

Countersurveillance Aesthetic: The Role of Fashion in the Reappropriation of Identity

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Published: October 26, 2023

Abstract

There is an ongoing issue of living in a hyper surveilled world where our data and information are being shared and stored beyond our reach and understanding. This process ends in a general unpleasant feeling of insecurity and loss of our proper identity, but luckily this issue is being addressed, and not just by researchers and engineers, but by designers and artists which are creating clothes and garments that will allow us to regain our own identity. In particular, the field of speculative design is the one embracing all of these projects and the aim of this presentation is, through a series of case studies, to display the swift from speculative design and artistic practice to a form of political resistance. For example, the artistic approach of Adam Harvey or Zach Blas aims at highlighting the potential of textiles, masks and jewellery to hide our precious and unique biometric data. Although the description of “post apocalyptic designs” might seem catastrophic, it is quite the opposite. There is a growing community of people rediscovering solutions and proposing them, envisioning a collective resistance where these forms of fashion will protect both the planet and our identity. In this sense, fashion, expressed through collective actions and social movements, will bring forward the need to introduce better regulation of the usage of data.

Keywords: Surveillance; Countersurveillance Fashion; Wearable Technologies; Visual Arts; Speculative Design.

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Introduction

Fashion has always been a medium for self-expression. However, what happens if we are stripped of our agency? If concealing our identity might grant us more safety and — as contradictory as it sounds — more freedom of expression?

The loss of agency is an ongoing issue of the hyper surveilled world we live in, where our data and information are being shared and stored beyond our reach and understanding. The purpose of this article is to present the evolution in surveillance studies and the intertwined discipline that face this tricky subject, then a selection of some case studies in the field of fashion and speculative design will present tactics of countersurveillance. Hiding, concealing and other strategies are aimed at protecting our biometric data and our image in order to regain a sense of freedom in expressing our identity. *Vexed Generation* is the designer duo that led us to reflect on the evolution of protest movements and their relation with face protection. Then, with the well-known projects of Adam Harvey, a different type of camouflage is explored where hiding occurs through bold fashion choices. The last case study is visual artist Zach Blas, who works with a reinterpretation of the mask against Ai's evident biases. A particular focus on *Cap_able*, an Italian start up, will represent the perspective of a contemporary fashion brand.

However, how did we reach the point of thinking of a countersurveillance? It all started with the technological evolution, which contributed to a hyperconnectivity and a constant share of our self-defined image. Then, the increasing collection of data that has become widespread, quick and undetectable way beyond our control. The artificial intelligence systems are both perusing into our private data and simply gathering all types of information that we willingly share because of the hyperconnection of various aspects of our life. With internal cameras on our smartphones and social media, the deal was sealed and our form or online representation were now inscribed in a bigger network as Lev Manovich, theorist and professor in digital culture and new media, tried to visualize in the project *Selfecity*.¹ With his team, he investigated selfies in five cities across the world applying theoretic, artistic and quantitative methods and thanks to their online and openly accessible *selfexploratory* it is possible to visualize and become aware of the data and information concealed in these self-portraits. The most engaging filter introduced in this project is where they tried to identify the mood (calm, angry, happy) in people's selfies (Fig. 01).

The other hand of the duplicity of technological advancement as a form of self-representation, lies within the feeling of loss of identity in an entangled web of predesigned *ways of seeing*, based on data we did not give permission to harvest. The interconnection via the Internet of computing devices embedded in everyday objects, enabling them to send and receive data, is strictly tied to the development of facial recognition technology. This system is based on a technology capable of identifying human features through a digital image. It is developed to gather the biometrics, unique biological measurements or characteristics that lead to our identity, namely fingerprints; and proceed with a pattern recognition and finding a match of the identified features in a database. Its development began in the 1960s as a form of computer application and is now embedded in most technological devices. What is troubling and causing controversy about this technology is that the data are collected and stored, appropriating one's identity and tracking the online activity. It can be said that "the display of the face in the multi-media age has become a habit, [and] identity turns out to be incidental and aimed only at reflection in the screen."² Identity through the eye of big data³ becomes an immaterial and imperceptible concept. The paradox is that big data is fed by user generated content that is giving away the information about the users themselves, who are doing this willingly but not fully aware. Furthermore, the computer analysis has in many instances committed errors and presented serious biases, which has led to questioning

1. Lev Manovich, "Selfecity," accessed February 1, 2023, <https://selfecity.net/>.

2. Massimo Clemente, " 'Selfie-Destruction'. Sull'autoritarsi contemporaneo," *Logoi.ph*, Vol. 8, n. III (2017): 118.

3. The term is in common use since the 1990s and refers to data sets with sizes beyond the ability of commonly used software tools to capture, manage and process data. Some of big data characteristics are volume (amount of data), variety (diversification of data), velocity (speed at which data is generated and processed), veracity (data quality and volume).

