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Zhuparris on Future Wake

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# 3. Embodying Data, Shifting Perspective: A Conversation with Ahnjili Zhuparris on *Future Wake*

Rosa Wevers with Ahnjili Zhuparris

### Abstract

This chapter discusses the artistic project *Future Wake* (2021) by Ahnjili Zhuparris and Tim van Ommeren that examines predictive policing. By shifting the focus from possible future crime offenders to possible future victims of fatal police encounters, using visual and affective means rather than expert knowledge and statistics, the artwork activates critical reflection on the politics and logics of predictive policing systems. The chapter first situates predictive policing in a context of securitization, and discusses how it enhances structures of discrimination. In the second part, Wevers interviews artist Zhuparris about the aims of *Future Wake*, discussing the artistic and technical process of creating the project, the politics of data, and the role of art in critical discussion on surveillance and AI.

**Keywords:** predictive policing; art; police brutality; data; surveillance.

# 3.1 Introduction

Technological surveillance and datafication have not only been widely criticized and examined in scholarly debate but also in the domain of the arts. Acting as canaries in a coal mine, artists have generated attention for some of the harms, hidden injustices and ethical problems that are produced by the use of networked surveillance technologies (Stark & Crawford, 2019; Wevers, 2023). The artistic interest in this topic proliferated with 9/11 and the following period of securitization resulting from the "war on terror"

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(Buzan & Wæver, 2003). Artists such as Jill Magid turned the gaze back at the operators of CCTV (closed-circuit television) cameras to expose their position of power;1 others explored tactics such as camouflage with the aim of resisting surveillance. The Snowden revelations in 2013 led to another wave of interest in the topic, with much focus on privacy and the ways in which digital behaviour is placed under surveillance (Monahan, 2022; Stark & Crawford, 2019). Artists such as Hito Steyerl started to critically investigate the visuality of surveillance systems, and were committed to reveal invisible surveillance structures to create awareness of their ubiquity and embeddedness in larger systems of power.<sup>2</sup> More recently, with the emergence of biometric surveillance and predictive policing, artists have turned to examine the algorithmic conditions of surveillance and their political implications (Vries, 2019; Wevers, 2018). In 2020, artist and activist Paolo Cirio for example created a series of photographs called *Capture* that showed faces of French police officers, which he collected from publicly available images of street protests in France.<sup>3</sup> Cirio used facial recognition software—which usually is targeted at civil protesters—to process the images. The work was intended to provoke a discussion on the unequal power dynamics at work in the use of these systems, and eventually got censored by the French government.

This interaction between art and surveillance has become known as "surveillance art" (Brighenti, 2010). As John McGrath and Robert Sweeny note, surveillance art "allows us to act upon our surveyed/surveying world in a way which, however momentarily and playfully, destabilises binary forms of power and control" (McGrath & Sweeny, 2010, p. 91). Characteristic of this artistic engagement with surveillance is the fact that artists not only make work *about* but often also *with* technologies of surveillance such as CCTV cameras, drones or biometric software. By closely intervening into the logics of the system, artists try to expose covert prejudices, assumptions and norms that feed the system's operations.

My ongoing research is committed to investigating the critical potential of surveillance art and how it mobilizes sensory-driven knowledge that disrupts naturalized, hierarchical and invisible surveillance structures. I investigate this thematic through different registers: in the form of cultural

<sup>1</sup> More information can be found on the artist's website: http://www.jillmagid.com/projects/evidence-locker-2.

<sup>2</sup> An example can be found in Steyerl's video installation *How Not to Be Seen: A Fucking Didactic Educational .MOV File* (2013).

 $<sup>3\,</sup>$   $\,$  More information can be found on the artist's website: https://www.paolocirio.net/work/capture/.



Figure 3.1. Still 1 from Future Wake (2021). Courtesy of Zhuparris and van Ommeren.

analysis as well as through curatorial practice. In the fall of 2021, I was invited to present about my curatorial research at an event for cultural professionals in the field of (digital) art, culture and design in Utrecht, the Netherlands. Here, I met Ahnjili Zhuparris, a Netherlands-based scholar and artist who presented the art project *Future Wake* (2021) that she created in collaboration with designer Tim van Ommeren. For *Future Wake*, the artists used predictive algorithms to spark discussion on the political implications of predictive policing. However, instead of criminalizing citizens, the project makes predictions about who might become a victim of a fatal encounter with the police. By shifting the focus from possible crime offenders to police crimes, *Future Wake* prompts reflection on the politics of predictive policing systems. Rather than using statistics, the interactive website approaches these pressing issues in an affective, audio-visual manner.

