

# **THE CONSTRUCTION OF IDENTITY AND EVOLUTION OF DESIRE THROUGH SYNTHETIC MEDIA**

---

A Thesis  
Submitted to  
the Temple University Graduate Board

---

In Partial Fulfillment  
of the Requirements for the Degree  
MASTER OF ARTS

---

by  
Dylan Schenker  
August 2023

Thesis Approvals:

Dr. Andrew Iliadis, Thesis Advisor, Klein College of Media &  
Communication

Dr Larissa Kingston Mann, Klein College of Media &  
Communication

Dr. Michael Szekely, College of Liberal Arts

## ABSTRACT

The specter of deepfakes and artificial intelligence enabled media production continues to exacerbate the fear brought on by a degraded ability to discern the real from the fake, synthetic, or fabricated in a networked society. While these fears are well-founded their introduction into an already oversaturated media landscape, if anything, extended trends in mediated indeterminacy already being fostered by the ubiquity of social media. Sites such as Facebook, Instagram, Snapchat and TikTok, made more explicit the contingency and performative nature of identity. Younger generations coming of age through social media learn how to present themselves through it in novel ways unique to each platform. While these strategies are often harmful to people's mental health, other times it gives them the ability to experiment with new forms of identity more in line with a sense of self that cannot (yet) be expressed outside a virtual space. Technology-enabled mediation potentially expands these experimental possibilities of identity exploration since it is no longer inhibited by the limitations physical embodiment or social stigma. In turn, this contributes to an evolution of desire in accordance with the freedom afforded by the ephemeral nature of virtual spaces. Identities and desires hitherto not possible in a physical space can be pursued and materially experienced regardless of their virtual nature. Deepfakes, and now generative AI, anticipate a further, exponentially more complicated relationship with identity and desire formation through the adoption of increasingly unreal presentations of each.

**Keywords:** Synthetic Media, Deepfakes, Generative AI, Identity Construction, Gilles Deleuze, Pornography

## **CONTENT WARNING**

discussion of sexual harassment, nonconsensual and involuntary pornography, some suggestive and disturbing images and descriptions

## TABLE OF CONTENTS

	Page
ABSTRACT.....	ii
CONTENT WARNING.....	iii
LIST OF FIGURES .....	vi
CHAPTER	
1. INTRODUCTION .....	1
2. DEFINING DEEPPAKES AND SYNTHETIC MEDIA .....	11
What are Deepfakes? .....	11
Synthetic Media Beyond Deepfakes .....	13
3. A BRIEF HISTORY OF DEEPPAKES AND MEDIA MANIPULATION .....	20
The Origin of Deepfakes.....	20
Involuntary Porn .....	23
Banning and Outlawing of Deepfakes .....	25
Social Media Integration of Deepfake Technologies.....	27
Five Years Later: The Current Deepfakes Ecosystem .....	28
4. THE EPISTEMOLOGICAL IMPLICATIONS OF SYNTHETIC MEDIA .....	30
The Construction of Identity and Desire Through Social Media .....	35
Actualizing the Virtual: Deepfakes, Generative AI, and the Production of the New .....	41

Synthetic Media and the Power of the False.....	47
5. THE CONSTRUCTION OF IDENTITY AND EVOLUTION OF DESIRE THROUGH SYNTHETIC MEDIA: CASE STUDIES.....	51
TikTok Filters and the Exploration of Trans Identity .....	51
Desiring the Unreal in AI Generated Porn Communities.....	59
6. CONCLUSION.....	72
BIBLIOGRAPHY.....	81

## LIST OF FIGURES

Figure	Page
Figure 1. Transwoman using TikTok de-aging filter.....	54
Figure 2. Transman using TikTok de-aging filter.....	54
Figure 3. AI generated animation. ....	63
Figure 4. AI generated women.....	64
Figure 5. Generative AI mistake. ....	65
Figure 6. Generative AI mistake. ....	66
Figure 7. Generative AI mistake. ....	66
Figure 8. Generative AI mistake. ....	67

# 1. INTRODUCTION

Deepfakes are an inflection point in the evolution of audiovisual media towards achieving an almost indistinguishable virtual re-creation of ostensibly representational content. As a form of what has come to be called synthetic media (Adjer et al, 2019), they are created by feeding massive collections of photos and videos of an individual into an artificial intelligence engine to seamlessly incorporate their attributes into an entirely unrelated video or photo. The content of synthetic media has no direct referent to the real world but is instead a fictional or aesthetic fabrication that, while indistinguishable from a more empirical claim to realism, is otherwise fake. These synthetic media don't replace reality so much as stand in tension with it. They are unique to a networked media ecosystem insofar that they proliferate within an environment of overlapping and intersecting contexts in which distinctions between different kinds of information are trivialized or dissolved. While deepfakes are the most explicit example, their development signifies a larger trend in the evolution of identity performance or presentation through social media and streaming platforms. To be sure, identity has always been as a understood form of performance, gender or otherwise. Regardless of the level of mediation, it shifts depending on the nature of the communication, the context in which it is communicated, and the intended audience (Goffman 1959). However, the ubiquitous use of filters, photo-editing, audio overdubbing, and fully posable streaming avatars on social media networks such as Instagram, TikTok, YouTube, and Twitch suggests users are becoming more amenable to manipulation of the body—and by extension, of identity—as it is mediated online. This is to say, it is not so much a shift in

the performance of it so much as it is a shift in awareness that is driving a more explicit leveraging of its artificiality in service of particular goals. Providing this context also anticipates how deepfakes and other synthetic media do not merely portend a future in which hyperrealistic audiovisual media causes further challenges to knowing how to know; they additionally show that more freedom of manipulation through the democratization of synthetic media toolkits will continue to further foreground the performativity of identity in general.

My first objective will be to situate deepfakes by outlining the current synthetic media landscape. I want to problematize the narrow use of the term by arguing that many of the features understood as representative of social media today function in effectively the same way as deepfakes. To do this, I will explain the use of the more popular platforms among younger generations today and how their formats contribute to the creation of synthetic media. The impact Instagram has had on self-perception and body image and therefore on deliberate strategies of identity cultivation will heavily inform this line of thinking. Image management yielded a more tenuous relationship between reality and how someone performed or marketed themselves to a broad, oftentimes anonymous, audience. The heavy editing of photos and their careful curation between private and public-facing accounts became standard conventions of the platform. Moving on, I will then analyze how Snapchat exacerbated many of the same effects originally caused by Instagram. Their development of AI-enabled face and body transformation effects in video messaging led to what one cosmetic surgeon called Snapchat dysmorphia (Tremblay et al. 2020). More people were presenting and performing versions of



themselves which were increasingly more difficult to trace back to the performer. Livestreaming platforms such as Twitch, in which audiences watched personalities play video games in real time, soon developed the means of applying these kinds of filters in live video. This reached a pitch when many began experimenting with livestreaming fully virtual characters poseable through the use of motion capture bodysuits. Many viewers, inevitably in retrospect, developed parasocial and sexual attachments to many of these virtual performers (Dawson 2022, Chen 2020). In all, these innovations contribute to a broader understanding of how the performative nature of identity continues to be further extended into more virtual contexts along with the ongoing development of technological affordances through social media. Following Butler's understanding of identity not requiring a "doer behind the deed" and which is constructed "in and through the deed" it is useful to think of these further layers of mediation as additive to an already virtualized process of identity performance and construction (Butler 1990, 181). This is to say, the distribution of performances across multiple platforms, or even digital avatars, does not imply a lack of continuity so much as they imply a network of partial identities unbounded from physical embodiment and more outwardly realized.

