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One or Two Things to (Un)Learn: Meeting with AI aka ML aka MC via Media Arts¹

AI like the arts is part of culture, and thus something, people do (cf. Gaztambide Fernandez 2013). But who is doing AI art? And for whom? And what might art education have to do with it? Since the turn of the year 22/23, art teachers in Germany have intensified the debate around the influence of AI on their teaching and especially on examinations and grading (cf. Fütterer 2023). Fears are often expressed that the authorship of homework, be it texts or pictures, is no longer verifiable at all. At the same time, there is hype and fascination about how to work creatively with text generators and soon also image-generating programmes. The art world, too, is infected by this broadly effective news of technology. The frequently asked question of whether AI can do art is related to the concept of art. An understanding according to which art takes up and reflects its context is not compatible with the statement that "software [is] getting closer and closer to human artists in terms of craftsmanship, [...] but it lacks any awareness of social, emotional or societal factors - and thus a very central drive for creative work" (Willenbrock 2021, translation nl).

In view of the rapid technological development, there are praises on the one hand - the influencer Sascha Lobo, for example, uses the metaphor that Europe must "embrace AI with full force" (2023, translation nl) - and objections or hints from various sides. Once Hito Steyerl's caveat that, given the simplicity of some programmes, one should really speak of artificial stupidity. "The first time I thought about this was when I came across a Twitter bot called 'hakan750048' or something like that. He was part of a bot militia used by Erdogan's AKP to influence elections about two years ago. Bots are still a very popular tool to influence public opinion and to divert popular hashtag topics. The script of such an AI is really only two lines, or maybe five" (Steyerl 2018, translation nl).

However, Steyerl is not only concerned with the lack of complexity of the algorithm, but with its serious consequences: "Nevertheless, in world politics, the social consequences of this artificial stupidity, as I call it, are already enormous" (ibid).

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These include election manipulation through false news, increasing social polarisation and the strengthening of filter bubbles.

A different objection comes from Jan Schoenmakers, who works in the field of developing AI-based analysis software for companies. Against this background, his empirically supported comment that "Generative AI [i.e. systems like ChatGPT or Midjourney] has become synonymous with AI" (Schoenmakers 2023, translation nl) is not surprising, but still relevant. Other applications of machine learning are left out in the public eye, for example "analytical AI to optimise operational processes" or for "automated commerce" or the coupling of networked machinery or components with data analytics and machine learning (cf. *ibid*) in order to be able to perform, for example, "Condition-Based Monitoring and Predictive Maintenance" (cf. Farnell Germany n.d., translation nl).

Apart from the fact that applications such as the surveillance of public space or military uses, especially in the form of weapon systems reacting to movement or heat patterns, are left out in Schoenmakers statement, he assumes a national, i.e. "German", entrepreneurial „we“ that has means of production and can make a profit.

Nevertheless, the well-founded thesis that "[t]he enthusiasm for - and the ease of use of - generative AI applications [goes] hand in hand with a real collapse of interest in how AI works" (*ibid.*) is significant from a (media) political and pedagogical perspective. It points to gaps as well as possible starting points for discussion.

This lack of interest in the effects of current technological developments is also criticised by means of image production: The work *The Electrician* (2022) by Boris Eldagsen was selected for the Sony World Photography Award 2023. Eldagsen declined the award in April shortly after the nomination on the grounds that those responsible for the award had shown no interest in distinguishing between photography and his software-generated image production.² While Eldagsen was interested in discussing the latest developments both for the photo community and beyond for democracies, the organisers showed no openness to the much-needed debate (Eldagsen 2023). Other photo festivals, too, "where the rules regarding AI are fuzzy", the artist deliberately subjected to a stress test since autumn 2022 by submitting AI-generated images and

² In the meantime, the term *promptography* has emerged for images generated with the help of text commands; it was proposed by the photographer Christian Vincés. Vincés' website: <https://www.christianvincés.com/>

often making it to the finalists (Neumüller/Eldagsen 2023, n.d.). "The result was always the same: People felt led by the nose, but didn't want to talk about it" (ibid.). The danger posed by indistinguishable photorealistic fakes for the question of true versus untrue events, of information versus misinformation or disinformation, in view of the still existing documentary content of photography, is immense.³ It touches on questions of truth-telling, political opinion-forming and trust relations on every conceivable level.

What the perspectives of Steyerl, Schoenmakers and Eldagsen have in common, despite all their differences, is the call to take a closer look at machine learning and Big Data as well as the functionalities and social consequences of these technologies and to make decisions about which applications are ethically and politically justifiable and which are not.

Starting with (the) Obvious

Obvious became known in 2018 through the auction of the work *Edmond de Belamy*. The artwork was estimated at about 8.000 dollars, and was sold for an astonishing 432.500 dollars. The somewhat blurry-looking computer print of a male figure goes back to the French collective Obvious, which fed the machine with 15,000 portraits from several centuries (Wille/dpa 2021). The production of the three researchers, artists and friends, as they market themselves, heavily relies on the history of western, european portraiture. Matchingly, the prints are very traditionally presented as showcasing a family carrying aristocratic names within golden frames. Not only is the critique of the exclusive white canon ignored, nor the critique of the masterly genius is considered. Even though paradoxically, we do not get a clue about the origin of the pictures. The trio has written a manifesto accompanying their success. Here some excerpts from its second version:

"Art is a perfect medium that allows to experiment with the possibilities of an AI and better understand how it all works. Here are four art features we identified as being helpful in our research.