When you visit the interactive website of *Future Wake*, you stare straight into the eyes of five faces. In the background you can see different surroundings: a gas station, a palm tree, a suburban neighbourhood. The faces—predominantly Black and Brown—are positioned in a frame which is occasionally interrupted by small glitches. They are accompanied by small pieces of information: a location, a date and a count-down clock. When you click on one of the faces a new page appears and a voice starts to speak:

Two deputies are responding to a domestic violence situation at a motel around 3:30 p.m. When they arrive, they will find me in a car with a gun. Police will say I pulled out the gun and pointed it at them. The police will shoot and kill me.

This chilling story, told by a calm and warm voice, is not real but might become so in the future. It was generated by AI and based on past data about police killings in the US. The project draws attention to the racialized violence of police brutality in a more affective way than numbers and statistics tend to do. As the count-down clock reminds us, in 169 days, 12 hours and 17 minutes this speculative story might become reality.

Predictive policing is a form of big data surveillance in which historical crime data is analysed for the purpose of predicting in which geographical areas there is an increased likelihood that crime will occur (Brayne, 2017). Predictive policing has also been used to make "predictions" about which individuals are likely to become involved in criminal activity—as was the case for the now discontinued heat list of the Chicago Police Department (Gorner & Sweeney, 2020). While predictive policing systems tend to be installed as more objective and efficient solutions for police work, their operations are far from neutral. As sociologist Sarah Brayne argues:

What data law enforcement collects, their methods for analyzing and interpreting it, and the way it informs their practice are all part of a fundamentally social process. Characterizing predictive models as "just math," and fetishizing computation as an objective process, obscures the social side of algorithmic decision-making. Individuals' interpretation of data occurs in preexisting institutional, legal, and social settings, and it is through that interpretive process that power dynamics come into play (Brayne, 2017, p. 1004).

Thus, rather than forming an antidote to discrimination, researchers including Ruha Benjamin (2019), Wendy Chun (2021) and Rashida Richardson et al. (2019) have shown that predictive policing systems actually reinforce racial discrimination in criminal investigation. This can partly be explained by the data that are used. In their investigation of PredPol, one of the dominant predictive policing systems in the US, Richardson, Schultz and Crawford show how the algorithm makes predictions based on "dirty data" that are "produced during documented periods of flawed, racially biased, and sometimes unlawful practices and policies" (Richardson et al., 2019, p. 15). As a result, predictive policing systems further increase racial discrimination, by leading to the over-policing and targeting of predominantly Black neighbourhoods in the United States (Benjamin, 2019, p. 66; Chun, 2021, pp. 18–20).

While predictive policing systems used in the US are developed by commercial companies, the police of the Netherlands—the context

from which I write this chapter—developed its own systems for predictive policing. In 2014, CAS ('criminaliteitsanticipatiesysteem' or crime anticipation system) was tested in four police districts, to be later installed throughout the Netherlands in 2017. CAS is a system that is designed for the prediction of crimes such as theft, burglary and robbery (van Schie, 2022, p. 139). The effectiveness of the system has not been conclusively scientifically proven, and similar to commercial programs such as PredPol, the system works in racialized manners and reproduces existing inequalities (van Schie, 2022, p. 156). Another example is the Sense project, that analysed data of vehicles driving around the city of Roermond to predict potential pickpockets from Eastern European countries.<sup>4</sup> In 2020, Amnesty International published a report on the Sense project, in which it analysed the system as "discriminatory from design to execution" (2020, p. 6).

The incorporation of AI in systems for criminal investigation, border control and surveillance can be understood from within a larger context of securitization, which encompasses the governmental strategies of risk prediction and prevention that evolved after 9/11 and the "war on terror". In this post-9/11 context a new security dispositive arose in which Western governments proclaimed to be in a "state of emergency" that would justify far-reaching security measurements (Buzan & Wæver, 2003; de Graaf & Eijkman, 2011). As gender and postcolonial scholar Christine Quinan points out, securitization should be understood as:

a highly political and ideological endeavor that is reliant on constructed binaries. For example, dichotomies such as inside/outside and citizen/terrorist become critical to the maintenance of homeland security, as such discourses are built on the notion that there is a threat to be contained or excluded. Furthermore, from this construction emerges an us/them binary, where the us is constructed as normal and the them is seen as abnormal or deviant (Quinan, 2017, p. 186).

