



How to Be or Not to Be Recognized as a Human: How Do Technical Limitations Influence the Image of the Self?



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The body is our anchorage in the world, the zero point in reality, but it is also the only blind spot for the person, especially the face. Humans only can see “what I look like” through media, which reproduces virtual images — from mirror to screen. Today, people get images of themselves from screens more and more. Whether people want them or not, these images are processed by algorithms. People have never had the power to control their own image but have been coerced by media. However, there is an easily overlooked but inescapable element that has always been in control — the technological boundaries/limitations. The artwork and proposal will focus on exploring how technological limitations in the digital age have shaped digital images, especially face images of the Self. It includes the images’ dissemination, compression, recognition, calculation and transfer between text and pictures.

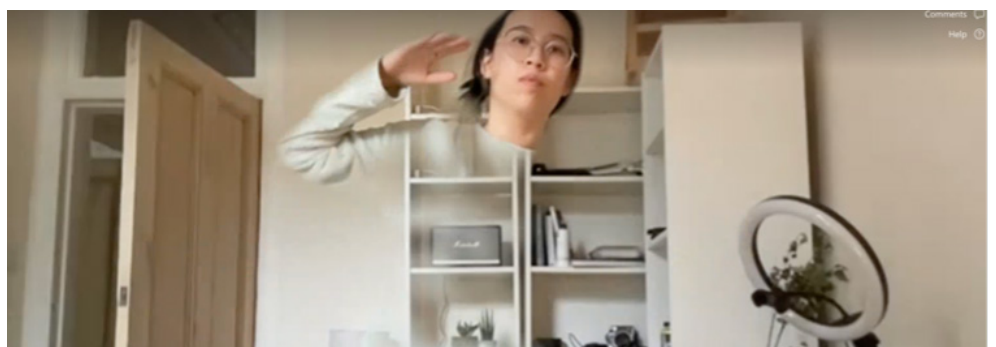
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Description of the Artwork

Compared with analogue images, recognising is an essential step in the operation of algorithms for processing digital images, especially for the body/face. In the post-epidemic period, online meeting software is being used significantly. A very intuitive and visible recognition exists on this software when users use a virtual background that the algorithm must make real-time judgements and process dynamic people: is this a person? Is this a human face? Does this belong to a part of a human being? Is this the edge of a human being? Its processing speed is extremely fast, almost catching up with the human eye's reaction speed. However, it has the technical limitation that when people move fast, the edges are not handled well, and some blurring or errors are caused. Sometimes it may cut off a part of the body that belongs to the person or incorrectly show a part of the background that does not belong to the person due to misidentification (Fig. 1). In the artwork *How to be or not to be Recognized as A Human*, (Fig. 2) the performance takes place in front of a computer camera. My own body was used as the experimental target and was transformed into a body image in real-time. The body's performance in this reality space is not valid, only valid in the interaction with the algorithm on the screen. The Zoom algorithm and I playfully banter, finding and playing with each other's bugs.

The whole video has not been edited in any way. Instead, all the effects were created by combining physical props and Zoom's virtual background feature. The former includes the mirror and screen in my hands, and the latter is a looping video of the jumping cube as a virtual background. It is a faithful recording of a performance using Zoom's record function.

Figure 1: Screenshot: My arm/body disappearing.