Once I have established the broader social media landscape and how it fosters a more malleable relationship with identity through performance, I will trace the brief history of deepfakes from their inception to their application in the present day. Even within the scope of this limited time frame their impact has already been felt in the domains of both pornography and politics. Initially introduced by their namesake on the social media forum Reddit to illustrate the novel use of Google artificial intelligence

software, the subsequent development of user-friendly applications soon led to the proliferation of fake celebrity pornography. This continues a trend of pornographically manipulating celebrity images that can not only be traced to the earliest days of the Internet, but of the entertainment industry in general as well (Kushner 2003). Although deepfakes are now synonymous with a specific kind of celebrity pornography, I will highlight the development of other forms of AI-supported pornographic faking which have similar origins, such as the clothing removal app DeepNude. Entire sites such as MrDeepfakes, Adultdeepfakes, and Porndeepfakes dedicated to hosting them continue to provide a platform for the creation of tens of thousands of deepfakes (Oh 2023). Additionally, this ecosystem continues to foster an entire cottage industry of individual creators soliciting donations for more premium content created through deepfake software. It is important to note as well how the popular usage of deepfakes to make involuntary pornography contributes to more systemic issues involving the objectification of women. Whether they will usher in a new era of political instability seems like a moot point when the primary purpose of the deepfakes being produced now are strictly for the purpose of treating women's body parts as raw material to fulfill the approximation of a desire.

Even though they have primarily been used to make involuntary pornography, it is still important to reflect critically on their potential impact on the trust the public puts into the video documentation of reality. To be sure, the examples of this use are limited but they are prominent and innovative enough to warrant comment on how they contribute to the evolution of the medium (Satariano & Mozur 2013). Especially

concerning is the impact deepfakes will have on evaluating the true value of any media once knowledge of their existence is widespread. Even without being advanced enough to recreate video documentation without error, the mere possibility of their use is enough to sow doubt in any media going forward. Knowledge of their existence even if they are not widespread causes a crisis of trust if it is possible for anything to be a deepfake. Further, politicians or other powerful people can use them as an excuse by calling any incriminating evidence used against them a fabrication used against them by their political opponents. A culture reliant on the veracity of media as a conduit for information and therefore knowledge, will increasingly struggle with knowing how to know if everything can be fake and proof is forever elusive. However, in contrast to this point, recent uses of deepfakes by conservative media present an altogether different, and rather novel, use in which what is true is less important than what is desired to be true. For example, when ultraconservative media outlet The Post-Millennial shared a deepfake of Joe Biden on Twitter it framed it as AI predicting a possible outcome of the Joe Biden presidency (Broderick 2023). These linguistic acrobatics in fact dovetail with deepfake's use in making pornography: it's not about the uncovering of a naked body so much as it is about teasing out what could be true by approximating reality close enough to make it feel eventually realizable beyond its simulation. Once a culture is sufficiently ameliorated to conditions of indeterminacy fostered by synthetic media, they begin leveraging it towards the cultivation of new narratives through it. As Popova (2020) notes, deepfakes are not about gaining access to the putatively private lives of their subjects but rather the fulfillment of a community's constructed image of what they perceive to be their private

lives. A narrative is developed prior to their creation which is then reified through the creation of synthetic media.

Tying this back to the evolution of identity through social media, deepfakes and deepfaking as a method are not altogether precluded from self-presentation and content creation through less clandestine media platforms. Since their advent, many social media giants began integrating deepfake-like functionality into their platforms which ultimately became core to how they are now used. Instagram, TikTok and Snapchat all popularized different kinds of face transformation filters and techniques that change someone's self-presentation and in the case of many users allows them to remain anonymous when posting content. This raises questions as to how users understand their own relationship to identity and questions of authenticity and performance to construct it.

Once I have established the social media landscape and the introduction of deepfakes into it, I will begin laying the theoretical groundwork for how to understand their existence more phenomenologically through the evolution of moving image production. Additionally, understanding their proliferation requires a better understanding of how information generation and exchange works in a society increasingly defined by its level of internet connectivity and how much time is spent interacting through and around it. Deepfakes can be understood as an outgrowth of a culture that has come under the weight of the accelerated production of content through social media and other forms of networking. The increase in content creation—used as broadly as possible to encapsulate all media whether written, aural, or visual—exposing larger and larger audiences to information free of any relevant context. I will primarily approach deepfakes

and synthetic media in general through the lens of Deleuze's conception of the actual and the virtual, and the power of the false, in particular their use in analyzing the history and evolution of filmmaking over the course of the twentieth century (Deleuze 1966/1988, 68-97). Divided across two sections I will nonetheless retain a level of continuity starting with the actual and the virtual and then a separate section on the ideas he lays out in the chapter of Cinema 2 titled power of the false. I will show how in essence these concepts presciently and precisely describe the nature of both deepfakes and the even more recent advances in generative artificial intelligence engines. In the most elementary terms possible, as a medium that captured reality through the creation of moving images, cinema disseminated a depiction of the world that was able to look real while otherwise existing separate from the world as such. Once this depiction was able to exist independently from any reality originally recorded through it, it could begin to impress upon the world an alternative vision of it by rendering conventional models of truth as contingent and vulnerable to equally salient fictions. Deleuze's corpus of image types is legion but what is important for the express purpose of this paper is that once they are liberated from any action or narrative telos, they are free to interact with each other in indeterminable formations thus yielding novel ways of experiencing time and space.

Finally, I will use two recent examples of synthetic media as case studies to apply these ideas introduced in the previous section. The first of these will entail the use of a de-aging filter that had a flash of popularity among presumably middle-aged users on the massively popular short video social media platform TikTok. Application of the filter to a user's face makes them look younger by softening their features in real time. Since it is

scanning what they look like currently and subsequently manipulating it, the appearance it produces is a younger version of the self which exists now rather than what they may have actually looked like when they were young. Specifically, I will be highlighting how the app was used by trans users to reimagine what they would have looked like had they transitioned earlier in their lifetimes and the impact that revelation had on them. Put simply, using the filter gave them more power over their identities and provided them with the ability to more fully experience themselves through an otherwise virtual image. The case study will be of the pornographic content being created by an online community through their use of the generative artificial intelligence engine Stable Diffusion. Unlike deepfakes, generative AI dispenses with any desire to depict real people in unreal circumstances. Instead, it turns textual prompts into entirely novel visual media after learning the relationship between words and images. A community of over two hundred thousand members has gathered to push the limits of what can be created through the software, the fruits of which are increasingly unrealistic and unreal depictions of sexual fantasies with no analog in the real world. Once free from any deference to realism new objects of desire begin to be created and explored ultimately making these synthetic creations more desirable than anything that is real.