In addition to this binary approach to security, securitization is characterized by a shift from a reactive to a pre-emptive view on security that does not respond to any concrete threat but is aimed at risk control (de Graaf, 2012). Predictive policing systems, designed with the aim of "anticipating and predicting" future criminal activity on the basis of historical criminal data,

4 It must be noted that the Dutch police itself does not regard the Sense project as a form of predictive policing.

are one of the various ways in which this risk-thinking is technologically materialized (Scannell, 2019).

While systems for predictive policing are installed under the guise of "making society safer," the question that emerges is who is included and who is excluded from this sense of safety. As critical research has shown, the deployment of new surveillance technologies in the context of securitization has led to the profiling, targeting and Othering of individuals and communities who do not embody the Western, white, cis-gender, heteronormative, secular and non-migrant norm (Browne, 2015; Madianou, 2019; Magnet, 2011; Puar, 2007; Quinan, 2017; Sanchez Boe & Mainsah, 2021). Rather than having their safety secured, they risk becoming marked as "suspicious subjects" and are subjected to further surveillance and criminalization.

## 3.2 Interview with Ahnili Zhuparris

In confronting spectators with possible future victims, *Future Wake* forces us to consider to what extent predictive policing systems make society safer, how this safety is defined and who is excluded from it. For the present chapter of *Doing Digital Migration Studies* I interviewed one of the creators of the project, Ahnjili Zhuparris. Zhuparris is a PhD candidate, data scientist and artist. For her PhD research, she develops machine learning algorithms to analyse fully remote clinical trials. In her artistic practice, she creates space to critically reflect on processes of datafication and their interrelations with systems of power. We discussed the aims of the project, the techniques and creative process through which it was developed, and the importance of art in discussion on the socio-political implications of surveillance, securitization and datafication.

Rosa Wevers (RW): How did you come up with the idea of *Future Wake?* Ahnjili Zhuparris (AZ): Tim and I are both Black artists, and I am a data scientist, so instinctively we were drawn to the Mozilla Foundation's open call for Black Artists interrogating AI.<sup>5</sup> Using this premise, we thought about Sam Lavigne's *White Collar Crime Risk Zones* project, <sup>6</sup> in which

<sup>5</sup> See: https://foundation.mozilla.org/en/blog/announcing-8-projects-examining-ais-relationship-with-racial-justice/.

<sup>6</sup> The project is a critical commentary on predictive policing software as well as crime prediction websites. By shifting the focus from "street crimes" to financial crimes, it exposes some of the biases underlying the uses of big data applications for criminal prosecution and the ways in which it is understood and represented. See https://lav.io/projects/white-collar-crime-risk-zones/.

he used predictive policing algorithms to predict white collar crimes in Manhattan. While surveillance systems could once be described by the Panopticon model, where a single authority system surveilled the masses, today's surveillance systems have multiple authorities surveilling the masses. Drawing on this principle, we wanted to depict a future in which civilians could pre-emptively police the police through an equally biased and flawed lens. That is how we landed on *Future Wake*.

RW: How would you position the project in your larger artistic practice? AZ: I am relatively new to the digital art world, however, I am not new to the world of surveillance and AI technologies. For me, *Future Wake* was a good stepping stone into using art to question and communicate issues in the ever-expanding world of AI surveillance and algorithmic violence. Algorithmic violence refers to violence that is either justified or created by algorithms.

RW: When you say algorithmic violence, are you drawing on the work of artist and researcher Mimi Onuoha, who proposed: "Algorithmic violence refers to the violence that an algorithm or automated decision-making system inflicts by preventing people from meeting their basic needs. It results from and is amplified by exploitative social, political, and economic systems, but can also be intimately connected to spatially and physically borne effects" (Onuoha, 2018)?