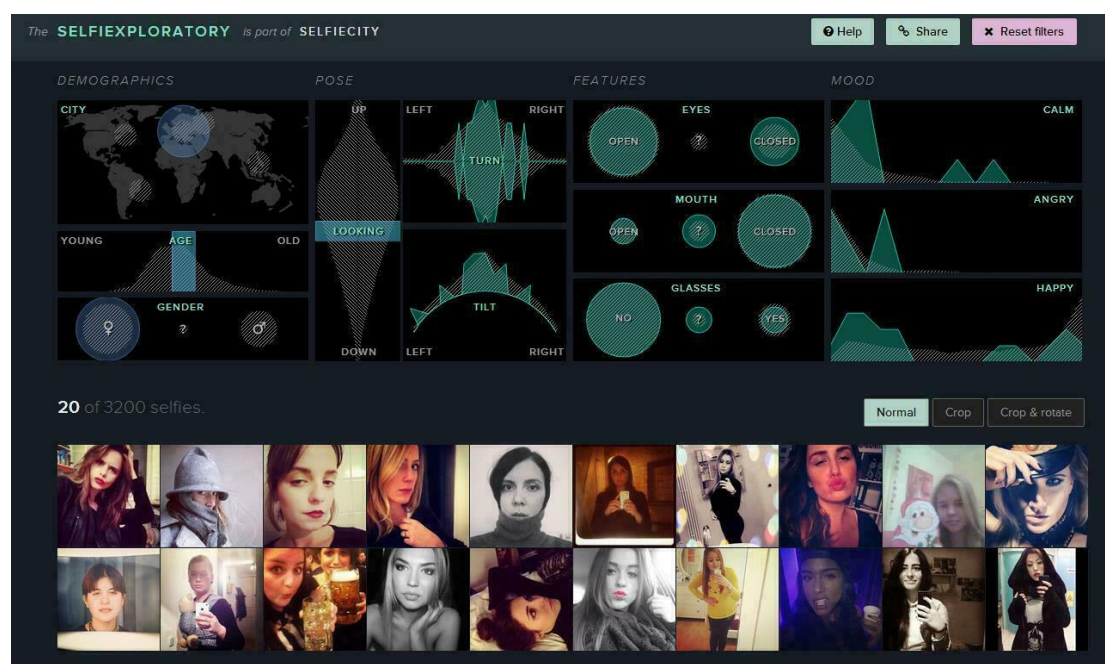


Figure 1: Example of filters in Selfecity

more and more how to prevent the use of this overwhelming technology, as it will be deepened in the following paragraphs.

Thanks to the work of some dedicated scholars, we are now able to acknowledge the problem of what has been described as a Panopticon⁴ in the age of electronic surveillance. Since the rise of surveillance has been studied for more than twenty years, the bibliography is extensive, but a few chosen publications can give an overview of the acceleration of the last few years. David Lyon was one of the pioneers of the field and researcher of the topic since the 1980s, as some of his publications show: *The Electronic Eye: The Rise of Surveillance Society* (1994); *Surveillance Society: Monitoring Everyday Life* (2001); or *Playing the Identity Card: Surveillance, Security and Identification in Global Perspective* (2008).⁵ More recently, Professor Shoshana Zuboff, author of 2019 bestseller *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, contributed to raising awareness on the topic and fight for increased regulations on new technologies' use of data.⁶ She shows how surveillance capitalism claims human experience as free raw material for translation into behavioural data. Although some of these data are applied to product or service improvement, the rest are declared as a proprietary behavioural surplus, fed into advanced manufacturing processes known as “machine intelligence,” and fabricated into prediction products that anticipate what you will do now, soon, and later.

It is with this quote by researcher Andrea Mubi Brighenti that we now delve into the choice of exploring fashion potentiality for countersurveillance:

4. Jeremy Bentham, a British philosopher and social theorist, published his plans for the Panopticon penitentiary in 1791, proposing a circular building with an inspection tower at the centre and cells around the perimeter. Jeremy Bentham, *Panopticon: Or the Inspection House* (London: T. Payne, 1791). It is in 1975, with the book *Discipline and Punish: The Birth of the Prison*, that Michel Foucault, philosopher and sociologist, strengthen Bentham's idea. Michel Foucault, *Surveiller et Punir: Naissance de la Prison* (Paris: Gallimard, 1975).
5. David Lyon, *The Electronic Eye: The Rise of Surveillance Society* (Minneapolis: University of Minneapolis Press, 1994); *Surveillance Society: Monitoring Everyday Life* (Buckingham: Open University Press, 2001); *Playing the Identity Card: Surveillance, Security and Identification in Global Perspective* (London: Routledge, 2008).
6. Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (London: Faber and Faber, 2019).

However, my point is that we should not underestimate the diversity of moods that can be conveyed through the same aesthetic of surveillance. Indeed, these moods range a lot from the dark and the gloomy, through the outraged and the sceptical, to the playful and even the enthusiastic. [...] Ultimately, I contend, the ambiguity that is inherent in all the dynamics of observing and being observed leads us to recognise the *haptic* component of the gaze.⁷

Panoptifashion: A Response to the Technological Gaze

In June 2021 the research centre ModaCult in Milan held a conference titled *Fashion Tales. Politics through the wardrobe* and titled one of the panels *Panoptifashion: data, hashtags and platforms*.⁸ It was the first time that this word emerged during this research, and it resonates with the approach chosen to display fashion and design creations used as a countersurveillance tactic, even if “for those who have studied surveillance the mere mention of the panopticon elicits exasperated groans.”⁹ The combination of two complex and multifaceted disciplines, such as fashion and speculative design, in relation to countersurveillance it is possible here because all three have the human body as their axe.

The Dark Glamour of Transparency

The design studio Metahaven, whose main interest is visual identity in relation to social and political transparency, has decided in 2010 to undertake a research and project on the visual identity of WikiLeaks. What they found fascinating was the paradox of this organization working to reveal truths and defend transparency, all through whistleblowing and secrecy, protecting their anonymity. In 2012 Metahaven presented the results with *The Dark Glamour of Transparency* in both an artistic installation and retail project (Fig. 02). The creation of the WikiLeaks scarfs, a piece of clothing typically associated with masking, veiling, and ambiguous enough between transparency and opacity, were decorated with camouflage patterns. This action of countersurveillance had the purpose to donate the money received from auctioning the pieces on eBay to WikiLeaks while they were under a financial embargo.

Finally, in 2011 the exhibition *Facestate* at the Walker Art Center put on display yet another project of Metahaven. They “use the kind of strategic thinking usually applied to commercial corporate identity projects to critique the political implications of blurring boundaries between consumerism and citizenship, especially when social software is embraced by governments in the name of improved transparency and interaction.”¹⁰ The Amsterdam-based studio carried on a research project on the parallelism between Zuckerberg’s social network and the state, considering the latter responsible for some sort of government surveillance through social media. The exhibition is a visualisation of this idea, the person and the device are imagined as one thing and therefore all the panels displayed are smartphone screens with a message, a mask, a password and so on.