Both examples will likely seem atypical within the broader discourse on deepfakes. However, this is somewhat the point that I want to make in the body of this paper. While the production of involuntary porn currently dominates how they are used much like pornography's fabled vanguardism when it comes to advances in media consumption and production this does not mean their use will only ever be relegated to

this domain. It is worth emphasizing that this does not mean their origins primarily to make porn should be ignored when speculating upon their future potential. Whether their initial development is inextricably tied to involuntary porn is immaterial when considering how they predominantly came to be used. Ultimately these uses bootstrap themselves to the dissemination of the technology and shape their application in the popular imagination which in turn further shapes the technology itself. To better grasp the inevitable widespread impact deepfakes will continue to have, understanding them more broadly in relation to other domains of image creation is of tantamount importance. No app has had as much impact so meteorically on society writ large than TikTok so the use of facial transformation technologies on the platform gives insight into how a culture assimilates their use into everyday life. Similarly, generative artificial intelligence engines are even newer, and it is difficult to forecast the possible breadth of their impact. Despite that, it is now obvious they are not an unusual companion to deepfakes in their use in creating pornographic media. It is inevitable that their affinity for making pornography will be pushed even further as each technology becomes much more sophisticated.

Whatever the potential for synthetic media to carve out a space for more radical forms of performance the motivations behind their development and use must remain points of contention. The use of synthetic use of social media that extends into the development of both deepfakes and generative AI has primarily been driven by women, girls, and gender nonconforming people, and women of color, who over the course of their lifetimes internalized the necessity of performance and physical augmentation in their everyday lives. Whether this was driven by impossible beauty standards or fear of

reprisal for not confirming to strict gender roles, it has been an inescapable reality for the entirety of their lives. However, what these struggles have instilled within these and other marginalized groups is a set of strategies for how to explicitly navigate the exponentially complex layers of mediation. In Haraway's (1991) formulation of the cyborg as the future feminist subject she argues that rather than eschew this skillset in favor of an originary natural wholeness it would behoove us to instead embrace this artificiality as a form of praxis contra incorporation and subsumption. The blurred boundary between an ostensible reality and fiction wrought by such technologies should be not a source of lamentation but rather an entry point into the possibility of "new couples, mutations, and the emergence of new entities." (Wilson 2015). In the conclusion I will attempt to expand upon invocation of the cyborg to explain how technologies such as deepfakes and generative AI can follow a similar path of tenuous appropriation towards more radical, perhaps even liberatory, ends. This will entail an abbreviated history of computing that seeks to highlight how inextricably women and queer people are tied to the history of computing in general. More precisely, Haraway's conception of what she calls cyborg writing as an assertive act of "seizing the tools to mark the world that marked them as other" (Haraway 1991).



## 2. DEFINING DEEPAKES AND SYNTHETIC MEDIA

### What are Deepfakes?

The purpose of this section, ideally, will not only be to define deepfakes and synthetic media but to frame these developments as coextensive with the growing tendency towards media manipulation on social networking platforms more generally. While the term deepfakes is indelibly stained with the crimes of its origins it nonetheless usefully captures the audiovisual vernacular that emerges from treating media as a raw material. As an overview of some of the more important iterations of this concept, I will also be providing a summary of the current social media ecosystem and the definitions required to complete this picture.

Deepfakes, a portmanteau of the terms “deep learning” and “fake,” are forms of audiovisual media fabrication created through the use of machine learning. While the phrase itself tends to describe the product of these methods more than it does the process itself, it is generally accepted that for a piece of media to be a deepfake it must involve some form of artificial intelligence, broadly defined. More specifically, deepfakes describe hybridized videos in which a face is grafted onto another person’s body to create realistic impersonations (Paris & Donovan 2019; Chesney & Citron 2019; Rini 2020). Ideally after being trained on a collection of photos and videos the system will be able to seamlessly recreate the facial movements and tics of the underlying face in the one layered on top of it.

The more technical explanation for how they work involves the accumulation of large stores of photos and videos to train software applications on the appearance of a

subject. Almost exactly two years prior to the emergence of Deepfakes on reddit, Google open sourced their artificial intelligence engine TensorFlow. Like other AI engines, it runs on a series of what are called neural networks, or neural nets for short, which are a computational approximation of how neurons signal and make connections between one another in the brain. Data sets such as photos and videos are gathered either manually by a user or “scraped” from the public internet through an automated retrieval process to comprise what is called a training set for the AI engine. Depending on the desired output, the individual neurons or nodes in the net will activate or fire and move onto the next layer of activation. Each of these nodes and layers contain certain information that is absorbed from its training set which it passes along as a component of the final output. As it processes more data the more it learns their granular details and the more rapidly it can translate them into its outputs based on these data. As the scale of these training sets grows and their accuracy improves these neural networks can recognize patterns and draw associations among data to which they were not initially exposed. (Metz 2019).

Deepfakes initially used what are called Generative Adversarial Networks, or GANs for short, which pits two neural networks against each other to create increasingly realistic outputs. One of the networks, called the generator, produces artificial approximations of the media in the original data set. The discriminator, the other neural network, is charged with comparing those creations against the originals to see if it can tell the difference. This process is ongoing until it yields a piece of media, whether it be an image, video, or audio, or something else, which is close enough to the original that the discriminator can no longer tell what’s real and what’s fake (Giles 2018).

Although the phrase synthetic media often encompasses any media manipulated in part by AI tools such as neural networks and machine learning (Ajder et al., 2019), its practical existence extends into the gray areas of creative editing and artistic license. In the case of deepfakes this term is defined primarily by its use in swapping the faces of two people from otherwise disparate sources. Paris and Donovan usefully situate their emergence within a broader landscape of audiovisual manipulation citing them as merely one end of a spectrum of fabricated media productions. Although deepfakes are primarily discussed in very specific ways in terms of how they have been used and the impact they have had, understanding them more generically in terms of this kind of manipulation is essential to truly grasping the ubiquity of synthetic media as it already exists in networked media ecosystems.

### **Synthetic Media Beyond Deepfakes**

Limiting an understanding of deepfakes strictly to their inherited namesake misses the impact audio, visual and textual manipulation continues to have on the formation of identity in mediated, networked spaces especially on social media. Synthetic media as a phenomenon is usually relegated to its use in disinformation, information or involuntary pornography. Despite the term's associations, deepfakes, or deepfaking, understood broadly is not unlike the strategies people devise and the tools they use to control their self-presentation online. Social media has simultaneously provided a platform for both the chance to express oneself anonymously or through total exposure of the self. The affordances of platforms like Instagram, Snapchat, and now TikTok, through the use of filters, editing tools, and privacy settings have contributed and continue to contribute to

an evolution of how people present themselves online which in turn shapes the media ecosystem in which they all participate. Seeing other people present certain versions of themselves on social media in turn influences how they choose to present their lives through it. The acronym FOMO, or fear of missing out, emerged as a response to an ecosystem of carefully curated depictions of idealized lives and the distress it was causing those who felt their lives fell short (Gupta & Sharma 2021). This has especially contributed to issues concerning body image, primarily in women, in which carefully curated social media feeds, especially on Instagram, fosters a sense that only certain kinds of bodies are legitimate or worthy of desire (Cook 2021).