AZ: Yes, I think it is the perfect term to describe how algorithms are used today, especially to algorithmically "wash away" people's responsibility, because now people can blame the algorithm for its decision rather than pointing out a single person or single entity. For me, *Future Wake* was a starting point in deciding in how I wanted to explain AI to the general public.

RW: The project focuses on the geographical context of the US. Why did you choose this setting, and could you imagine a project like this also being developed in the context of Europe?

AZ: We actually wanted to create a Dutch version, but we chose not to for two reasons. Fortunately, there are so few fatal encounters in the Netherlands that there is not enough data to do a similar project. It still happens, but not on the same scale as in the US. And the other reason is that even though there are a few cases, we could not find any open-access databases with European police-related fatal encounters, or at least not a unified one. The US is more consistent or unified, so it was quite easy to find data about the citizens, either through newspapers or from Freedom of Information Acts.

I also have a personal connection to the US: I grew up in New York until I was nine. ... I remember a few years ago that a family friend was murdered. He got shot in his head after a fight on the street. It was so telling that when my aunts told me about it, they were like "it was definitely the police!" And it could have been anything, right? But the initial response was to blame the police. In the end, it turned out that it was not the police who killed him. Nevertheless, this first response is very telling of how violence is perceived in Black communities in the US.

RW: The title of the project, *Future Wake*, signifies a state of mourning—a wake is a watch or vigil held when a person passes away. Do you in fact see the project as an act of mourning, or as an invitation to engage in it? AZ: We see often that mourning of and grief for a victim fuels activism and the demand for a reformation of a system. To activate a critical response towards these AI systems, we wanted to elicit an emotional response from our audience members. Hence we framed our predictions as victims who would be mourned after their future deaths to deepen the emotional weight of our statistical predictions.

RW: The project not only responds to predictive algorithms, but also builds upon a predictive algorithm that you designed yourself. To what extent is it possible to get an insight into the algorithms of predictive policing systems such as PredPol?

AZ: For Future Wake, I took two different approaches to building the predictions. The first was using simple time-series forecasting. So this is saying: "a death happened on this day, a death happened on that day. So for future days, what is the likelihood of a death happening within a day or two days or a month or so on?" So you use the previous date as an indicator of future dates. The other approach that I used, and that I would argue is closer to what the predictive policing systems are doing, is using contextual data. That means that I looked at the weather, previous crimes, poverty levels, current gang violence and all these contextual and environmental clues to make predictions about the future. I was not able to mimic the contextual data-based predictions for two reasons. One was that a lot of data that predictive policing systems use is more or less real-time, such as looking at real-time traffic events, or emergency calls, or known ongoing activities in the area (such as parties, or sporting events). It was impossible for me to find a real time-database for all places in the US to make the predictions. And two, I really had no idea how their data was processed as well (it is not known which variables were deemed more important than others or if variables were processed hour by hour or day by day). So it was very difficult for me to speculate.

RW: How did you continue?

AZ: What I did was remotely trying to mirror how predictive policing systems work. For the cities that we chose, which are the five most populous cities in the US, I downloaded all of their demographic information. I also looked at general crime data, so I could usually find how many shootings there were per zip code, what was the number of rapes and so on. I put all of these data points together and then I tried to predict what would happen the following day. Unfortunately, the data was quite noisy because the data sets differ per city and they are not unified. Sometimes the granularity of the data (the level of detail) was different. So for example, in New York, maybe they would give me the crime data for each day, whereas in LA maybe it would be per week or per month. I did my best and I tried to make predictions based on that data. And then I compared the predictions for both the time-based approach and the contextual approach. It turned out that the first model that I made, the time-series forecasting, was much more accurate than the contextual model. That can mean two things. Either the contextual model was just really bad, or it is saying that the time-series forecasting algorithm that I made is actually really good, which also means that the number of fatal encounters with the police is so regular that you can just predict when the next one would happen based on previous dates. It is unnerving.

RW: Future Wake combines the artistic and human-driven strategy of storytelling with AI. Could you talk us through the creative process that led to this project? Why did you choose to work with storytelling as a creative practice, and how did you transform the generated data into the faces and stories that we see in Future Wake?

AZ: Data and algorithms are too often distilled into numbers and statistics, it is important to remind ourselves that humans are in the loop. By transforming our data and predictions into digital victims, we brought the human into the foreground, and the numbers and statistics into the background. The final but most important step was to use art and audience interaction to connect the viewer with the generated victims. By using deepfake technology, we enabled each generated victim to tell their story directly to the audience. We quite literally let the data do the talking.