Presenting Metahaven’s projects allow introducing another field of studies for countersurveillance fashion: speculative design. This kind of design practice theorises critical proposals for possible futures to open discussions or raise consciousness on future implications. The term was popularised by the publication *Speculative Everything: Design, Fiction, and Social Dreaming* (2013) by the well-established designer duo of Anthony Dunne and Fiona Raby.¹¹ Since design is generally about creating effective solutions to existing problems, the speculative practice allows more freedom in challenging assumptions more than offering practical proposals when dealing with non-controllable and even revolving issues.

7. Andrea Mubi Brighenti, “Artveillance: At the Crossroad of Art and Surveillance,” *Surveillance & Society*, Vol. 7, n. 2 (2010): 11.

8. “Fashion Tales. Politics through the wardrobe,” accessed July 17, 2023, <https://convegna.unicatt.it/fashiontales>.

9. Zygmunt Bauman, David Lyon, *Liquid Surveillance: A Conversation* (Polity Press: 2012), 49.

10. Anthony Dunne, Fiona Raby, *Speculative Everything: Design, Fiction, and social Dreaming* (The MIT Press, Cambridge: 2013), p.15.

11. Anthony Dunne and Fiona Raby, *Speculative Everything: Design, Fiction, and Social Dreaming* (The MIT Press, Cambridge: 2013).



Figure 2: Wikileaks scarf, Metahaven, 2010 (Photo: Artist for Assange)

Another reason why the field of speculative design has been a precious source of case studies relies on its underlying irony, which becomes a necessity when facing defiant technological surveillance spreading like wildfire and affecting our lives.

Our Digital Self

The concept of Panoptifashion is strictly connected to the new frontier of digital fashion where collected data are processed, AR and VR thrive, and the creation of virtual capsules for avatars and wearable tech seems appealing to almost every possible fashion brand. The recent publication of Amanda Sikarskie, *Digital Research Methods in Fashion and Textile Studies* (2020) is a successful attempt of guiding new researchers in the three major steps of their studies — searching, connecting, making — as crowdsourcing, hashtags filters, data visualisation and mapping methods are necessary tools to approach digital fashion.¹² Regarding avatars, it is still a twofold issue as on one side emerge the idea of a surrogate of the body, like a mannequin or a lifeless proxy that we have the power to activate:

These uncanny doubles [of avatars in art, ed.], are complex machines of introspection. We fetishize them in order to escape a confrontation with our real selves; we project ourselves and our fantasies onto them in order to bypass natural and social limits or real life.¹³

On the other side, the avatar might be the pinnacle of freedom in defining one's identity, thanks to the broad customization possibilities and the surfacing of digital garments, eventually leading the way to a hybridization into some sort of cybernetic organism.

Finally, the two noteworthy aspects of this new developing industry are the exploration of XR and the potential of metaverse. The XR, which stands for extended reality so an in-between AR and VR, is moving towards an increasingly mixed fashion experience whether in the shopping sector, in fashion exhibition, in any sort of avatar life/gaming world. The metaverse is instead still uncharted ground. Surely, some fashion luxury brands have tried some first steps, but the future is still unknown, especially when focusing on common people and interrogating them on what are they looking for in this representation of their digital self. Dressing an avatar without the limits of physical fashion is appealing, but the step forward seems to legitimize a person's digital identity even more: interoperability, which means that the avatar you created on a platform will be used in others (from a work meeting to a game session). Of course, for this process to be fully operative will take time and technological advancements, but there are some pioneer projects, as Digitalax Digital Fashion Operating System, who are allowing your digital avatar to move from one virtual space to the other without losing identity and piece of clothing. As it is understandable, these kinds of improvements have to be introduced alongside better regulations on the usage of data, otherwise they will become another problematic system to fight yet again.

Hiding: Concealment as a Reappropriation of Identity

The increasing set up of CCTV cameras, usually referred to as security cameras, in public spaces has grown exponentially since the 1990s, when their technology advanced and because of the method of digital multiplexing multiple cameras could be recording all at once. The reason behind the installation is to increase safety in the streets against crime and terrorism, as material collected by the cameras can be used to identify a person and its movements. This already holds the first contradictions, because in the case of crime prevention studies have shown that a camera is not an effective deterrent and often the perpetrators damage the camera before committing the crime. In the case of counter-terrorism, the exponential fear of the last decade has not provided more safety, as many of the attacks in public places were not anticipated. The problem in this case is caused by the fact that the circulation of videos from surveillance cameras gives the terrorist the fame and instils a sense of fear they were looking for at the beginning. Furthermore, recent projects have been launched like INDECT, a European program since

12. Amanda Sikarskie, *Digital Research Methods in Fashion and Textile Studies* (London: Bloomsbury, 2020).

13. Francesco Spampinato, "Body Surrogates: Mannequins, Life-Size Dolls, and Avatars," *PAJ: A Journal of Performance and Art*, Vol. 113 (2016): 19.

2009, that is trying to develop a form of automatic threat detection looking for suspicious behaviours through CCTV. Needless to say, the controversy around the invasion of privacy and the collection of data has been highlighted, meaning that even collective actions taken by governments to increase security are not well seen by law-abiding citizens that prefer not to be tracked all the time. Whereas visual artists, such as Aurore Dal Mas or Irene Fenara, are questioning the role of surveillance cameras with their artistic practice that use the cameras' footage as a tool, other artists chose to focus on the other side of this gaze therefore the body in its corporeity and our physical presence and identity.