- Art is tangible : it offers some concrete results when experimenting.
- It is accessible : most people have an affinity with some kind of art.
- Art is interpretable : it offers another way to experiment, and leads to debates that are at least as interesting as the answers you can get the purely scientific field

³ Cf. Enders 2023, who advocates a labelling obligation for manipulated images.

- Art is free, and it cannot be restrained by our own creativity when experiencing with it.

Therefore, art seemed like the perfect way to experiment with creativity as expressed by artificial intelligence." (Obvious 2020, 6)

Reading these lines, one might get the idea, that *Obvious* mainly has an unsharp approach to what art is. I would state for the features one, two and four, that they are all unrealistic or very debatable at the least: Regarding the third feature for instance, how experimentation and interpretation are meant to interrelate. This is why their tactics could be called "faking the artist".

"Unlearning"

The literary scholar and postcolonial theorist Gayatri Chakravorty Spivak has coined the term "unlearning", which stands for an understanding of knowledge systems as being connected to power relations. She explicitly focuses on the distinction between recognized and worthless knowledge. Recognized, for example, is the Western canon of art history; in contrast, knowledge about black or indigenous cultural history, for example, is devaluated. Spivak proposes to unlearn the hegemonic prefabricated images, practices, and texts. The art educator Nora Sternfeld has taken up the concept of unlearning and paraphrased it as follows:

"It is difficult to imagine unlearning. One thing that stands in our way is our initial understanding of the word. Is it even possible to simply leave dominant knowledge behind? My immediate answer is "no" for two reasons.

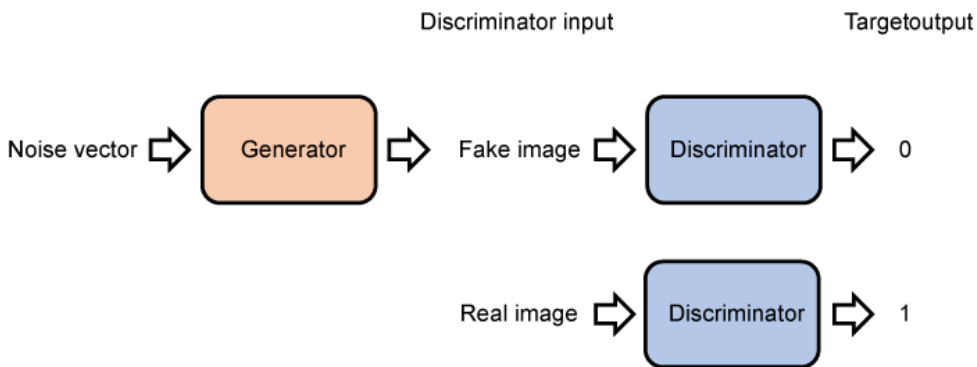
First, there is no way back. There is no path that leads us to a time or place before the history of relations of power and violence that are responsible for what we know today. Secondly, unlearning is not an easy task. For this reason, it is worth taking a closer look at how it is discussed in postcolonial theory.

Before we can directly proceed to unlearning, we first have to understand that learning is the result of hegemonic relations. Understanding this enables us to reflect on the knowledge and skills we have learned" (Sternfeld 2016, 3).

Departing from this basis, i would add: "Unlearning colonially shaped image and knowledge repertoires means something fundamentally different for people from (formerly or neo-) colonized countries than for *white* Western Europeans" (Lüth 2018, 125).

GAN and nag – The Hare and the Hedgehog

The series of *The Belamy Family* (2018)⁴ is a collection of portraits of such *white* Westerners, which has been created using Generative Adversarial Networks, GAN for short. A GAN lets two algorithms, or neural nets, work with and against each other: the first designs images based on noise and a program, the second rejects them if it suspects a machine behind the work. What makes the former learn again and become better (cf. Wikipedia: GAN).



Marc Tanti, University of Malta: An illustration of how a GAN works, created: 29 June 2023, https://upload.wikimedia.org/wikipedia/commons/8/8b/Generative_Adversarial_Network_illustration.svg

The concept of the machine generator, meaning a program that assembles new combinations from a digital pool of images, is reminiscent of the *net art generator* that Cornelia Sollfrank developed back in 1997 (Sollfrank 1997a). It was abbreviated nag.



Cor-

Cornelia Sollfrank (1997a): net art generator, Screenshot 11 July 2023, <https://net.art-generator.com/>

⁴ “Bel Ami” is a reference to Ian Goodfellow, the inventor of GANs.