Figure 3.2. Still 2 from Future Wake (2021). Courtesy of Zhuparris and van Ommeren.

To generate the future events, we used the historical events from the police datasets to train machine-learning models to predict the number of deaths (categorized in terms of race, gender and cause-of-death category) on a given day in the five most populous cities in the United States. Based on the day, race and gender category, we predicted the geographical coordinates of the event. Based on the geographical coordinates, we trained a GPT-2 model to generate a story based on other events that happened in the same area. To generate the videos, we used the profile pictures of the victim (found in Fatal Encounters) to train a Generative Adversarial Network (GAN). The trained GAN was then used to generate the facial characteristics of the victims' faces. This two-step approach used the victims' historical data to collectively tell a story about the future.

RW: The faces that are generated in *Future Wake* reflect how already marginalized communities in the US are overrepresented in databases of fatal police encounters. Which databases did you use to generate this new data? AZ: We used the Fatal Encounters<sup>7</sup> and Mapping Police Violence<sup>8</sup> databases. Both databases were created by civilians, who used media and police reports to gather information. While the FBI also has a database, we found that the database only had a fraction of the cases found in the civilian databases. This is because the FBI relies on police agencies to volunteer in collecting the relevant information.

- 7 https://fatalencounters.org/.
- 8 https://mappingpoliceviolence.org/.

RW: I am reminded here again of Mimi Onuoha's work, specifically her artistic project *Library of Missing Datasets*, for which she traced blind spots and omissions in otherwise data-saturated spaces. The artist argues that the moments when data are missing can give us important insights about the politics of data:

The word "missing" is inherently normative. It implies both a lack and an ought: something does not exist, but it should. That which should be somewhere is not in its expected place; an established system is disrupted by distinct absence. That which we ignore reveals more than what we give our attention to. It's in these things that we find cultural and colloquial hints of what is deemed important. Spots that we've left blank reveal our hidden social biases and indifferences (Onuoha, 2018).

A striking example in this regard is the *Migrant Files* project, a civic initiative of activists and journalists from Europe who collected and analysed data on migrant deaths and disappearances in Europe. While European borders are extensively surveilled, and biometric information of migrants who have arrived in Europe is stored in centralized databases such as EURODAC and the Schengen Information System, data about migrants who pass away or go missing in their journey to Europe is not centrally documented by European governmental organizations. The intervention of the *Migrant Files* project, which entails both identifying the absence and collecting, contextualizing and analysing the missing data, brings urgent awareness to the Othering and dehumanizing workings of Fortress Europe and whose lives are considered worth documenting (Leurs, 2018).

Turning back to the missing data about fatal police-related encounters, could you reflect on the discrepancy between databases created by civilians and by the US government? What does the missing data tell us?

RW: Your answer shows how the question of what data is available, and what data is lacking or even erased is a very political issue. And related to that, the question of representation also matters. How does data represent? Who extracts data, who does it represent and who not? Your project makes an intervention into these questions by, as you say "letting the data speak," by bringing the human back into the loop. Could you reflect on what you find important when working with data and algorithms in a critical manner?

9 https://www.themigrantsfiles.com/.

AZ: I think the main issue with data now is that it completely lacks context. It is an issue for my PhD research as well. Basically people are distilled into machine-readable information, but that is totally taken out of context. And so, at least for Future Wake, we try to overcome this. We tried to put data about people and violent incidents back into the context by showing their location, by letting the victims tell the background story of what happened. Think about the death of Georgy Floyd, a well-known recent example of a fatal encounter with the police. Even though many people have watched the video and followed what happened before and after, in the existing databases Floyd was just a single row of data with ten parameters such as "black, male, died from a chokehold." These parameters totally remove the gravity or the weight from the incident. It removes what the premise was from what happened. It removes how many people, both in-person and online, watched this video and took his death to heart, and completely removed the movement that his death sparked. So I think for me, to make data more valuable and in a way that is emotionally meaningful for someone, would be to put it back into context.

RW: In addition to the artistic part of the project, *Future Wake* also exists of an important informative component. When entering the web project, visitors can learn about the methods and datasets that you have used. The website also offers background information that explains how predictive policing systems operate, how their predictions are flawed and how these systems automate and conceal biases and can further reproduce discrimination through the over-surveillance of marginalized groups. Why did you decide to include this in the project?