False Sense of Security

The first proposed case study is located in the UK, which during the 1990s was one of the most prolific countries in installing a network of security cameras in the streets. To be fair, there has been a form of regulation with the Data Protection Act of 1998, where the Parliament granted to individuals legal rights to control information about themselves, and that has been complemented in 2018 of the General Data Protection Regulation (GDPR). Be that as it may, these regulations were and are not enough, which is why a duo of designers came forward with a capsule collection to ensure the privacy of the wearers. *Vexed Generation* is the idea of the designer duo of Joe Hunter and Adam Thorpe, that in 1994 decided to act against the suppression of civil liberties and the installation of surveillance cameras in London's poorest boroughs with a collection of clothes and a hybrid space used as a secretive retail shop.¹⁴ They are described as an anomaly in the fashion industry, but their impact is comparable to other ground-breaking experiments in other fields, such as the SEX boutique run by Vivienne Westwood and Malcolm McLaren in London in the 1970s. The *Vexed Generation* shop was in an alleyway behind Carnaby Street with no logo, windows covered and as anonymous as possible (Fig. 03). The same mood characterised the interior, a white room and basement with a rack of clothes with tape-letters on the wall spelling out the context of the clothes in the fight for personal protection, with the only piece of furniture of a television transmitting grainy footage of riots and other events. Regarding the clothes, two were the main goals behind them, which will be displayed through two of their most iconic pieces: to raise awareness on air pollution and the state of surveillance, and to subvert the fashion trends with irony. The common element is the use of military and high tenacity ballistic fabrics, as well as knife proof and bulletproof materials.

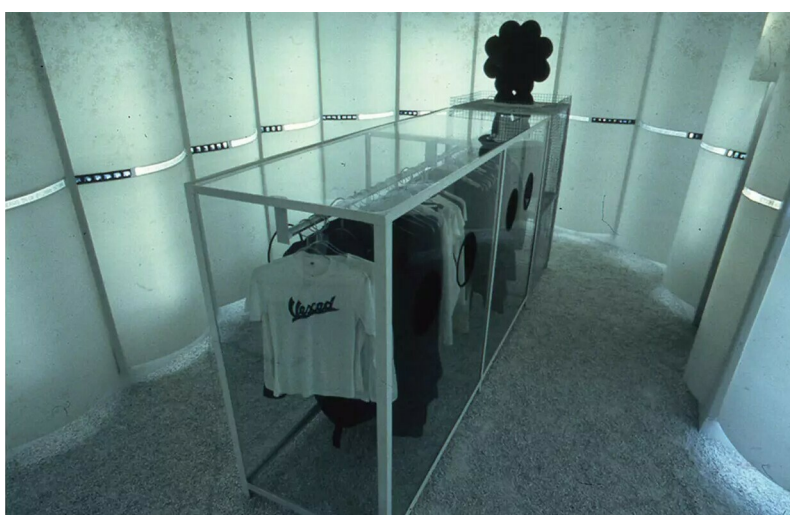


Figure 3: Vexed Generation retail shop in London

The first design is the *Vexed Parka* (Fig. 04), conceived in 1994, an almost balaclava-hooded jacket that could be zipped up to the eye's line as an armour. It was made of fireproof military nylon originally de-

14. Joe Hunter and Adam Thorpe in Max Grobe, "We speak to resurrected cult 90s label Vexed Generation about its new capsule," *Highsnobiety*, 2019, accessed February 1, 2023, <https://t.ly/YWTT>.

signed for NASA and provided additional padding at kidneys and groin. That year, the Criminal Justice Act wanted to restrict unlicensed rave parties and repress other social behaviours (curiously similar to a recent law proposition discussed in Italy at the end of 2022), attracting a strong opposition culminating in demonstrations and campaign of resistance. Hunter and Thorpe created this jacket as a parody of police riot gear that would protect the wearer both by covering their face and protecting the wearer in case of unjustified attack by the police. The second example is the popular *Ninja Hood*, introduced in 1995-1996, reissued every year until its demise. This unisex design is characterised by a high collar, with the double output of protecting the wearer's identity and of offering a filtered mask to avoid breathing the polluted air of London. Zippers and velcro pockets completed the signature of Vexed Generation design.



Figure 4: Example of Vexed Parka, designed by Joe Hunter and Adam Thorpe Vexed Generation, 1995 (Photo: Pinterest)

Faithful to their beliefs, when their creations were more and more commercialised and copied by fast-fashion chains, Hunter and Thorpe decided to focus on different projects and the label stopped producing. Fast-forwarding to the first decade of 2000, three events happened in the UK, China and the US that need to be analysed in order to understand the quick evolution from what Vexed Generation envisioned. In UK, it was founded a campaign group, Big Brother Watch, pursuing the reclaim of privacy and civil liberties from an informed public. Thanks to targeted campaigns, research projects and reports, they are doing an astounding work at keeping up to date all the cases of excessive intrusiveness of recognition tech and its indiscriminate usage. Similar to having your fingerprints or DNA stored in a police database is having your biometric photo stored there as well, but there are specific laws that apply DNA or fingerprints preventing the police from simply taking anyone's at any given moment. The problem is that currently there is no restriction revolving on biometric data being collected and stored. Then, in Hong Kong, a protest movement in 2019-2020 highlighted once more the issue of recognition in the conflict between the people and the police. During the protests against an extradition bill, police used facial recognition to track protesters, but people creatively pushed back with laser pointers to confuse and disable the facial-recognition technology or spray-painting cameras with their