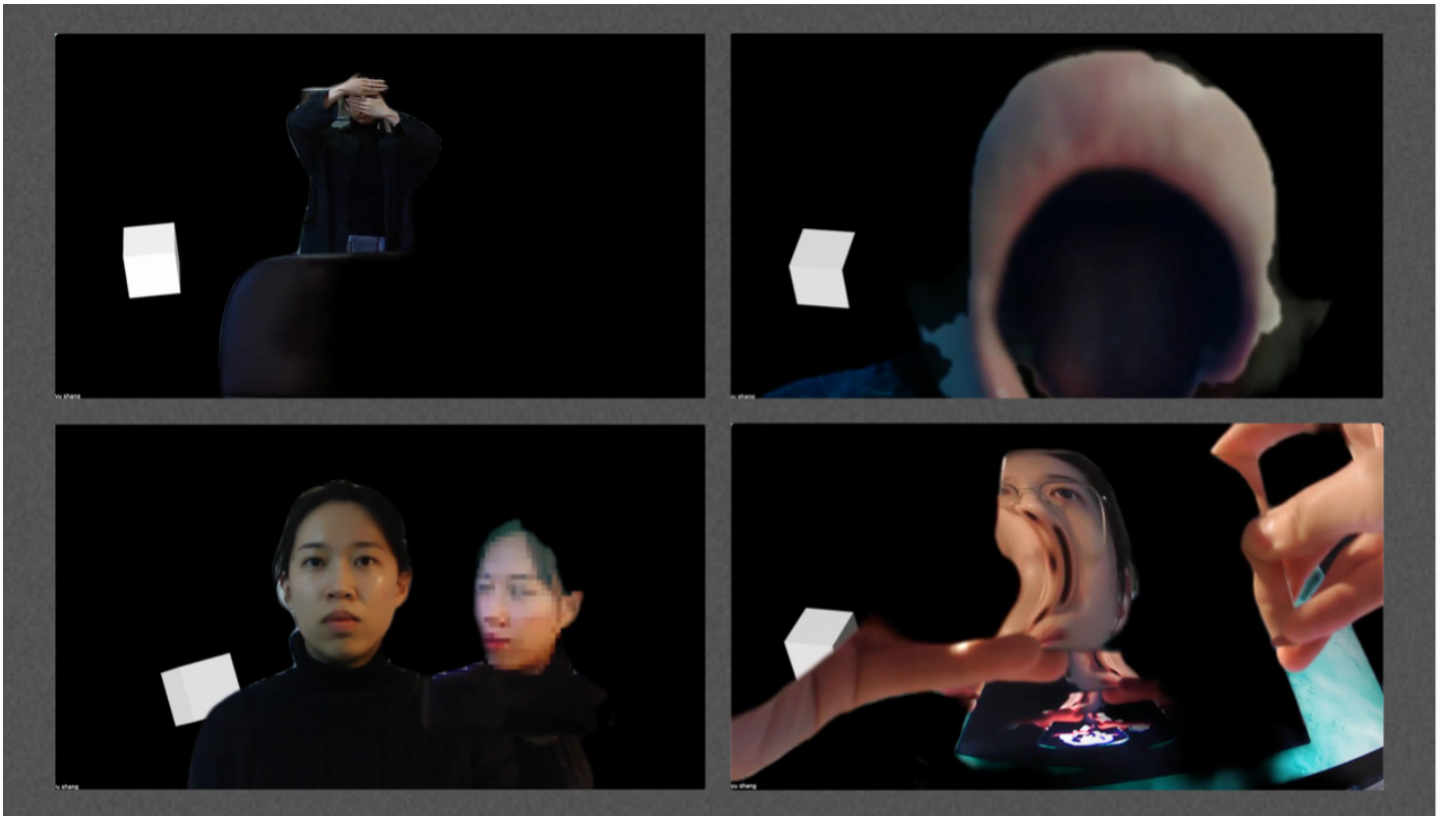


Figure 2: Video *How to Be or Not to Be Recognized as a Human* (<https://www.youtube.com/watch?v=IBVOvFdELRM>).

Context

When software and image collide the result is not just a different, processual image, but also a paradigm shift with implications for thinking about the ontological link between representation, memory, time and identity. (Rubinstein and Sluis 2013, 25)

Initially, people discovered themselves in the mirror as a process of awakening self-knowledge and gaining an identity. Many related theories and scholars — such as Jacques Lacan (2006) and Suzanne Ridley (2014) — have noticed the history of mirrors and their role in shaping self-consciousness and identity. Then, it is the camera’s power to ‘see’ in an inhuman and multiple ways that give us, a whole new way of thinking. During the long period of development that photographic technology has been going through, from film photography to digital photography, the role of light has undergone different chemical and physical changes compared to that of a mirror. At the same time, people have more flexible access to images of their own bodies, seeing themselves from different angles, even in motion, where the ‘person’ in the image and subject can avoid direct gazes at each other. Today, one increasingly common phenomenon is that people often use cameras and screens as mirrors, even more than mirrors themselves. For example, the smartphone that everyone carries with them anytime and anywhere. Or the rapidly increasing use of online meeting software, especially since the epidemic, where a ‘mirror’ appears in the bottom right-hand corner of the screen, which helps people always know ‘what I look like when I am talking to the other’. That’s weird, as people never needed to think about it

before the invention of video calls and online meetings. Do we really need to know this?

Simultaneously, the advent of the digital image removes the one-to-one correspondence between the image and the original, allowing the data/algorithm to take advantage of it. Digital images of self-representation increasingly appear in our everyday lives; whether you actively use filters or effects or not, the image of you that the camera displays on the screen has possibly been processed by an algorithm. The opinion is described by another interesting example which is from an interview with Hito Steyerl (2014). According to a technician working on smartphone cameras, half of the data captured is noise because the phone lenses are so tiny and inferior. The key to solving this problem is to create an algorithm that cleans and defines the image from the noise. How does the camera know what needs to be preserved? The algorithm tries to match faces and shapes by scanning the photos you've already taken and stored in albums, and the pictures you've used in networks such as social media. The algorithm creates the picture "based on earlier pictures, on your/its memory. It does not only know what you saw but also what you might like to see based on your previous choices. In other words, it speculates on your preferences and offers an interpretation of data based on affinities to other data" (Steyerl 2014). The result is that the picture it created may not exist in reality. What is presented on the screen is not the present moment being photographed, but an image intertwined with the past. But this mode of image production is as well as limited because the common tendency of the new images generated by the algorithm is guided by your currently existing images and currently existing preferences. All are directed towards the unknown in this constant process of difference and repetition of generation.