AZ: We believe that transparency should be the primary assessment of an algorithm prior to its deployment. Transparency is the first step towards enabling a critical democratic inspection of AI. Transparency also allows the public to demand changes when an algorithm predicts an erroneous event. We wanted to exercise those values by showing the inner workings of *Future Wake*.

RW: Predictive policing is only one example of the growing integration of algorithmic surveillance systems in processes of securitization. In the context of Europe, for example, biometric data of migrants are automatically cross-referenced with criminal databases, leading to the (re)production of racialized inequalities, as well as to the criminalization of migration itself (M'charek et al., 2014). Another example can be found in the use of facial recognition algorithms in UN refugee camps, in which refugees are

required to give away their biometric data to get access to humanitarian aid (Madianou, 2019). How do you look at this development from your perspective as an artist and a programmer? Why do you think that these systems are given so much power?

AZ: The appeal of algorithmic surveillance systems is their ability to automatically process data with both speed and accuracy. The processed and curated data supports the decision-making process. It is important for us, as artists and programmers, to be the curators of data. We need to remind ourselves and our audiences that data represents a historical extension of ourselves. These historical traces can and will be used to influence our future decisions. We should challenge the allure of the efficiency of new technological systems by inverting these systems to expose their biases, flaws and potential harmful applications.

RW: Future Wake repurposes AI for social justice by exposing racist structures rather than automating them. I see the project as an example of the way in which AI can be used for "diagnos[ing] current inequalities" and revealing discriminatory structures of the past, as Wendy Chun has recently suggested in her book Discriminating Data (2021, p. 2). How do you look at this potential of AI?

AZ: We agree. We see our project as a stepping stone to challenge the algorithmic systems that police us. We hoped that our audience members would think critically about the design and applications of *Future Wake*. We have been asked about how the dataset was created, the accuracy of the predictions and the biases of the AI models. By allowing the audience to think critically about our work, they would then have the critical framework to analyse actual predictive policing systems. Further, if audience members considered our project to be unethical, perhaps our project would be a public mirror to question if law enforcement should be using the same technologies.

RW: Future Wake offers an affective and audio-visual entry point into research on the power structures in which AI systems are embedded, and opens up discussion on the ways in which these systems reproduce structures of inequality. Why was it important for you to make this intervention through art? More broadly, what is your take on the role of art and creative work in discussions on the political implications of the datafication and securitization of society?

AZ: Speculative and critical artworks should interrogate AI systems by exposing their impact on human lives. Rather than assessing AI systems in terms of numbers without consequences, art brings humans back into

the loop. It is important to remind the audience that algorithms take data from humans, and their outputs or predictions are used by humans to make decisions. Too often, data are distilled from the context in which they were gathered, and too often, the impact of the algorithms is made invisible.

### 3.3 Concluding Reflections

In examining predictive policing, Future Wake also draws attention to larger issues concerning the politics of data. The project challenges dominant ways of representing data, that are characterized by visual minimalism and consequentially perceived to be neutral and objective (D'Ignazio & Klein, 2020). Building on the work of feminist philosopher Donna Haraway, feminist data scholars Christine D'Ignazio and Lauren Klein argue that data visualities tend to reproduce a "god trick," that establishes a distance towards the viewer. Data are accordingly experienced as if they present a complete and objective overview of the subject matter that they represent. The fact that data is always partial and biased remains invisible. By transforming abstract data points into faces, Future Wake destabilizes this neutrality and objectivity of data, and highlights how real people are impacted by such datafied predictions. In doing so, it invites an emotional and embodied response to data, which is in line with what D'Ignazio and Klein have posited as an important principle of data feminism and a way to move beyond the "god trick" (D'Ignazio & Klein, 2020).

Moreover, *Future Wake* encourages the spectator to take a critical look at the way in which algorithmic processing and data have been used to create the project. The *Future Wake* website makes information about the design process transparent and accessible, and renders explicit how biases and gaps in the approach are part of the databases and algorithmic process. The website project states for example: "Just as predictive policing has inherent risk, *Future Wake* also has inherent risk. These statistical models can only predict what it has seen before; history only repeats itself. Both tools can only offer the probability of an event happening, and each prediction can be wrong or even dangerous." While predictive policing systems are built upon values such as efficiency, *Future Wake* subverts such functionalities by working towards justice. In that way, the creators of *Future Wake* encourage the spectator to ask critical questions about data: How is data represented?