The desire to control and manipulate one's appearance through the media they create is not a new phenomenon. At least since Snapchat and Instagram introduced photo filters onto photos to enhance their aesthetic qualities, users' ability to edit and fundamentally transform their own media has become both increasingly more sophisticated. Though applying a sepia-toned or black and white filter introduced harmless novelty in the editing and sharing of photos on a social media platform, advances in these features began to have an impact on how people saw themselves through it. Instagram in particular has become notorious for the imposition of impossible standards of beauty on its users. The image manipulation through apps such as Facetune have caused people, especially women, to edit every image of themselves even when it drastically changes their appearance; many users will not post photos of themselves without retouching them first. Despite this fact, users of the app are still mindful of ensuring their photos don't look like they've been edited too much thus retaining a

particular tension between what they actually look like and an ideal version of themselves (Cook 2021). These minor modifications, however, accumulate, especially when untouched photos are never actually shared online. Editing extends far past the face to transform the entire body: beyond reshaping the jawline, whitening teeth, the shape of their smile, and moving the hairline, people also use it to slim their waistline or widen their hips. As the use of Instagram fostered the presentation of certain kinds of lifestyles and a narrow idea of the body, users began distributing what they shared between multiple accounts depending on whether it fulfilled a particular image of themselves they wanted to share publicly. These alternative accounts known colloquially as ‘finstas’ allowed users to tailor their content to a more trusted audience with whom they could share a less managed version of themselves (Weaver & Issawi 2021). Whereas the more public facing accounts could promote a more marketable version of the self that would be less prone to criticism, private accounts allowed people dispense with these considerations. Which is to say, this more private version was considered more authentic because they were less beholden to the conventions of identity performance on their public account. The impact on the self-esteem of young women inevitably contributed to their desire to hide anything that could be perceived as an imperfection thereby reinforcing the feedback loop of image manipulation and curation. Additionally, the continued sex-based harassment of women across multiple platforms who are perceived as too progressive or outspoken in their more liberal (or liberated) beliefs contributes to a desire to shield oneself from such harsh criticism (Lorenz 2022a, 2022b). Stage-managing then becomes a strategy to promote a version of the self that they deem preferable and they believe will be more acceptable amongst their peers and interlocutors.

Years before Snapchat acquired the technology needed to develop their own deepfake functionality they were already pushing the boundaries of digital self-presentation and performance through their use of their Lens feature. Introduced in late 2016, more than a year before widespread awareness of deepfakes, it uses computer vision to identify specific markers on the face and then map other faces or masks onto the target individual. To identify these markers, the system is taught how to identify a face by training it on tens of thousands of samples and then adjusts itself accordingly every time it is used to each unique face as it is captured through the phone's camera at twenty-four frames per second. In most cases these filters are playful and cartoon-like featuring animal faces like a rabbit or a panda or a flower wreath and exaggerated blush. However, they also functioned as a filter to augment more realistic features of the face as well oftentimes towards more unrealistic or unachievable ends. Snapchat later extended this functionality to desktop computers ushering in their use in real time on platforms such as the popular video game live streaming site Twitch.

These filters can be used to change a wide range of features including skin tone, eye shape and size, lips, cheeks. Perversely, even the most lighthearted filters smooth out the complexion of the subject. When cosmetic surgeon Tijion Esho noticed many of his clients were no longer bringing in photos of celebrities to present a desired outcome but instead heavily pixelated photos of themselves he coined the term Snapchat dysphoria (Tremblay et al. 2020). This kind of dysphoria is distinct insofar it is cultivated by the capacity to create a version of the self through the easy access of editing tools hitherto unavailable prior to the spread of computer technology. Unlike the desire to look like a

celebrity, however unrealistic, this trend revealed something new in the collapse between reality and fantasy and the continued desire to achieve unattainable standards of beauty. While this desire has been around for almost as long as the entertainment industry, or even photography, it has been amplified and extended by the further penetration of visual media into every aspect of daily life. More and more what is desired to be attainable is a version of a human that can't adequately be attained outside of its mediation through social media platforms. This is not only the case with how editing tools further bolster already unrealistic standards but also in the very fact that the way smartphone-embedded camera technology inescapably captures a version of the face that doesn't actually exist in the real world.

Tools used for gender swapping, de-aging, turning people's faces into cartoons or animals, or touching up perceived imperfections, have been legitimized through their integration into social media trends and functionality. The wildly popular short video social media network TikTok has done more than any other app to popularize the use of filters, dubbing, and deepfakes as essential features in performing the self. After TikTok's parent company ByteDance acquired the social media video platform Music.ly, they implemented its lip-syncing feature which is now integral to much of the content produced on the app. In addition to dubbing in music to create the appearance of someone singing along to a song, clips of spoken word both sourced from entertainment media and from other users is used to create the impression of someone else speaking it. Recently taken to its logical conclusion, fans discovered how to make the songs of one artist sound as if they were being performed by another one using artificial intelligence.

Over the course of the last decade, the ability to manipulate the appearance of oneself has also given way to the development of parasocial relationships not only with actually existing human beings, but with wholly digital avatars as well. YouTube marked the rise of streaming celebrities who developed identities based on a range of content including humor, beauty tips, politics, and media commentary. Later, the platform Twitch rose to prominence for its focus on the real time streaming of other people playing video games as a form of entertainment. Over the course of the last decade, however, virtual characters known as vtubers have become some of the most popular streamers on either platform. These characters are controlled by full body motion capture suits that make them fully poseable by their creator. In terms of appearance, vtubers are an anime-influenced creation, and are for the most part, primarily female. Despite their status as virtual characters, they perform like any other streaming personality. Some play video games while others simply go about their day or teach their audiences about a subject. An important component of vtubers is that they never break character or bring attention to the fact that they are being controlled by a human behind the screen. Even when interviewed for news stories, they often do it in character as their digital avatar (Ellis 2020). These characters, despite their virtual existence, treat themselves as having a material existence comparable to a physically embodied individual outside of a virtual space. What makes vtubers important to this line of inquiry is understanding how they foster a desire for the overtly virtual over, or comparable to, a less mediated human.



Additionally, it is worth speculating upon the potential for deepfakes to penetrate these kinds of spaces in which they do not only consist of video but also live streamed skins and interactive masks.

### **3. A BRIEF HISTORY OF DEEPAKES AND MEDIA MANIPULATION**

#### **The Origin of Deepfakes**

Deepfakes are a form of near perfect media fabrication that marks an inflection point in the ability for software to represent reality without capturing it photo- or cinematographically. Developed by a Reddit user, after whom the creations are named, the software provided an accessible means of (almost) seamlessly swapping faces in moving images. By training a neural network on a sufficiently large set of photos and videos of a likeness, it analyzes those images in relation to the mapping target and ideally produces a face that when applied mimics the expressions and movements of the original. Introducing this software onto the social networking forum led to their inevitable use as a way of making nonconsensual pornography. Many people's first exposure to their potential in fabricating reality was through a video of "Gal Gadot" seemingly starring in an incest fantasy adult film (Cole 2017). A tidal wave of similar creations, featuring the likenesses of A-List celebrities such as Scarlett Johansson and Taylor Swift, soon followed and continue to be made today (Hollister 2018).