face fully covered in DIY methods (for example with motorcycle helmets with the visor tin foiled). This act showed the people of Hong Kong are rejecting this vision of how technology should be used in the future. In the context of these protests, we can perceive the awareness that your face itself, something you can't hide, could give your identity away. Besides these protests, in China the surveillance state is acknowledged and somehow accepted whereas in the US the situation is trickier as it starts to become more evident, but is not openly communicated from the governmental institutions, forcing leaked information and other courses of action. In 2019 Amnesty International launched *Ban the scan*, with a New York City campaign and a global campaign against the use of facial recognition technologies used to harass minorities and to grant police a powerful tool of mass surveillance. As stated on the website of the campaign, "black and minority communities are at risk of being misidentified and falsely arrested — in some instances, facial recognition has been 95% inaccurate. Even when it 'works', it can exacerbate discriminatory policing and prevent the free and safe exercise of peaceful assembly."¹⁵ Following these events means to become aware of the development of the problematic surveillance of CCTV cameras which are now embedded with facial recognition systems, an even scarier threat to urban safety and personal protection. All of this revived Hunter and Thorpe desire to propose a relevant change through responsive garments, therefore in 2019 they released an eleven-piece capsule collection, a reissue of the most famous designs, in conjunction with Byronesque (a well-known vintage store) and Farfetch (an online luxury fashion retailer). The urgency to return after twenty years was given by the need to remind new generations that there is the possibility to respond creatively to the things that concern us. This recreation of archive pieces is deeply rooted in a new way of engaging the communities by choosing local manufacturers, so that the designs are the same, but the quality is higher, and they are more sustainable. In an interview about their comeback, the duo shows the coherent choices made towards hiding as a recognition of one's identity declaring:

A preference for privacy or anonymity is not a threat unless it is received as one. The old adage of CCTV advocates in the 90s was, "If you have nothing to hide you have nothing to fear" — scarily, this phrase has been attributed to Nazi Minister of Public Enlightenment and Propaganda, Joseph Goebbels. Conversely, we could argue: "If we have nothing to fear from the anonymous, then why do we need to know their identity?"¹⁶

Dazzling Camouflage

Another way to hide is to resort to camouflage and an unexpected form is dazzle camouflage or razzle dazzle, made of intricate designs of geometric shapes in various colours that intersect each other. The intention of this specific camouflage is not a literal form of invisibility, it is first and foremost a form of unrecognisability. It was extensively used on ships during WWI because it made it difficult to estimate its range, speed or direction, making it a more difficult target to hit. The chosen case study of Adam Harvey's project *CV Dazzle* (Computer Vision Dazzle)¹⁷ was created by the designer as part of his NYU Master's thesis in 2010 and is still ongoing. It consists of an open-source anti-facial recognition toolkit where hair and make-up can be styled to camouflage facial features from facial detection software programs (Fig. 05). These designs can be easily achieved using low-cost methods, modifying hairstyles, asymmetrical and colourful makeup with the goal to manipulate the expected dark and light areas of a face in relation to what computer vision algorithms look for when identifying objects. For example, unevenly extending dyed hair over an eye and the side of a painted face heightens facial asymmetry, disguises head shape, and complicates tonal gradients of the skin. This is highly effective in mitigating the risks of remote and computational visual information capture and analysis, while disguising it as a fashionable attire. In preventing one's identity from being captured by the digital gaze, it gives back agency and a choice for self-representation. Two aspects are quickly evolving, fashion trends and technology, and Harvey is fully aware that the designs need a constant update. On one side, what now strikes as bizarre might become a fashion trend in the future and once a style is mainstream of course technology

15. Amnesty International, "Ban the scan New York City," accessed February 1, 2023, <https://banthescan.amnesty.org/nyc/>.

16. See Max Grobe, "Highsnobiety," 2019, accessed February 1, 2023, <https://t.ly/YWTT>.

17. Adam Harvey, "CV Dazzle," accessed June 20, 2023, <https://adam.harvey.studio/cvdazzle>.

will be developed to keep its pace. On the other hand, because of this technological advancement, not all the projects will remain valid over time. The artist specifies on his website that these 2010's examples worked specifically with Viola-Jones face detection algorithm, a specific framework launched in 2001. Following Harvey's steps, several projects are playing with the idea of make up or accessories as a disguise against facial recognition technology. For example, a group of researchers from Carnegie Mellon University designed spectacle frames that can hide the wearer and trick the machine into identifying him or her with somebody else.¹⁸ The limits of this project, as others, are its application in real life with different lighting conditions and distance from the camera. Moreover, the frames are not subtle and discreet, pointing out yet again how noticeable these tools are to other humans' gaze. Being untraceable requires expanding behind the machine eye and considering the crowd we are in. To conclude, is particularly noteworthy the work of four young artists — Evie Price, Emily Roderick, Georgina Rowlands, Anna Hart — that under the name *The Dazzle Club* and via filmed performances, texts, workshops are keeping Harvey's legacy alive and up to date.¹⁹

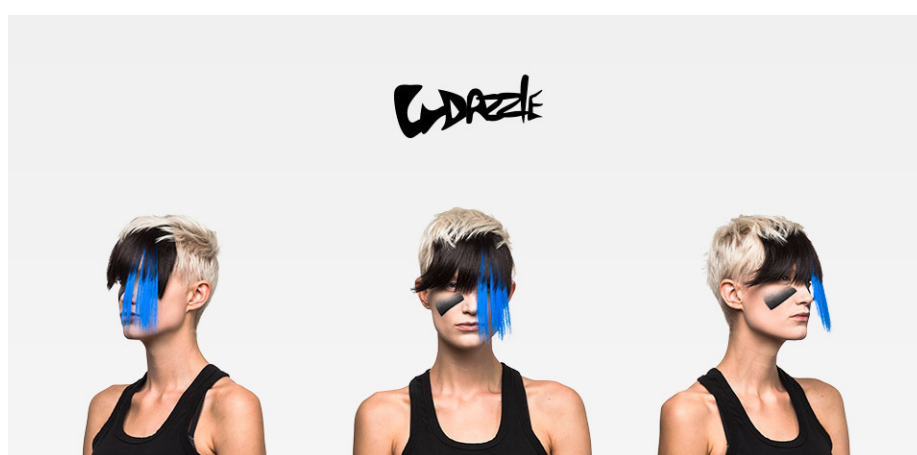


Figure 5: Example of CV Dazzle, Adam Harvey, since 2010 (Photo: Adam Harvey Studio)

