography, and the Gnostic Mission of Early Film," *Modernism/Modernity* 4, no. 1 (1997).
2. Tevor Paglen, "Invisible Images (Your Pictures Are Looking At You)". *The New Inquiry* (December 8 2016). <https://thenewinquiry.com/invisible-images-your-pictures-are-looking-at-you/>.
3. Shoshana Amielle Magnet, *When Biometrics Fail: Gender, Race, and the*
4. *Technology of Identity* (Durham, NC: Duke University Press, 2011).

### **Biography**

Romi Mikulinsky is the head of the Master of Design (MDes) program in Industrial Design and a senior lecturer at the Bezalel Academy of Arts and Design in Jerusalem. Her dissertation at the University of Toronto's English Dept. was dedicated to photography, memory, and trauma in literature and film. Dr Mikulinsky researches and lectures on the future of reading and writing as well as on the various interactions of words and images, texts, codes, and communities in the information age. She has worked with various startup companies and media websites, corporations and municipalities on implementing innovative communication technologies. She served as the Director of the Shpilman Institute for Photography and worked with various art museums in Israel. Her book *Digital Clutter: Topics in Digital Culture*, co-authored with Prof. Sheizaf Rafaeli, is to be published in 2019.