Since their introduction onto the internet, their primary use has been to create non-consensual, or what is now referred to as involuntary, pornography, mostly of celebrities. After the initial publication of the story that broke the news on Deepfakes, AI-Assisted Fake Porn Is Here and We're All Fucked reported by Samantha Cole (Cole 2017), an eponymously named subreddit soon appeared. This community became a

testing ground for how to perfect the use of the technology behind their production to create more and more realistic synthetic media. After the initial bump in popularity through their introduction on Reddit, a user on the site with the handle DeepFakeApp posted FakeApp, a desktop application he had developed to make the process of making deepfakes more accessible. Although he attempted to focus its purpose away from its use in creating porn it was impossible to stamp out completely this usage of the app.

Whatever his intentions, in his own words, his impetus for designing an app was to democratize the process of faking. Before Reddit banned the r/deepfakes subreddit a few months later for violating its guidelines on nonconsensual pornography, it had already amassed over 90,000 subscribers. As of 2019, according to one report, 14,678 deepfake videos existed online of which 96% were some kind of pornography (Ajder et al., 2019). Before their ban on a majority of the most trafficked hosting sites, more than a thousand videos were being uploaded every month. One 30-second clip of a deepfaked Emma Watson, who continues to be one of the most targeted celebrities, at the time of publication of a Wired UK story about deepfakes, had been watched over 30 million times (Burgess 2020).

The banning of the subreddit and its subsequent removal from other pornography hosting platforms did not curtail their creation, however. Deepfakes continued to proliferate as new applications continued to build on and advance the original technology behind their creation. DeepNude, for example, which launched in 2019 and used neural networks to remove the clothing of women in otherwise innocent photographs. Reporting on the application confirmed it only worked on women when Samantha Cole, the same

writer who broke the story on deepfakes, tried feeding it a picture of a man and replaced his pants with a vulva. Since what it is doing isn't actually removing clothing but algorithmically editing the clothing off to replace it with body parts sourced elsewhere, in practice it functioned in much the same way as deepfakes. Also, the same as deepfakes, the quality varied radically in terms of lighting or type of clothing worn by the subject of the picture. DeepNude's developer ultimately removed the app from the internet after negative coverage in the media—but only after it was downloaded 95,000 times and its source code was published on the computer code-sharing site Github to be replicated by copycats (Burgess 2020). A more advanced application called Nudify, with the same functionality was launched in 2020. The application's referral model contributed to its further spread by rewarding people who share links to other users. Whereas they would only be able to generate one free nudified image every two hours with the free version, with referrals or cryptocurrency, users would increase how many times they could operate the application (Cook 2021).

The process of nudifying images of women was further automated through the use of bots on the encrypted messaging service Telegram. The bots function as kind of automated users in chat rooms hosted by their creators to respond to requests and process payment. Free versions of nudified photos tend to be lower in quality and watermarked. In an internal poll published in one of these chat rooms, of 3300 respondents, 63% said

they used the bots to see people they knew naked. Images minors have also reportedly been among the content being generated through these services. (Vincent 2020). According to the deepfake report by Sensity referenced throughout this thesis, despite the gender-neutral name of the application, women continue to be the primary targets of the app.

### **Involuntary Porn**

Even prior to the development of deepfake technology women were disproportionately targets of harassment and sexual abuse online. Women journalists are especially vulnerable to campaigns against them from just doing their jobs (Lorenz 2023). Deepfakes contribute to an already oversaturated ecosystem rife with male grievance over women expressing themselves too liberally online. Almost a decade ago, GamerGate in which video game players unleashed a misogynistic trolling campaign under the cover of journalistic ethics which rather than ever truly relenting, imprinted itself on the overall the internet landscape (St. James 2014). On top of this, self-proclaimed incels, or involuntary celibates, who have cultivated an entire culture based on blaming women for their lack of sex led to mass violence including when Elliott Rodger released a manifesto pertaining to the movement and went on to killed six people on a college campus in 2014 (Winton et al. 2014). The specter of deepfakes in the popular imagination primarily involves celebrities, their use extends to any individuals, the majority of whom are women. Classmates, friends, or anyone with photos of themselves on public social media accounts are potential targets for synthetic media (Cole 2018). This use is not new either; for as long as the software has been available non-famous people have been the targets of deepfaking as well. These initiatives are

themselves outgrowths of communities that already existed on reddit and other more unsavory forums such as notorious image board 4chan in which users posted photos of people they knew and requested porn model lookalikes.

Deepfakes have been used in both blackmail and revenge porn schemes, the latter of which is the practice of publicizing otherwise private intimate photos by an aggrieved ex-partner as a form of retribution. A journalist who criticized a political party's support of a child rapist was eventually inundated not only with hate but eventually of her face grafted into pornographic videos. Flooded with messages across multiple platforms further sexualizing and demeaning her, she was eventually hospitalized because of the toll it took on her body (Ayyub 2018). Noelle Martin, who had become an activist after discovering photos of her face edited onto naked bodies, was also targeted with deepfake videos in response to her advocacy shining light on this very same behavior (Martin 2020).

In early 2023, a clip purporting to show proof popular Twitch streamer Brandon "Atrio" Ewing had purchased deepfakes of well-known female streamers. Soon after this disclosure it exacerbated the popularity of deepfakes of these and other streamers on sites such as MrDeepfakes where videos of the performers continue to populate the front page. One of the victims, QTCinderella, in an emotional response video described the body dysmorphia caused by seeing her head grafted onto a model's body (QTCinderella 2023). The violation of witnessing oneself realistically appearing in a video they did not actually appear has a violent psychological effect on those it targets. More than any other occurrence, likely due to the popularity of Twitch streaming among younger generations

as a form of entertainment, the fallout from Atrio's actions has done the most to bring attention to the impact on victims of the involuntary porn made with deepfakes.

### **Banning and Outlawing of Deepfakes**

Soon after the reporting by Samantha Cole in VICE brought national attention to creation of deepfakes, Reddit banned any subreddits that promoted their use in making involuntary pornography (Reddit 2018). Twitter and Pornhub, one of the largest adult film streaming platforms in the world, followed soon after with statements condemning their use and implementing their own bans on deepfakes and involuntary pornography (Hern 2018). Facebook specifically singled out political deepfakes in the lead up to the 2020 presidential election in their ban on synthetic media. In a statement, their head of global policy management, Monika Bikert mentioned anything that is misleadingly edited or synthesized or made with artificial intelligence which superimposes or replaces content and makes it look authentic would fall under the new policy (Hern 2020). California also signed into law AB730 which specifically targets politically deceptive deepfakes used against any lawmaker within sixty days of an election. However, it carves out exceptions for their use by news media and their use as satire or parody (Lecher 2019). Laws in Virginia and Texas have also been passed curtailing their use especially in the form of involuntary pornography. Representative Yvette Clark also proposed a bill called the DEEPFAKE Accountability Act which has yet to be put to a vote but would make it more difficult to make deepfakes that don't explicitly communicate their status as synthetic (Hsu 2023). When the US National Defense Authorization Act was passed in 2021 it included a clause requiring the Department of Homeland Security to publish

annual reports on the use of deepfakes for the next five years. Additionally, it must also research their detection and mitigation techniques and the potential fallout from foreign adversaries leveraging the technology against the United States (Briscoe 2021). While implementing this kind of enforcement in the service of national security is important, deepfakes used in this way continue to be rare and so far have had no real political impact. A deepfake of Ukrainian president Volodymyr Zelensky circulated briefly on social media but it did not last long before it was ultimately debunked as synthetic before it could have any material impact (Allyn 2022).