Escaping AI's Biases and the Overlooking Eye of the Drone

As mentioned in multiple occasions before when describing the quick progress made by computer technology and machine learning, one of the biggest issues emerged has been the biases embedded in artificial intelligence systems. While artificial intelligence programs work on analysing, representing, and processing information, the machines have been trained by humans in the beginning. The problematic aspects are therefore embedded in the first bunch of data the algorithm is fed but is not immediately recognize and will then evolve quickly during the use of the computational program, revealing only later on unacceptable errors impacting life outside the machine and demonstrating how certain forms of discriminations that we thought were in the past are still relevant nowadays. The crucial point is that we accept humans are biased, but we blindly trust the machine results.

Acknowledging the Identity Problem of AI

The visual artist Zach Blas questions political implication in technology and, besides some conceptual work, he also engages with workshops and immersive installation to reflect on biometric recognition, predictive policing, and the limits between security and surveillance. He is currently one of the most important artists in addressing the new challenges of gender issues in technology. The *Face Cages Project*

18. Samuel Brice, "Protecting Your Privacy from Facial Recognition," *Medium*, December 20, 2020. <https://samdbrice.medium.com/4ofce44d3bob>.

19. The Dazzle Club (@thedazzleclub), Instagram account, <https://www.instagram.com/thedazzleclub/>.

(2014-2016) consist of four structures and four respective videos of the creators wearing them.²⁰ Since the success of today's booming biometrics industry has been described as "a cage of information," often classist, homophobic, racist, sexist, and transphobic, four queer artists — Micha Cárdenas, Elle Mehrmand, Paul Mpagi Sepuya, and Zach Blas himself — generated biometric diagrams of their faces, which are then fabricated as three-dimensional metal objects (Fig. 06). The material recalls handcuffs, prison bars and torture devices, and the same goes with the structure even if it is contradictory being it forget from the precise biometric data of the wearer. This is because the purpose of the face cage is to depict the dehumanisation behind facial recognition patterns. The visual motif appearing when a face is scanned for authentication, verification, and tracking purposes, gives back a sharp diagram that once is re-matched with the person's face is too harsh and painful. What should have been a faithful portrait shows instead reveals how far from the human features the biometric diagram is, even if it contains all our unique and personal information.

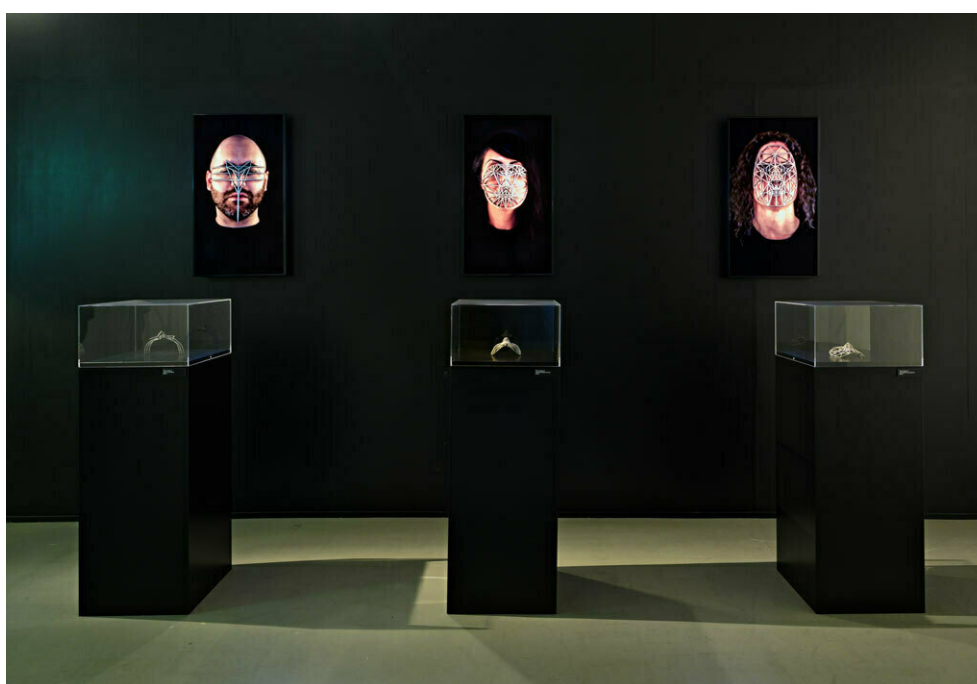


Figure 6: Installation of Face Cages, Zac Blas, 2014-2016 (Photo: Zac Blas, website)

The artistic practice of Blas has inspired creations in the following years, as we can see here with the countersurveillance jewellery of Ewa Nowak and Sara Sallam which beautifully adorn the face, avoiding facial recognition. Ewa Nowak designed *Incognito* (2018) as a piece of facial jewellery that doubles as an anti-AI mask.²¹ By perching reflective surfaces around the features facial recognition technology relies on, *Incognito* fools surveillance cameras and facial-recognition technology. By making the piece aesthetically pleasing, Nowak imagines a near future where anti-surveillance ornamentation is the norm. Sara Sallam developed her project, *Orwell* (2020), as a follow-up to Ewa Nowak.²² The designer appreciated the mask's beautiful design but noticed that tracking technology had advanced so rapidly that the mask was no longer effective against certain types of recognition. While Nowak's mask was intended only to fool Facebook's AI technology, Sallam wanted to create a more updated form of the anti-tracking jewellery.