Cornelia Sollfrank is a conceptual and media artist, who has been working and living for a long time in Hamburg, northern Germany. In 1997, the Hamburger Kunsthalle, home of an important public art collection, spanning the period from the Middle Ages to the present day, announced the first net art competition worldwide, under the title „Extension“. Sollfrank, who judged this initiative as an attempt to appropriate a self-organized, widely dispersed net art fabric by the institutionalized art establishment, wanted to add her own extension to this competition. She invented 289 fictitious female artists, generated their email addresses, and signed them up as contest participants. After the system had accepted and benevolently noted the flood of female registrations (a press release positively mentioned the large number of female participants), the initiator of what was later presented as *Female Extension* was faced with the requirement of producing a sufficient quantity of net art works to submit. Sollfrank started to collage new web pages by copy and paste from found HTML code. This ‘manual’ process proved to be too time-consuming in view of the necessary mass production. A programmer, she talked to, suggested that she might leave the production to a program. Thus was born the first net.art generator, a program that searches the net for image files after entering search terms and reassembles the finds.

Sollfrank succeeded in uploading websites to the Kunsthalle server for almost all of the registered virtual net artists, thus turning them into full-fledged participants. The similarities of many of the artists' contributions, created by the peculiarities of the net.art generator, were not commented on by the jury. However, no female participant was able to win first place. When the male winner was officially announced, Cornelia Sollfrank took the opportunity to distribute a press release about her actions, thus bringing the concept of *Female Extension* (1997b) to the public.

Briefly, how does the nag work: It is made to automatically produce net.art on demand. You push the create button, then by choosing a title for your art work, which you fill into the online form, the nag searches for as many images as you want to combine (two to eight). You can also give yourself an artist name, and wait for a minute till you see the result. If you are satisfied with the digital collage, you can save it on the net art generators website and/or download it for yourself. Thus the decision of what images are kept in case of the net art generator is performed by a human actor.

Learning about Machine Conditioning (MC) and Datasets

Compared to *Obvious* or Sollfrank, Sara Ciston is mainly interested in written communication, technically speaking in Large Language Models aka LLMs. They call themselves „poet-programmer who loves building community through critical-creative code and building tools to bring Intersectional approaches to AI.“ (Ciston’s website)

Ciston demands, that „creators interested in using generative tools like ChatGPT [...] should account for the hundreds of thousands of unwitting co-authors whose content was scraped online for their proprietary models“ (Ciston’s announcement 2023).

Ciston in a talk for the University of Edinburgh referred to four recommendations on how artists and citizens can get to the bottom of the black box machine learning. number one „use sharper language“, number two „avoid intimidating complexity“, then three „experiment with AI tools against the grain“, and four „ask better questions of ourselves as critical makers“ (cf. Ciston 2023, 1.05–1.16).

Regarding the first point, they quote Francis Hunger with the suggestion to speak of machine conditioning (cf. *ibid*, 1.19 bis 1.22). Hunger writes: „Instead of using [machine] ,learning’, [...] I proposed the notion of ‘conditioning’, as in the Pavlovian reflex, in which a potent stimulus is paired with a previously neutral stimulus.“ (Hunger 2023: 8).

In order not to overestimate the complexity, Ciston refers to Murray Shanahan, focussing the statistical basis of LLMs, which do not know anything about certain historical events, such as the first landing on the moon, but calculate that the name Neil Armstrong is often followed by the word moon (cf. Ciston 2023, 1.56–2.04). Complexity is largely based on size and the structure of the data sets. One problem in connection to ChatGPT is the extensive facsimility, i.e., the appearance of veracity (cf. *ibid*, 2.44–2.50), which cannot be debunked as a fake and from which it is impossible to trace the sources without detailed examination fact **of** every case (cf. *ibid*, 2.21– 2.27 and 3.41–3.49). Ciston's own work, which I will present as an example, stands for the subversive use of machine (learning or) conditioning tools against the grain. In terms of proposition number four "ask better questions as critical makers," Ciston proposes alternative tactics that they combine with intersectional and artistic claims. They contrast the currently prevailing system of LLMs, which indiscriminately collect as much data as possible and process it without traceability of the sources, with an alternative vision: Here, smaller data sets can be compiled for communities for specific purposes. (cf. *ibid*, 4.01–4.12, quoting Asmelash Teka). The effect of such curated datasets would be the conscious shaping of (counter)knowledge (cf. *ibid*, 7.48–7.50).

The artist*poet*programmer concretizes further ideas in various often collaborative projects. One of them is called the *Intersectional AI Toolkit* (2022–) which asks questions like: „What do you wish you could change about AI? How could queer, anti-abl[e]ist, anti-racist, and feminist practices help reshape AI in fundamental ways?“ (Ciston’s website). Some of these questions are answered in self-made paper magazines, which were subsequently digitized.⁵

Unlearning Sexism

The announcement of another intervention of the poet*programmer sounds very promising: “a bot that tries to explain feminism to misogynists online [...]“ (ibid). Considering the toxic presence and antifeminist impact of the manosphere (cf. Sugiura 2021), the need for such a bot is evident.

Ciston wrote the code for their bot *ladymouth* (2019) to “address self-identified ‘men’s rights activists’ [abbreviated MRA], without engaging with them personally. The chatbot responds with quotations from feminist theorists and then logs its conversations, which [later is] incorporate[d] into writing, performance, and video art“ (Ciston 2019, 1).