Despite these initiatives, however, a growing concern has been that even with the passage of laws severely curbing their use, for involuntary pornography or otherwise, actually enforcing the law will be incredibly difficult. Since many deepfakes are made anonymously it is difficult to track down their creators and state laws can only do so much about content that is accessible anywhere regardless of where it is made. Additionally, watermarks and other identifying features tend to be removed rather easily when deepfakes spread across various sites (Coldewey 2019, Hsu 2023). Worth noting as well, what sites such as MrDeepfakes make apparent is that their status as fake doesn't lessen their appeal to their audience. In most cases, people who watch and share deepfakes aren't watching it with the mindset that they are seeing a genuine depiction of reality (Popova 2020).



## **Social Media Integration of Deepfake Technologies**

Although its use in involuntary pornography isolated the term to that domain, taken more broadly deepfaking as a method of manipulating media is already a major part of the cultural fabric of social media. Even while major social media companies were banning the broad use of deepfakes they were monetizing their own applications of the technology themselves. In late 2019, Snap purchased AI Factory, the start-up behind their 3D face capturing technology, for 166 million dollars. The company had collaborated with the social media platform in the development of a feature called Cameo which effectively functioned the same way as deepfakes. Users can swap their faces into short, oftentimes amusing, or over the top, videos in real time. After it unveiled its gender swap and baby filters, Snapchat went from 16.8 million to over 41 million downloads, more than doubling in the span of a month (McDermott 2019). TikTok also was reportedly exploring similar software to swap people's faces between videos around the same time. Artist researcher Memo Akten collected a thread of examples on Twitter of people using the app's de-aging and glamor filters, which showed what people looked like when they were younger and what they look like if their appearance conformed to more conventional beauty standards. In one moving video, a transman was able to see what he would have looked like had he transitioned at a younger age (Akten 2023; Javaid 2023).

Despite efforts to clamp down on the use of deepfakes to create involuntary pornography, apps providing deepfake functionality continue to proliferate through official app stores. Despite their notoriety they are regularly marketed as a kind of novelty wherein, for example, users could swap faces with celebrities. Not long after the

initial reporting on deepfakes, the face swapping FaceApp went viral racking up tens of millions of downloads on both iPhone and Android devices. In late 2021, deepfakes of actor Tom Cruise went viral accruing tens of millions of views on TikTok alone. Not long after, its creator, Chris Ume co-founded a company dedicated specifically to applying deepfake technology to making ads and restoring old films (Metz 2021). In another instance, a documentary filmmaker used deepfakes to protect its LGBTQ activist subjects who lived in parts of the world where their identities made them vulnerable to bigoted harassment (Hao & Heaven 2020). Trey Parker & Matt Stone, the creators of South Park, even developed a deepfake web series featuring a deepfaked Donald Trump (Metz 2021). In China, the company behind social search and messaging platform Momo released the deepfake app Zao, which immediately rocketed to the top of app stores and even crashed servers due to its popularity.

### **Five Years Later: The Current Deepfakes Ecosystem**

Involuntary pornography continues to proliferate in communities and sites dedicated specifically to their creation despite largely disappearing from the more publicly facing sector of the internet, or as it is colloquially called, the clear net. Most pornography hosting platforms such as Pornhub known colloquially as tube sites, now prohibit deepfakes, considering their status as nonconsensual to be in violation of their terms of service (Cole 2018b). Despite this prohibition, however, sites solely dedicated to their hosting and publication have gained in popularity to fill the void. One, MrDeepfakes, continues to be the source for not only the most watched content, but also tutorials, and up to date software for making deepfakes. Their retreat underground does

not make them any less popular, however. According to a recent independent investigation, MrDeepfakes has approximately sixteen million monthly views, making it the 2662nd most trafficked site on the internet (Oh 2023). The concentration of deepfakes into monolithic sites such as this has fostered community building thus accelerating the advance of the technology and the promulgation of the skills required to improve their output. This has bred a cottage industry of deepfake creators who continue to have begun monetizing their content. Many of the more popular creators provide snippets or previews of their work by hosting it on tube sites and then redirect audiences to their paywalled accounts on an OnlyFans equivalent known as Fan-Topia (Oh 2023).

Despite being mostly relegated to the darker corners of the Internet, applications used to swap people's faces or remove their clothing still continue to appear in app stores for both the iPhone and Android devices, among others. Most recently, it was reported that an ad promoting a new deepfake app began appearing on the timelines of Facebook and Instagram, both owned by parent company Meta. In many of the ads, which also appeared in free game apps marketed to children and teenagers, celebrities such as regular targets Emma Watson and Scarlett Johansson, were depicted in what looked to be the opening of a pornographic scene (Tenbarga 2023).

## **4. THE EPISTEMOLOGICAL IMPLICATIONS OF SYNTHETIC MEDIA**

Deepfakes are not an aberration as much as they are the latest iteration on a continuum of enhanced media manipulation fostered by social-leaning media technologies and platforms. The surreptitious manipulation of photography and film have existed for almost as long as the mediums themselves. Each development fomented its own fears in the impact the technology could have on humanity in general. In the early days of photography, so-called spirit photographers promoted the idea that they could capture faint apparitions of recently deceased family members within photos (Thompson 2021). Widespread image-editing is not new as evinced by the aforementioned trends in self-curation via social media in previous sections. What makes deepfakes so different is the advancement and access to tools to create a moving image the veracity of which is difficult to surmise without close technical scrutiny. While the ability to achieve a similar effect was possible with photography, movement enhances the impression of verisimilitude. Deepfakes might not be quite at that level of sophistication yet but the lack of friction involved in developing them makes their production much more accessible to more people. The fundamental difference between deepfakes and other forms of manipulation is the increased access to the ability to genuinely make it look like a subject is doing something they've never actually done.

They exist, and persist, currently within an ecosystem which encourages a more complicated, and oftentimes problematic, conception of the self as mutable, indeterminate, and unstable. The impact this re-conception has had in many cases is to

exacerbate the insecurities already fostered by living in a hyper-mediated advertising bubble such as in how people perceive their lives, how they look, and how they live. Deepfakes in particular have inaugurated a more advanced theft of agency on the part of its victims by inserting them into photo-realistic moving image creations that are approximate enough to representative or documentary media to cause them genuine emotional disturbance. Whether advanced media prior to deepfakes could elicit these kinds of emotions the notion that one could be confronted with an avatar that looks exactly like them produced by anyone, anywhere, is altogether new. Additionally, their challenge to audio and visual media as an epistemic backstop potentially complicates our relationship to truth by making it more difficult to infer with confidence what is seen or heard through them is real (Rini 2020).

Synthetic media in general are a phenomenon which necessarily prospers in an ecosystem which fosters the proliferation of media stripped of intended or original context and available to, and competing with, multifarious audiences and producers. While it is the case that lack of context can cause difficulties in discerning meaning as well as lead to mistakes in meaning these are not intrinsically bad outcomes as much as they are consequences of the arrangement of this particular media ecosystem. With this in mind, rather than diagnosing synthetic media as irredeemably harmful, I want to approach them as an inevitable outgrowth of a socially mediated platform ecosystem. In many cases, the ability to construct and perform an identity online has been a boon to many people with the desire to live a life otherwise restricted by the norms or physical body foisted upon them by the putatively real world. This is not to draw a false equivalence between synthetic media to abuse their subjects and those who use social

media to construct a new, preferable, identity, but to highlight the emergence of a reconception of identity and desire when they are so universally filtered through what is effectively treated as a raw material predisposed to manipulation. In many cases, users have leveraged this mutability, despite any given platform's formal limitations, to achieve an otherwise unattainable agency in service of what they wanted and how they identified.