20. Zac Blas, "Face Cage," accessed June 20, 2023, <https://zachblas.info/works/face-cages/>.

21. Noma design studio (@noma_design_studio), "Incognito", Instagram photo, June 5, 2019 <https://www.instagram.com/p/ByU3im2h6Lz/?hl=it>.

22. Natashah Hitti, "Sara Sallam's Orwell jewellery thwarts invasive tracking technology," *Dezeen*, June 11, 2020, <https://www.dezeen.com/2020/06/11/anti-tracking-technology-surveillance-jewellery-sara-sallam-orwell/>.

Fashion as an Act of Political Resistance

Today's wars are characterised by an invasive surveillance of civilians, remote-control weaponry, and the use of drones as a mechanism for delivering both weapons and propaganda to a target population. Once armed, drones grant persistent aerial surveillance which, when fused with other data, can create an archive of movements, establishing life patterns and targeting individuals. Fashion can act once more as a form of political resistance, denouncing this aspect in current conflicts and alerting of an unaddressed issue.

A fundamental reading for a better comprehension of the drone phenomenon is Grégoire Chamayou's *A Theory of the Drone* (2015), as this book addresses the transformation of warfare brought about by the advent of unmanned technology. Besides describing drones, Chamayou identifies a series of principles that determine what a drone is and how it works.²³ To prevent a possible negative output or behaviour, constant surveillance is seen as the lesser evil, without acknowledging the installed feeling of restriction of one's life and therefore personal definition. In Grégoire Chamayou's words:

Drones are indeed petrifying. They inflict mass terror upon entire populations. It is this—over and above the deaths, the injuries, the destruction, the anger, and the grieving—that is the effect of permanent lethal surveillance: it amounts to a psychic imprisonment within a perimeter no longer defined by bars, barriers, and walls, but by the endless circling of flying watchtowers up above.²⁴

Finally, it is the riveting role of the overlooking eye that guided Chamayou to associate drones with God. He refers to the film *Eyeborgs* (2009) to show how lethal cameras are once detached from a wall and armed. Even without using guns, the drones are demonstrating that the desire that arises is that of hiding, guarding one's identity, and ultimately one's life, much like what happened in the panopticon and with a judgmental God. Therefore, war and invisibility have become intertwined in today's world, and here is where the countersurveillance design of Adam Harvey is of service. He created *Stealth Wear* (2013), continuing the exploration of the aesthetics of privacy and the potential for fashion to challenge authoritarian surveillance technologies. The collection of garments he created aimed at shielding the wearer from the thermal scanning operated by drones (Fig. 07). The technology employed required that garments be made with a silver-plated synthetic fabric that is highly flexible, wearable, and thermally reflective to grant anonymity from drones. Up to this day is yet one of the more complete case studies as it includes several points of view expressed by Chamayou, one for all the issue towards the eye of the camera being the eyes of God that he respects but highlights when he decided to inspire the entire collection to traditionally Islamic hijab and burqa. Lastly, Harvey in 2013 opened a *Privacy Gift Shop*, a pop-up store at the New Museum in New York, was a sort of retrospective of his previous works with the difference that from a speculative and artistic practice this time were on sale. Between anti-drone stealth wear, a copper wallet shielding from RFIF and a t-shirt with an optical character recognition-resistant font, there is also one of the latest projects launched via Kickstarter, *Off Pocket*. It is a phone pouch that shields your phone from wireless GPS signals. This swift is crucial as it was a way of showing how much people care about privacy once it is in the marketplace, and in our current society making these types of products a commodity means interpreting countersurveillance as an actual option in someone every day's life.

23. Grégoire Chamayou's principles: 1) The principle of persistent surveillance or permanent watch; 2) The principle of a totalization of perspectives, or a synoptic viewing; 3) The principle of creating an archive or film of everyone's life; 4) The principle of data fusion; 5) The principle of the schematization of forms of life; 6) The principle of the detection of anomalies and pre-emptive anticipation. Grégoire Chamayou, *A Theory of the Drone* (New York: The New Press, 2015).

24. Chamayou, *A Theory of the Drone*, 45.

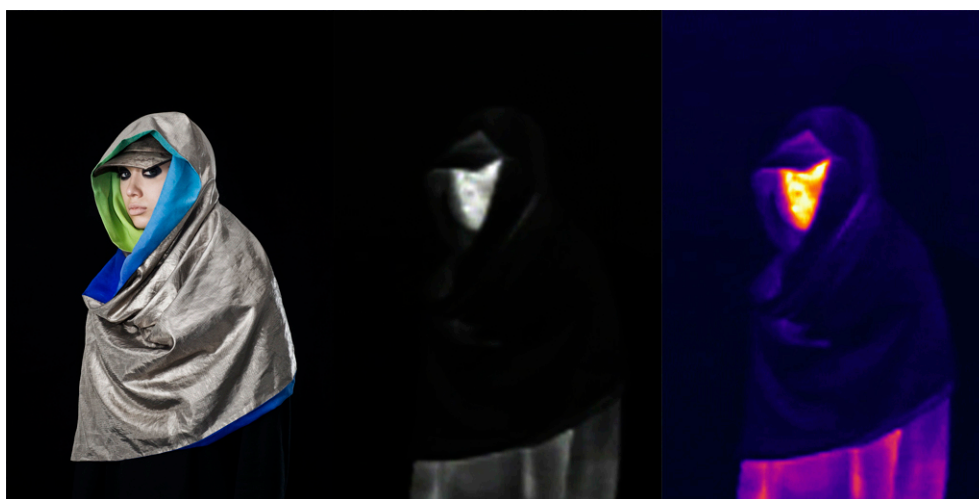


Figure 7: Stealth Wear, Adam Harvey, 2013 (Photo: Adam Harvey Studio)

Conclusion

The research around this topic is at the intersection of different fields and still ongoing but has surely opened a lot of secondary doors. Furthermore, the matter of surveillance and the employment of new technologies in fashion and design is constantly evolving at a pace that requires constant attention and updating. Several questions that have come to light during the writing process and have not an answer yet, and one of these consider the merging between art-fashion-design in addressing multifaceted challenges: will this interrelation continue, and how can it be enhanced and embraced? One last case study can introduce a further future discussion.