Explaining the technical proceeding of the program, Ciston continues: “In the initial prototype, the ladymouth chatbot selects a random keyword from a SQLite database I compiled of common misogynist terms. It logs into Reddit and searches a predetermined forum for a post containing this keyword, then submits a reply using a quotation I linked to that keyword, selected from my readings in feminist theory. The bot also stores the original post and checks for any responses to its previous comments. It waits, then runs again. During development, rather than the bot replacing me in these communities as I hoped, I became all-too-acquainted with their vocabulary and customs. I reviewed posts daily and added keywords from TheRedPill Glossary: ‘SVM’ is ‘sexual market value’; a ‘plate’ is a ‘woman with whom you are in a non-exclusive sexual relationship,’ i.e. ‘spinning plates’; ‘LMR’ refers to ‘last-minute resistance’; and ‘AWALT’ stands for ‘all women are like that’ (R/TheRedPill)“ (ibid, 2). Ciston involuntarily „gained uncomfortable familiarity with the language of misogyny while loitering in these spaces ...“ (ibid).

Thus Ciston exposed herself to the forums and their linguistic conventions, to be able to train the bot for the upcoming confrontations.

“The bot operated for 12 hours and 3 days respectively before it was banned from each forum. The chatbot makes a technological intervention by inserting itself where it is unwelcome-because of this provocation, it operates as spectacle, designed to fail“ (ibid, 3).

⁵ Definitely worth reading is, for example, the zine *What Shouldn’t AI Be Used For?* (2022), <https://static.miraheze.org/intersectionalwiki/b/ba/IAIzine-Moz-Digital.pdf>



Figure 2. A Reddit user reacts to ladymouth's participation in the Men's Rights subreddit ([reddit.com/r/mensrights](https://www.reddit.com/r/mensrights)).

A Reddit user reacts to ladymouth's participation in the Men's Rights subreddit ([reddit.com/r/mensrights](https://www.reddit.com/r/mensrights)). Screenshot of Sarah Ciston (2019): ladymouth: Anti-Social-Media Art As Research, in: *Ada: A Journal of Gender, New Media, and Technology*, No. 15. 10.5399/uo/ada.2019.15.5, p. 2, archived at: <https://scholars-bank.uoregon.edu/xmlui/bitstream/handle/1794/26793/ada15-ladyn-cis-2019.pdf>

Reactions like the one you can see here, show, how Ciston, by appropriating technology for her own feminist means, is challenging the men's rights activists on what they believe is their own terrain: IT. This irritates the user here so much, that he acts as if he could not imagine a woman writing a code. He gets caught in the net of his own stereotyped lack of imagination. There is even a tiny chance for him to unlearn sexism by this encounter. As Ciston formulates it: "Each interaction is the smallest intervention, but perhaps ... these microgestures might have untraceable but compounding effects [...] Each moment wasted could be time a woman elsewhere is not harassed" (ibid, 10). Saving emotional energy on the side of targetted groups is part of ladymouth's agenda.

Learning about Emotional Labour

Giardina Papa is also interested in emotional work, as she mentions in her biography: „Elisa Giardina Papa's research-based art practice seeks forms of knowledge and desire that have been lost or forgotten, disqualified, and rendered nonsensical by hegemonic demands for order and legibility. Sifting through discarded AI training datasets [among others], Giardina Papa traces how recurrent forms of extractive capitalism and imperialism have strained our capacities for living and laboring.“ (Giardina Papa's website)

Many tasks that we assume are done by computers are actually done by humans in secret to maintain the illusion of automation.

Cleaning Emotional Data (2020) is an „installation that addresses .these. new forms of precarious labor emerging within artificial intelligence economies. Specifically, it focuses on the global infrastructure of microworkers who 'clean' data to train emotion-recognition algorithms“ (ibid).

In the winter before, the artist herself „had worked remotely from Palermo for several North American companies who provide ‘clean’ datasets to train AI algorithms to detect emotions. Among the tasks she performed were the taxonomisation of emotions, the annotation of facial expressions and the recording of her own image to animate three-dimensional characters“ (ibid).



Elisa Giardina Papa (2020): *Cleaning Emotional Data*. Video installation: three HD videos, colour sound, 18 min; embroidered textiles, variable dimensions. Installation view Kunsthalle Mulhouse, France, http://www.elisagiardinapapa.org/new/img/cleaning_emotional_data/EGP_cleaning_emotional_data_03.jpg

Cleaning Emotional Data (2020) documents these microtasks while simultaneously tracing a history of emotions that questions the methods and psychological theories underpinning facial expression mapping. The implications of this demand for emotional legibility – used increasingly either to identify consumers’ moods or to detect potentially dangerous persons [...] is further explored in a series of large-scale textile pieces developed in collaboration with Michael Graham of Savant Studios (Brooklyn, NY). [...] This joint “fabrication” of computational and human language demonstrates how emotional sensibilities exceed reductive categorisation“ (ibid).

Unlearning Isolation

In another series of interview based video works, Elisa Giardina Papa deals with “[e]mpathy, digital labor, and new ways to serve and care on the network“ (Soulellis 2016). The series is called *Technologies of Care* (2016). Giardina Papa paid the workers for the time of the interviews. Thus we listen to workers while they are working.