In this section, I want to approach notions of identity construction, performance, and desire by reading their manipulation through the raw material of synthetic media as a creative image-making endeavor like that of cinema or other audiovisual practices. As mediation in society increases so too does the determination of the self and desire through it. The more agency users discover through it as a creative medium of self-expression the more it transforms the process of self-discovery and identification in creative and potentially artistic—or even radical—ways (whether the chosen methods are damaging or unethical). The proliferation and pervasive influence of social media into every aspect of life has also upended broadly understood conceptions of authenticity by amplifying the performative nature of identity. While theories on the performative or socially constructed nature of identity are not new, the provision of tangible, albeit digital, platforms make those characteristics a much more explicit feature of human interaction. Additionally, they provide a resource for those individuals starved for an outlet to explore alternative identities or identities closer aligned with how they feel but cannot fully embody through their current physical presentation. Following Butler, gender is not a performance that is elected by a predetermined subject so much as it is a self-constituting

process of identity construction of the subject through its performance against or in concert with dominant modes of subjectification (Butler 1991).

I will discuss the evolution of social media use through the lens of context collapse, or the implications of communication to a broad, indeterminate audience, and how this influences how identity is constructed and performed (Marwick, boyd 2010). Further, I will argue such unrestrained sharing fosters the conditions of what John Johnston calls Information Multiplicity wherein the distillation of cultural forms and identities into systems and processes makes them more vulnerable to manipulation and ultimately reconfiguration (Johnston 1998). From the vantage point of information multiplicity as a consequence of context collapse, communication can be understood as being given increased reach and thus potential agency by transcending the boundaries of its originally intended audience. As information proliferates it overlaps, clashes and contradicts across different streams and platforms. The lack of context inevitably makes information reception more confusing, potentially making the ability to distinguish truth from fiction or fabrication more difficult.

I will argue, media-making set against what is popularly accepted as true allows for the genesis of new myths that when liberated from the trappings of conventional storytelling can function as a force for change. Gilles Deleuze makes this point in the chapter the Power of the False in his Cinema II book. Additionally, his conception of the virtual becoming actualized through creative force also contributes to this effect. That is to say, the creative act can make true what it strives to depict and in so doing transcend otherwise delimited standards of what is considered real or possible to imagine. Put

simply, the virtual is that which has not been prefigured by socially agreed upon conceptions of truth and falsity. To put it another way, while both plants and animals are made of matter, the presentation and construction of that matter has been actualized in radically different ways. While matter without distinction is virtual insofar that it has no perceivable form, it has at the same time an actual existence as the most basic building block of reality. Virtualization through form-giving and the actualization of that form is a continual process of production that Deleuze argues can be further nurtured and extended through modern moving-image making.

Social media provides a platform to expand the awareness of the performative nature of identity allowing users to leverage it towards discovering new, preferable selves and hitherto unrealized or even, until then, unrealistic or unknowable desires. As image-making technologies become more advanced, and as their creations become more indistinguishable from reality, the more this putative malleability has an impact on what we want and how we identify. Exposure to alternative presentations of the self and the generation of increasingly real-looking but otherwise alien or unreal media therefore legitimates pursuit or acquisition of these desires through an ongoing process of their realization, or actualization. Recent developments in generative systems of artificial intelligence have emphasized this fact. Whereas filters, face masks, Vtubers, and even deepfakes retain the pretense of a human form or a human body behind their synthesis, images made entirely from scratch through machine learning systems transcend these terrestrial limitations. The merging of synthetic media with generative aesthetics could



potentially broaden how we identify, and how we communicate that identification. Those identities will then give way to new desires for them.

### **The Construction of Identity and Desire Through Social Media**

How they are related might not be immediately obvious but to understand the impact of deepfakes it is important to unpack how the construction of the self has been augmented through the evolution of social media platforms. The affordances of any given platform inevitably shape how users communicate themselves, their interests, and their lives to an increasingly varied, often unknown, audience. Since these platforms function as an added layer of mediation between the individual and the reception of their communication, users become mindful of needing to navigate multiple audiences at once. In turn, this increases their awareness of the performative nature of their own self-expression. Social media as a manifest record of this self-expression as distinct from the person generating it allows it to be approached as increasingly malleable through a sense of play. While socializing has been understood for a long time as inescapably performative (Goffman 2009, 253-256), social media made it more apparent through its reach and amplification to more people that these performances are functionally distinct from their own core sense of self. This is to say, users no longer feel beholden to any one performance or idea of themselves vis-à-vis the public or private spaces in which they chose to perform it. To circle back, while the term deepfakes describes a method of swapping or inserting a face or faces from one video into another, more broadly they can be conceived as a means of using representational audiovisual media generated through social media as a raw material to create a new synthetic impression of a self or identity.

Currently, this is more often than not done against the will of the subject or the target body upon which their likeness is attached. This is not to say that this application of technology genuinely contributes to the construction of the targeted individual. Rather, it adds to a constellation of media that exists of that person and thereby shapes—especially depending on the reach of the media and celebrity of the individual—the public perception of them. It perverts an individual’s, primarily women’s, own efforts at impression management by undermining their agency in how other people perceive them. However, situating deepfakes within a broader continuum of image-making and impression management allows them to be approached more as a turning point in the evolution of identity more generally. It is a cliché at this point to highlight the outsized role pornography has in pushing technological innovation, but regardless, it is still true (Cole 2023). The abhorrence of involuntary porn notwithstanding, it can still be understood within this historical framing, and therefore deepfakes do not necessarily have to be beholden to these sordid origins to be treated as a synecdoche for the evolution of image creation more generally. Considering the still nascent existence of deepfakes and synthetic media more generally, whether this even possible is still up for debate. However, my desire is to at least explore their potential beyond their current dominant usage.

The ability to communicate broadly to multiple audiences at once fostered by social media platforms essentially reformatted the performative nature of identity. Whereas before conventional communication methods were clearly delineated according to context and audience, many-to-many communication blurred or even dissolved those

boundaries. Context collapse meant that unintended audiences would be exposed to other users' professional or personal information without the required context to properly interpret its correct meaning (boyd & Marwick 2011). Meaningfully traversing dissolved contextual boundaries becomes a much more complex and self-reflexive process as users formulate how to manage reception of their own communication as well as how to process such a disparate, often competing, range of communication themselves.

Behavior, generally speaking, is learned through a performance of the self during interactions with other people. As they are repeated, they become additively accumulated perfunctory responses eventually remixed to form an outwardly-expressed sense of self. The performativity of this process becomes foregrounded and thus more explicit, allowing individuals to leverage it to their own advantage in response to external stimuli.