10 https://www.futurewake.com/#/data-and-methods?tab=2.

In whose interest and for whose goals? What does this dataset include or leave out?

Future Wake is designed as a critique to algorithmic violence but also makes use of predictive algorithms to allow citizens to predict police brutality. In doing so, it potentially risks reproducing forms of algorithmic violence itself. For instance, in drawing attention to racialized violence in the context of police brutality, the artist had to work with existing databases that categorize people into machine-legible categories of race and gender—which are categories that impose simplistic and external views on gender and race without considering the subject's self-identification (Browne, 2015; Keyes, 2018). In our conversation, Zhuparris explained that the project has received some critical responses addressing such issues, mostly in the form of questions about how the data for the project was processed and what biases were part of it. During our conversation, Zhuparris also reflected on the different effects that the project might have for different audiences: I think one of the flaws of *Future Wake* is that some people might miss that we criticize predictive policing. On a superficial look it might just seem as if we wanted to show that not only can you use predictive policing to predict burglaries and fires and rapes, you can also use it to predict when the police would kill someone. So it could be understood as if we just identified another application for the algorithm rather than just critiquing it.

Zhuparris is not the only artist facing such tensions in working critically with AI. As Kate Crawford and Luke Stark observe, "in challenging structures of technological, economic, and institutional power through art incorporating digital technologies, the artists themselves risked replicating those same structures of power" (Stark & Crawford, 2019, p. 449). When working with AI and "getting their hands dirty," important political and ethical issues become apparent that artists are forced to deal with and take accountability for.

For projects such as *Future Wake*, the critical potential not only lies in the end result but also in the design process itself. In the case of Future Wake, this "dealing with" is visible in the contextualizing part of the web project in which spectators are made aware of the methods and data that are used, and the inherent flaws of the approach. *Future Wake* is explicitly not presented as a technical solution, but as an instigator of discussion that invites critical interrogation of biases rather than obscuring them. By explicitly attending to such hidden "attachments, values, absences, and biases in data," art holds the potential to activate a process of critical reflection, which is "a process by which the interwoven social and technical dynamics of data are made visible and accessible to judgment" (Loukissas, 2019, p. 162). In *Future Wake*,

such critical reflection is activated in relation to the topic of security. By turning the logics of predictive policing upside down, the project both exposes how these systems work and allows citizens to critically examine power in policing practices. In doing so, *Future Wake* makes tangible how social justice should be central to discussions on security.

### References

- Amnesty International (2020, September 29). *Netherlands: We sense trouble.*Automated discrimination and mass surveillance in predictive policing in the Netherlands. https://www.amnesty.org/en/documents/eur35/2971/2020/en/
- Benjamin, R. (2019). Race after technology: Abolitionist tools for the new Jim Code. Polity Press.
- Brayne, S. (2017). Big data surveillance: The case of policing. *American Sociological Review*, 82(5). https://doi.org/10.1177/0003122417725865
- Brighenti, A. M. (2010). Artveillance: At the crossroad of art and surveillance. *Surveillance and Society*, 7(2), 137–148. https://doi.org/10.1016/j.bandl.2010.12.002
- Browne, S. (2015). Dark matters: On the surveillance of Blackness. Duke University Press.
- Buzan, B., & Wæver, O. (2003). *Regions and powers: The structure of international security.* Cambridge University Press.
- Chun, W. H. K. (2021). Discriminating data: Correlation, neighbourhoods, and the new politics of recognition. Discriminating Data. MIT Press. https://doi.org/10.7551/mitpress/14050.001.0001
- D'Ignazio, C., & Klein, L. F. (2020). Data feminism. MIT Press.
- de Graaf, B. A. (2012). Historisering van veiligheid. *Tijdschrift voor Geschiedenis*, 125(3), 305–313.
- de Graaf, B. A., & Eijkman, Q. (2011). Terrorismebestrijding en securitisering: Een rechtssociologische verkenning van de neveneffecten. *Justitiële Verkenningen*, 37(8), 33–52.
- de Vries, P. (2019). Algorithmic anxiety in contemporary art: A Kierkegaardian inquiry into the imaginary of possibility. *Institute of Network Cultures*. https://networkcultures.org/wp-content/uploads/2020/06/AlgorithmicAnxietyPDF.pdf
- Gorner, J., & Sweeney, A. (2020, January 25). For years Chicago police rated the risk of tens of thousands being caught up in violence. That controversial effort has quietly been ended. Chicago Tribune. https://www.chicagotribune.com/news/criminal-justice/ct-chicago-police-strategic-subject-list-ended-20200125-spn4kjmrxrh4tmktdjckhtox4i-story.html