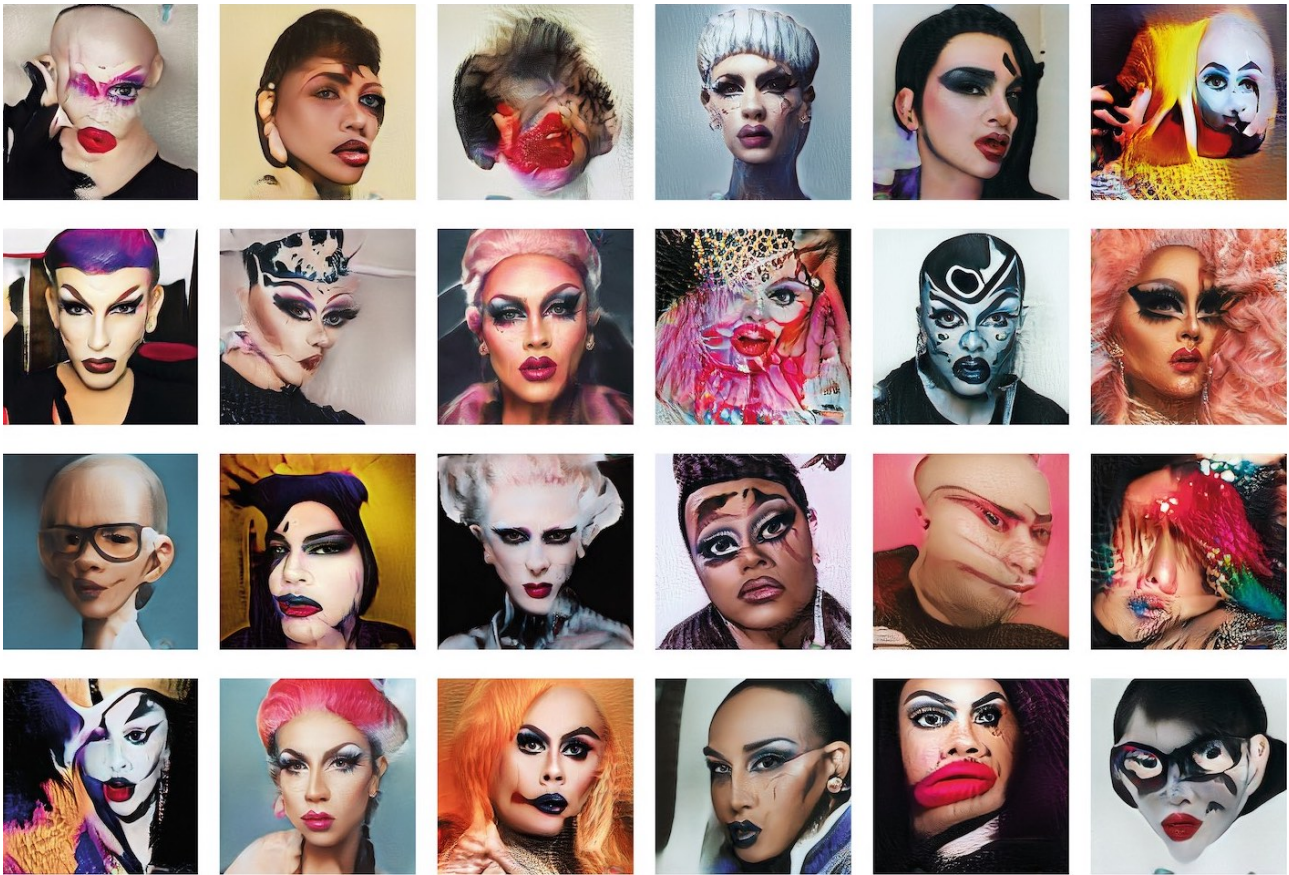
Rhizome, online archive of digital art and culture, has published a packaged version of this work, where you download folders with data and a skript, which „takes over the user’s browser with flowing sound, text, and images“ as the artist and educator Paul Soulellis (2016) writes about it. He continues: „The sessions read like ethnographic research but on-screen they play out like vibrant paintings [...]. The domestic textures visualized by Giardina Papa are familiar; they humanize the anonymous caregivers, but maybe also echo the downloader’s own physical environment [...]. Technologies of Care asks us to pay attention to these relationships, to the spaces between voices—to consider how close watching and listening to others on the network might link us together from all sides of the screen“ (ibid). Thus not only worker number one, a woman from Venezuela who teams up with her daughter to do research and translation jobs (see the folder „worker 1 - researcher and nail wraps designer“ at Giardina Papa 2016), but also the public watching the script running on their own computer, become part of a network, with the option of unlearning isolation.

Unlearning the Cistem

While Papa's work emphasizes haptic materiality and human contact, Jake Elwes has been working with deepfake⁶ technology since 2019. Deepfakes are realistic media content that has been generated or modified using machine learning technology (for more detail see Federal Cyber Security Authority, in German: Bundesamt für Sicherheit in der Informationstechnik, n.d.). A very common use of deepfakes is in the area of ‘face or identity swapping’. The resulting content has considerable destructive potential; it can create misinformation or damage a person’s reputation.

Diving into the topic of deepfake, Elwes first decided to queer the technology, to demystify and subvert the predominantly cisgender and straight ML systems. A thousand images of queer faces and makeups were injected into a dataset of 70,000 normative portraits (cf. Elwes 2023, 5.30–5.37). While *Zizi - Queering the Dataset* (2019) aims to tackle the lack of representation and diversity in the training datasets often used by facial recognition systems, in the following project *The Zizi Show* (2020) Elwes und the collaborating drag performers tested the limits of the programmes by using them differently. For instance, combining 21 nonbinary bodies to produce an interactive video and performance show (cf. Elwes 2023, 4.38–4.52).