Cap_able

At the intersection of fashion design and technology, there is the first Italian capsule collection of knitted adversarial pattern is prototyped and patented in 2021. Cap_able's *Manifesto Collection* (Fig. 08) has the purpose of raising awareness on the importance of privacy protection while providing a practical piece of garment to consciously add to one's wardrobe, taking self-expression to a new level. The pattern is similar to other projects, made by adversarial images that confuse the facial recognition technology of a computational system such as YOLO, avoiding the identification of the person by the typical red bounding box, which instead will recognize dog, zebras or other animals. The compelling novelty of this project is the use of these adversarial patches on knitwear, a choice that has brought Cap_able to work with Italian company Filmar for their specific sustainable yarns that provided the intensity of the colours needed for the pattern to be effective. Indeed, Rachele Didero, Cap_able CEO, underlined — during an interview with the author — that patenting the collection in Italy and bring forward this project here has also been a choice linked to the quality of materials, the easier accessibility to them while being base in the same country, and the willingness to include in the process a supply chain respectful of the environment with the high quality standards of Made in Italy knitwear.²⁵ Another crucial aspect is Cap_able's plan, looking out for other fashionable collections and a possible solution to make them economically more accessible. We are now in the field of commercial fashion and not in speculative design anymore, therefore Rachele Didero and her team have to consider the long-discussed issue of wearers not being recognized by cameras, but still have a very distinctive piece of clothing that other people will notice. Will the Italian public be captivated by this? Would a bold and colourful design be the only prospect, or there are other paths to explore? In any case, after receiving recognition from Compasso d'Oro in 2022 (Targa Giovani) and a fruitful collaboration with Fondazione CRT in Turin, the start-up

25. Interview held by the author, the 19th of January 2023.

is set for a promising future that will contribute to the essential raise of awareness on surveillance and the gathering of data in Italy.

The starting point has been the intersection of rising technologies and the body. It could be argued that countersurveillance techniques through fashion are simply an artistic statement, however, the role of fashion choices in one's personal path of self-definition opens a much more complex dialogue.



Figure 8: Sweater from the Manifesto Collection, Cap_able, patented in 2021 (Photo: Cap_able, website)

Bibliography

- Bauman, Zygmunt and David Lyon. *Liquid Surveillance: A Conversation*. Cambridge: Polity Press, 2012.
- Bentham, Jeremy. *Panopticon: Or, the Inspection-house*. London: T. Payne, 1791.
- Brice, Samuel. "Protecting Your Privacy from Facial Recognition." *Medium*, December 20, 2020, <https://samdbrice.medium.com/4ofce44d3bob>.
- Chamayou, Grégoire. *A Theory of the Drone*. New York: The New Press, 2015.
- Clemente, Massimo. "'Selfie-Destruction'. Sull'autoritrarsi contemporaneo." *Logoi.pb*, Vol 8, no.III (June 2017): 112.
- Dunne, Anthony and Fiona Raby. *Speculative Everything: Design, Fiction, and Social Dreaming*. Cambridge: The MIT Press, 2013.
- Foucault, Michel. *Surveiller et punir: Naissance de la prison*. Paris: Gallimard, 1975.
- Grobe, Max. "We speak to resurrected cult 90s label Vexed Generation about its new capsule." *Highsnobiety*, 2019, <https://t.ly/YWTT>.
- Hitti, Natashah. "Sara Sallam's Orwell jewellery thwarts invasive tracking technology." *Dezeen*, 11 June 2020, <https://www.dezeen.com/2020/06/11/anti-tracking-technology-surveillance-jewellery-sara-sallam-orwell/>.
- Lyon, David. *The Electronic Eye: The Rise of Surveillance Society*. Minneapolis: University of Minneapolis Press, 1994.
- Lyon, David. *Surveillance Society: Monitoring Everyday Life*. Buckingham: Open University Press, 2001.
- Lyon, David. *Playing the Identity Card: Surveillance, Security and Identification in Global Perspective*. London: Routledge, 2008.
- Mubi Brighenti, Andrea. "Artveillance: At the Crossroad of Art and Surveillance." *Surveillance & Society*, Vol. 7, n. 2 (2010): 137-48.
- Spampinato, Francesco. "Body Surrogates: Mannequins, Life-Size Dolls, and Avatars." *PAJ: A Journal of Performance and Art*, no. 113 (May 2016): 1-20, https://doi.org/10.1162/PAJJ_a_00311.
- Zuboff, Shoshana. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. London: Faber and Faber, 2019.
- Sikarskie, Amanda. *Digital Research Methods in Fashion and Textile Studies*. London: Bloomsbury, 2020.

Sitography

- Amnesty International. "Ban the scan New York City." Accessed February 1, 2023, <https://banthescan.amnesty.org/nyc/>.
- Zac Blas. "Face Cage." Accessed June 20, 2023, <https://zachblas.info/works/face-cages/>.
- The Dazzle Club (@thedazzeclub), Instagram account, <https://www.instagram.com/thedazzeclub/>.
- Adam Harvey. "CV Dazzle." Accessed June 20, 2023, <https://adam.harvey.studio/cvdazzle>.
- Lev Manovich. "Selficity." Accessed February 1, 2023, <https://selficity.net/>.
- Noma design studio (@noma_design_studio), "Incognito", Instagram photo, June 5, 2019. <https://www.instagram.com/p/ByU3im2h6Lz/?hl=it>.

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