In a short essay he wrote a few years before suicide, Gilles Deleuze (1990) made the point that we are constantly under or within some kind of control so that the social order is maintained. There is always a sense that we are being surveilled or are yielding our place to some invisible authority (Rothwell 2017). The image, as a mechanism for capturing something recognisable about who you are, is now playing the role of an "invisible authority". The mirror is the earliest producer and medium for generating authoritative images. Then what factors act as the invisible authority that determines the image that influences its appearance?

However, actually, throughout history, people and their images have never been unified. In the embodied perception of phenomenology, when we go into the world of perception, we are always taking our bodies with us. An interesting contradiction is that the body as the "zero point of orientation" (Merleau-Ponty 1962), which we can best determine its physical authenticity, can be controlled, touched, and

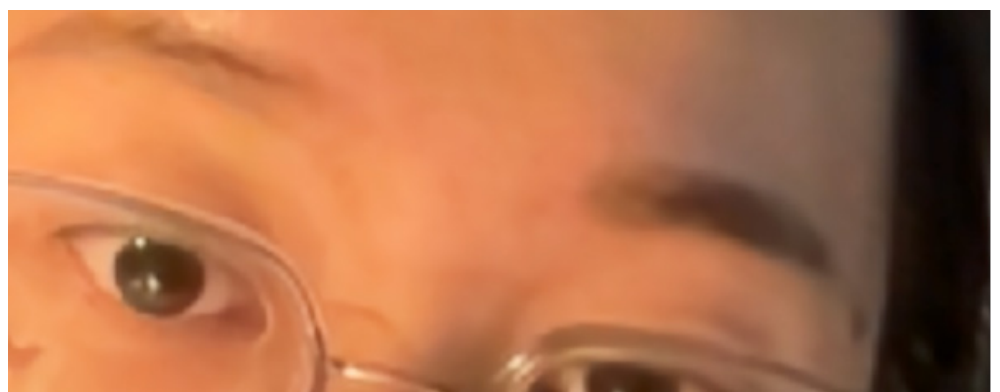
felt. But it is the only blind spot of its owner in the world, especially our own face. This is the reason I chose my own body as the target in the work.

Digital Images and Technical Limitations

Some arguments suggest that under highly magnified observation, analogue images are considered to have a high degree of consistency and accuracy with the represented object, such as gradations of light and shade that still retain a perfectly natural and smoothly curved state (Poe 1840). In comparison, an image encoded by digital means comprises a finite number of pixels, i.e., cells that are visible when magnified. Furthermore, the colour of each cell is determined by a finite range of integers, such as RGB values from 0-255. Therefore, the amount of information in an image from traditional photography is infinite. In contrast, a digital image contains a fixed amount of information, which is limited by the resolution, and when zoomed in to see the colour of each pixel, no more news is available (Mitchell 1998, 31-70). Secondly, the light of the captured image is decomposed into binary codes to be transmitted in wired or wireless and finally recomposed to new images on the screen. Numerous scholars have argued that the manipulability of code defines the character of digital images (Rose 2016, 7). Digital images are indeed prone to be edited by people, but this project wants to highlight the ‘non-editable’ factor that exists outside of the human element — the inherent technical limitations of the representation media themselves.

A visual example of this occurred during my video using Zoom software, as shown in the screenshot (Fig. 3), where my eyebrows show a clear asymmetry. I do not look like this in fact, and Zoom doesn’t want to show me like this either, but it happened. This is one of the technical limitations I talked about. The limits of this technology are neither what humans nor the technology itself want, but it becomes a non-negligible power — affecting the appearance of images, the relationship between the body image and body, and the building of self. This invisible power does not exist only in the age of the digital image; it has been present throughout the history of the human body image and has had a range of cultural and ideological influences.

Figure 3: My asymmetrical eyebrows on the screen



Another notorious but crucial example is that early in its invention, photography raised issues of race, class and colonialism over the point of black and white skin. Photography has been described as a technology invented for white people. Due to technical problems with light in the photographic imaging principle, images of black people's faces could not be captured well, and their facial features were erased; "The problem is memorably attested in a racial context in school photos where either the black pupils' faces look like blobs or the white pupils have theirs bleached out" (Dyer 1997). It is suggested that this problem was not solved until the age of digital photography. However, a similar problem has not been fixed very well even today. It is still present in facial recognition systems (Buolamwini and Gebru 2018, 77-91).

As this technical limitation is invisible and easy to ignore, I wanted to express, through the intervention of my work, the new aesthetics and the changing relationship between the human and digital image that results from this technical limitation, of which this work is one. As the whole world becomes increasingly homogenised, algorithms produce more and more instant overcoding faces in a repetitive generation; are they undermining the specificity of the faces and replacing them with the creation of universals, or are they creating new specificities? These are questions that require further research.

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