⁶ Deepfake is a portmanteau word of the terms „deep learning“ and „fake“.



Jake Elwes (2019): Zizi - Queering the Dataset. Series of 24 prints. Archival pigment prints on Platine Fibre Rag paper 21x21cm. <https://www.jakeelwes.com/images/project-zizi19/zizi-prints.jpg>

For Elwes, it was important that everyone involved knew what happens to their data so that the work could be done on the basis of informed consent. In addition, the people whose data are used in a stage show are paid for it (cf. *ibid*, 6.55–7.03). In 2019, the agenda was still to modify and mess up an existing dataset, from 2020 onwards, the videos and stage shows are based on creating queer datasets of their own. Both tactics aim to counter *white*, straight, cisnormative, and at all biased technologies with something positive. It's about willfully having fun with deepfakes, which are often used for exploitative or discriminatory representations, while bringing forth an alternative ethic. Elwes calls it queer to celebrate one's diverse community even under complex circumstances (cf. *ibid*, 6.42–6.50).

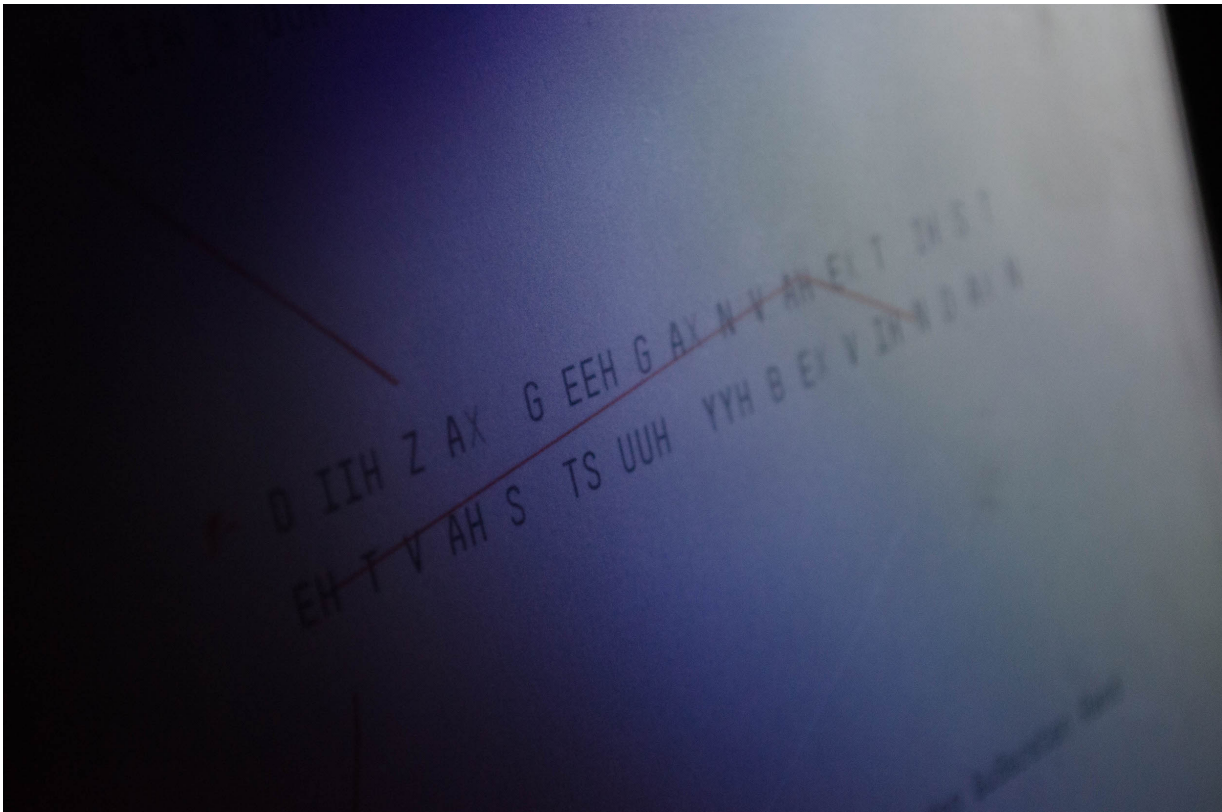
Learning about Human Failure

Pedro Oliveira is „a researcher, artist, and educator interested in a decolonizing inquiry of listening and the articulations of sonic violence at the borders of the EU. [His] work inquires listening and its implications on racialized violence and the policing of bodies in urban and border spaces“ (Oliveira’s website).