- Keyes, O. (2018). The misgendering machines: Trans/HCI implications of automatic gender recognition. *Proceedings of the ACM on human-computer interaction*, 2, 1–22. https://doi.org/10.1145/3274357
- Leurs, K. (2018). Hacking the European refugee crisis? Digital activism and human rights. In S. Ponzanesi & A. J. Habed (Eds.), *Postcolonial intellectuals in Europe* (pp. 263–284). Rowman & Littlefield.
- Loukissas, Y. A. (2019). All data are local: Thinking critically in a data-driven society. MIT Press.
- Madianou, M. (2019). The biometric assemblage: Surveillance, experimentation, profit, and the measuring of refugee bodies. *Television and New Media*, 20(6), 634–648. https://doi.org/10.1177/1527476419857682
- Magnet, S. A. (2011). When biometrics fail: Gender, race, and the technology of identity. Duke University Press.
- M'charek, A., Schramm, K., & Skinner, D. (2014). Topologies of race: doing territory, population and identity in Europe. *Science, Technology & Human Values*, 39(4), 468–487. https://doi.org/10.1177/0162243913509493
- McGrath, J., & Sweeny, R. (2010). Surveillance, performance and new media art. *Surveillance and Society*, 7(2), 90–93.
- Monahan, T. (2022). *Crisis vision: Race and the cultural production of surveillance.*Duke University Press.
- Onuoha, M. (2018). Notes on algorithmic violence. *GitHub*. https://github.com/ MimiOnuoha/On-Algorithmic-Violence
- Puar, J. K. (2007). *Terrorist assemblages: Homonationalism in queer times*. Duke University Press.
- Quinan, C. (2017). Policing bodies. In A. Peto (Ed.), *Gender/war: Macmillian inter-disciplinary handbooks* (pp. 185–196). Cengage Gale.
- Richardson, R., Schultz, J. M., & Crawford, K. (2019). Dirty data, bad predictions: How civil rights violations impact police data, predictive policing systems, and justice. *New York University Law Review Online*, 94(192), 192–233.
- Sanchez Boe, C., & Mainsah, H. (2021). Detained through a smartphone. *Digital Culture & Society*, 7(2), 287–310. https://doi.org/10.14361/dcs-2021-070214
- Scannell, R. J. (2019). This is not minority report: Predictive policing and population racism. In R. Benjamin (Ed.), *Captivating technology: Race, carceral technoscience, and liberatory imagination in everyday life* (pp. 107–130). Duke University Press. https://doi.org/10.2307/j.ctv11sn78h.10
- Stark, L., & Crawford, K. (2019). The work of art in the age of artificial intelligence: What artists can teach us about the ethics of data practice. *Surveillance and Society*, 17(3–4), 442–455. https://doi.org/10.24908/ss.v17i3/4.10821
- van Schie, G. (2022). *The datafication of race-ethnicity*. Phd Thesis, Utrecht University.

- Wevers, R. (2018). Unmasking biometrics' biases: Facing gender, race, class and ability in biometric data collection. *Tijdschrift voor Mediageschiedenis*, 21(2), 89–105. https://doi.org/http://doi.org/10.18146/2213-7653.2018.368
- Wevers, R. (2023). Caged by Data: Exposing the Politics of Facial Recognition Through Zach Blas' Face Cages. In K. van Es & N. Verhoeff (Eds.), *Situating Data: Inquiries in Algorithmic Culture* (pp. 159-171). (Media Matters). Amsterdam University Press. https://doi.org/10.5117/9789463722971

Zhuparris, A., & van Ommeren, T. (2021). Future Wake [Art project]. https://www.futurewake.com

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