To discuss human failure in an age of extended automation, a very important piece of his work is presented in the following. It is titled: „*Das hätte nicht passieren dürfen*“ („*This should not have happened*“), 2018. The title is taken from the press release of the Bundes-

amt für Migration und Flüchtlinge (BAMF) – the authority in charge of Migration and Refugees after investigating, here i quote Oliveira, „the disastrous case of German neo-Nazi soldier Franco A., who managed to impersonate a Syrian refugee and was granted asylum seeker status in Germany [in 2015]. Franco A.s intention was to carry out a series of violent attacks on public figures, left-wing politicians and activists, making use of his identity as a Syrian migrant. His case seemed to put the entire German asylum seeker system in jeopardy. Numerous reports, statements, and press inquiries sought to shed light on how a white German citizen with no knowledge whatsoever of Levantine Arabic, as well as a questionable backstory, could be granted a temporary asylum status“ (Oliveira 2019).

„The solution found by BAMF to address this case was to begin, with utmost urgency, deploying so-called ‘accent recognition’ software to allegedly avoid ‘human mistakes’ which might have led to Franco A.’s acceptance within the system“ (ibid). The first showing of this project took place in spring 2018 at ACUD Gallery Berlin (ACUD’s website).



Pedro Oliveira (2018): „Das hätte nicht passieren dürfen“. Digital Scores, 20x30cm, one of three. Commissioned by Karma Ltd. Extended and installed at ACUD gallery’s courtyard in Berlin, February–March 2018, <https://oliveira.work/wp-content/uploads/2018/02/acud-4.jpg>

As a three-channel installation, it „had machines reading bureaucratic language, but doing so in what they might understand as a ‘neutral’ German accent. The second installment [took place in Brussels]. For this piece [Oliveira] turned phonemes into scores meant to be sung by a ‘trio of immigrant voices’ members of the local experimental choir, highlighting

the distinct processes of translation that happen when the task of machinic reading is performed by humans. Three singers – Moumy Chahou, Farida Lehyan, and Ghassem Mousavi –, performed the piece on April 14, 2018. Each of them was assigned a slightly different score with different notations for prosody, modulation, and amplitude [...].“ (Oliveira 2019)⁷

For me this is another strong example related to the long discussion about the fact, that computer systems also reflect human production, including human attitudes and assumptions. Accordingly, it does not help to simply use machine systems in case of human failure, as long as the replacement is not preceded by a complete analysis and the mistakes made are not taken into account in the correction. Which unfortunately, as one has to say, when reading the rest of the press release of the German Ministry of Migration and Refugees, did not fully happen.

Unlearning Racism

For instance the fact that the fake refugee might have calculated and aimed at the risk of aggravating the asylum process for refugees, did not play a big role in considering the consequences. Or the fact, that Franco A. could pass because of the positive bias of a translator towards the forged persona he was presenting. So one can take the title as a call for continuing reflection and unlearning again, or as Oliveira notes: „In refusing to ‘take part’ in the sound archive’s own shortcomings, these performances did not solely denounce the coloniality embedded in accent and voice recognition systems; instead, they enunciated poetic rehearsals for different, multiple futures.“ (Oliveira 2019)

Summing up: AI aka ML aka MC Un/Learning Measures for Art Education

In the paragraphs of the article, the following aspects of unlearning and learning were called up by artists dealing with and commenting on the use of machine learning systems.

- (unlearning) faking the author
- learning about machine conditioning and datasets
- unlearning sexism
- learning about emotional labour
- unlearning isolation
- unlearning the cistem
- learning about human failure
- unlearning racism

⁷ There is also an audio collage as part of the publication in the Spheres magazine. <https://spheres-journal.org/contribution/das-hatte-nicht-passieren-durfen-re-narrating-border-vocalities-and-machine-listening-calibration/>

Reading this list, where learning and unlearning are taking turns, it is important to hold on to, that learning and unlearning are interdependent, they rely on a continuous process of perception, reflection, production, reflection, communication, reflection...

In consequence of these observations, the task of art education could be, deal with the first point in the list, to work on the ideas of art, for example, taking apart the actions of *Obvious* with a media or conceptual art trained perspective. Thus, the focus of critical art education in dealing with AI and art today comprises the differentiation of artistic concepts, which can happen both by speaking, creating and acting. On the other hand and at the same time, art education should learn and unlearn from artists who relate and engage in worldmaking. These ways interaction allow to un-learn (about) the production of willful content, shapes and codes. It just needs support and resources to do this.

Bibliography:

ACUD (website): <https://acudmachtneu.de>

Ciston, Sarah (website): <https://sarahciston.github.io/>

Ciston, Sarah (2019): ladymouth: Anti-Social-Media Art As Research, in: *Ada: A Journal of Gender, New Media, and Technology*, No. 15. 10.5399/uo/ada.2019.15.5, archived at: <https://scholarbank.uoregon.edu/xmlui/bitstream/handle/1794/26793/ada15-ladyn-cis-2019.pdf>

Ciston, Sarah (2023): Asking the Wrong Questions about Generative AI, in: *The New Real*, University of Edinburgh, <https://www.newreal.cc/posts/asking-the-wrong-questions-about-generative-ai>

Eldagsen, Boris (2023): Sony World Photography Awards 2023, esp. the passage: Response to the Press Release of SWPA, <https://www.eldagsen.com/sony-world-photography-awards-2023/>

Elwes, Jake (2023), as part of Queering AI – online panel on art and AI [with Jake Elwes, Janne Kummer und Sara Morais dos Santos Bruss], ZKM Karlsruhe, 28.06.2023: <https://www.youtube.com/watch?v=8Tyz4shW5d4>

Enders, Stefan (2023): Fotografie und Authentizität im Zeitalter von Photoshop und KI, unter: FRELENS – Berufsverband der Fotojournalist*innen und Fotograf*innen, <https://freelens.com/kuenstliche-intelligenz/fotografie-und-authentizitaet-im-zeitalter-von-photoshop-und-ki/>

Federal Cyber Security Authority (in German: Bundesamt für Sicherheit in der Informationstechnik – BSI) (n.d.): Deep Fakes – Threats and Countermeasures: https://www.bsi.bund.de/EN/Themen/Unternehmen-und-Organisationen/Informationen-und-Empfehlungen/Kuenstliche-Intelligenz/Deepfakes/deepfakes_node.html

Fütterer, Werner (2023): KI – die geduldige Lehrkraft in der Hosentasche, in: BDK Verband für Kunstpädagogik (professional association for art education), 21. September 2023, <https://bdk-online.info/de/2023/09/21/ki-die-geduldige-lehrkraft-in-der-hosentasche>

Giardina Papa, Elisa (website); <http://www.elisagiardinapapa.org/>

Giardina Papa, Elisa (2016): Technologies of Care, Rhizome, <http://archive.rhizome.org/the-download/technologies%20of%20care.zip>

Gaztambide Fernández, Rubén (2013): Why the Arts Don't Do Anything: Toward a New Vision for Cultural Production in Education. In: Harvard Educational Review Vol. 83 No. 1 Spring 2013

Hunger, Francis (2023): Unhype Artificial 'Intelligence'! A proposal to replace the deceiving terminology of AI. In: Training the Archive – Working Paper Series 6, Aachen/Dortmund, April 2023, DOI: 10.5281/zenodo.7524493

Lobo, Sascha im Interview mit der ZDF Redaktion (2023): "KI mit voller Kraft umarmen“, unter: ZDF.de vom 06.04.2023, <https://www.zdf.de/nachrichten/panorama/sascha-lobo-interview-kuenstliche-intelligenz-100.html>

Lüth, Nanna (2018): For Beginners: Bausteine einer differenzreflexiven Kunstpädagogik. In: Stefanie Marr, Magdalena Eckes, Katja Hoffmann (Eds.), Was geht? Was bleibt? – Kunstpädagogische Debatten: Retrospektiven und Gegenwartsanalysen. Oberhausen: 123–140

Neumüller/Eldagsen (2023): Im Kopf. Es ist keine Fotografie!, in: ReVue, 31. März 2023, <https://www.re-vue.org/beitrag/im-kopf-boris-eldagsen-moritz-neumueller-es-ist-kein-fotografie>

Obrist, Hans Ulrich (2018): Künstliche Intelligenz oder künstliche Dummheit?, in: NZZ Feuilleton, 21.07.2018, available at: <https://kim.hfg-karlsruhe.de/kuenstliche-intelligenz-oder-kuenstliche-dummheit/>

Obvious (2020): Artificial Intelligence for Art (Manifesto), 2020, <http://obvious-art.com/wp-content/uploads/2020/04/MANIFESTO-V2.pdf>

Oliveira, Pedro (website): <https://oliveira.work/about/>

Oliveira, Pedro (2019): „Das hätte nicht passieren dürfen“. Re-Narrating Border Vocalities and Machine Listening Calibration, in: Spheres Journal #5 Spectres of AI, <https://spheres-journal.org/contribution/das-hatte-nicht-passieren-dufren-re-narrating-border-vocalities-and-machine-listening-calibration/>

Soulellis, Paul (2016): The Download: Technologies of Care. Elisa Giardina Papa's portraits of digital laborers, unter: Rhizome, 4.10.2016, <https://rhizome.org/editorial/2016/oct/04/the-download-technologies-of-care/>

Sollfrank, Cornelia (1997a): net art generator (project website), <https://net.art-generator.com/>

Sollfrank, Cornelia (1997b); Female Extension (project website), <http://www.medienkunstnetz.de/works/female-extension/>

Sternfeld, Nora (2016): Learning Unlearning. In: Nora Sternfeld and Marko Karo (Eds.), CuMMA PAPERS #20, Helsinki 2016

Steyerl, Hito, quoted after Obrist (2018): <https://www.nzz.ch/feuilleton/kuenstliche-intelligenz-oder-kuenstliche-dummheit-ld.1405241>

Lisa Sugiura (2021): The Incel Rebellion: The Rise of the Manosphere and the Virtual War Against Women, Emerald Publishing Limited, Bingley, pp. 15-36, <https://www.emerald.com/insight/content/doi/10.1108/978-1-83982-254-420211004/full/pdf?>

Wikipedia article (GAN): https://en.wikipedia.org/wiki/Generative_adversarial_network

Wille, Joel/dpa (2021): Wohin führt künstliche Intelligenz die Kunst?, in: Die Welt, 30.03.2021, <https://www.welt.de/226044577>

Willenbrock, Harald (2021): Künstliche Intelligenz und Kunst. Wann ist Kunst eigentlich Kunst?, in: Zeitgeist. Das Kulturmagazin des Goethe Instituts, Januar 2021, <https://www.goethe.de/prj/zei/de/art/22094490.html>