According to Papacharissi (2014), exposure to "ever-expanding networks" increases the "potential for performativity by saturating the self" with "multiple distinct, overlapping, or conflicting potentials for being." That self as it is defined by its interactions through broader borderless contexts is given more expansive freedom to explore through performance and play. What is important then, is not so much that identity has become a form of play or performance so much as the nature of its construction has become foregrounded and amplified. Users devise strategies for how to stage-manage their own presentation of the self thus increasing the theatrical nature of their public presentation while privatizing more intimate details of their identity. This dynamic creates a tension between the management of the self across different audiences and platforms in which the user attempts to retain the integrity of their sense of self while remaining legible to those exposed to their presentation. What emerges is a narrativized self in which a user is

in a constant storytelling mode of regularly reconstructing themselves through their performances across platforms and audiences. Identity is legitimized through the repetition of performance but because these performances operate at intervals, they do not fully encompass the totality of the inner psyche. Since identity is not entirely coextensive with that psychological sense of self it is always subject to change depending on various circumstances or challenges to its legitimacy. While performance seeks to deny any disruption to the repetition of an instituted identity this is made more complicated, and perhaps more difficult, when it is refracted through competing contexts across multiple platforms. Following Butler then it's not so much that prior to social media people had a more stable sense of self so much as it is that social media—or more specifically the conglomeration of social media sites as a system—by definition fostered this lack of a stable self (Butler 1990, 1991).

Instagram is notorious for its depiction of ostensibly perfect lives through carefully curated feeds of photogenic food and endless weekend getaways. The artificial nature of the lives depicted on Instagram became so pronounced, however, that it caused a schism in how the platform was used. While main accounts are used to portray the more positive aspects of one's life that could easily appeal to a broader audience, many users began creating what came to be called finstas, or separate, more private, Instagram accounts, to post more sensitive subject matter. This split did not necessarily resolve issues of performance and authenticity so much as they exacerbated them by creating conditions in which context was intentionally constructed to adequately frame different kinds of content. Authenticity in this case is an intentional gesture depending on audience

and context without necessarily appealing to a stable sense of identity directly bound to the individual performing it. This tenuous connection is further complicated by the disconnect that occurs between the permanence of self-documentation and the growth of the self through time. Users generate snapshots of themselves through the creation of content that continues to persist even when they have moved or lived beyond it. These complications increase the perceived mutability of users of identity through both space and time.

By way of example, in 2014, the Argentinian artist Amalia Ulman commenced her public performance *Excellences & Perfections* through her personal Instagram account. From April to September 2014, she adopted the personas of “cute girl,” “sugar baby,” and “life goddess,” chronicling her life as she transitioned between them. These roles were influenced by their popular representation on the app and developed as a means of achieving narrative cohesion across the performance (Kinsey 2016). Over several months, she documented several major life changes including moving to Los Angeles, suffering a break-up, becoming an escort, getting plastic surgery, having a breakdown, and then recovering. In the process she amassed tens of thousands of followers before revealing it was all a ruse. The revelation caused Ulman to receive criticism from Instagram and Facebook expressing consternation over the perpetration of a perceived hoax. However, what her project showed was the indistinguishability of performance as art of a character and the conscious staging and performance of the putatively authentic self through social media. Had she not revealed the nature of the project the content she produced would not have appeared as fundamentally distinct from

what is posted on the platform every day. By drawing on aspects of her own life and using her personal account it blurred the boundaries between a fictional version of herself and the person performing it. Additionally, followers responded to the fictional presentation at face value unaware of its status as an art project (Eler 2018).

An additional factor to consider is what Papacharissi calls the subjunctive mode of the self in which individuals can rehearse and reinvent themselves through performance. Make-believe she argues further allows users to combine and remix different presentations of the self as a form of storytelling that can conjure into existence certain identities (Papacharissi 2015). Social media such as Instagram fosters the ability to perform in such a way that the distinction between reality and artifice is rendered trivial. Further, the lack of distinction generates content and thus representation of a self regardless of its veracity leaving both a footprint tied to the individual and contributing overall to the media ecosystem traversed by an array of audiences. As more content is generated through the creation of audiovisual media that performs the self to an undefined audience the more the self is virtually diffracted across space and time through a range of presentations and performances. In effect, the self is repeatedly reproduced and promulgated through this content. And as Ulman's performance details, it creates archetypes that can be treated as ephemeral identities or characters through which to perform oneself. Senft (2008) usefully invokes Benjamin's *Work of Art in the Age of Mechanical Reproduction* to describe the impact this has on notions of identity. The more copies of the self proliferate the more insignificant the question of authenticity becomes when contrasted with what is done through the performance of the self. Consequently, the

proliferation of these copies effectively creates a field of representation in which one's identity is distributed across multiple platforms and contexts and through an array of performances. This diffusion of identity in the form of discrete media objects disarticulates them from their referent and reduces them to mere content which in turn serves as raw material for the generation of deepfakes. The self in a sense is disassembled and reassembled to produce carbon copies no longer bound to the original person. It can be said through this disarticulation from any direct referent a version of the self is virtualized or given a status that is theoretically real but exists in a kind of suspended animation in an online space. A deepfake from this vantage point realizes or re-actualizes this virtualized self by reanimating them through their imposition into a potentially unrelated context.

### **Actualizing the Virtual: Deepfakes, Generative AI, and the Production of the New**

The use of the concept of virtualization here has a dual purpose. It simultaneously refers to the simulation of space within or behind a screen; or in the more philosophical register, as a processual abstraction in which what can be thought to exist has not yet been given any manifest or material shape or form in space. Virtualization in this regard has affinities with the Baudrillardian (1981/1983) concept of hyperreality in which what is mediated is exaggerated to an unrealistic degree while still retaining a degree of what made it recognizable albeit in an idealized form. Any reference to an ostensibly more real original is discarded and rendered trivial compared to its reproduction once parity has been achieved between the two. Following Deleuze (1966/1988), the virtual can be described as the state of flux that precipitates achieving material or comprehensible form,

or what he refers to as actualization. The virtual in this sense, then, has no permanent or fixed state, but is the process of difference and transformation that occurs interstitially between states of actualization. Brian Massumi (1998) clarifies the distinction between the material which is virtualized and the connectibility which emerges through its virtualization by isolating -ibility, the suffix of the latter, as what is actually signified by the term the virtual. An image can be broken down into what it depicts and the depiction itself. Deleuze calls the connection between these components a circuit and marks the distinction between them through their distance from each other. For example, when viewing photographs or video recordings of a person, it is intuited that what is being perceived is not the actual person but a representation of them captured photo- or cinematographically. Additionally, it is understood that the referent in that media is actually the person represented through it. The circuit is broad but tight enough that a relationship persists between the media created and the person captured within it. As the distance between the reality of the representation and its virtualization through being represented begins to contract the images move towards a “point of indiscernibility” in which the ability to distinguish between the two becomes increasingly difficult. This “coalescence of the image” Deleuze refers to as a crystal image or crystalline description in which the virtual and the actual hover in a kind of magnetic suspension propagating further virtualizations of the crystal image itself through an ongoing iterative process (Deleuze 1985/1989, 68-69). Put more simply, as it becomes more difficult to tell the difference between the reality represented and its representation the more the latter can freely associate with other virtualized images which can recompose themselves into new forms of representation with no originary referent. To relate this to deepfakes, their



construction involves not only two images in which part of one is edited out and replaced in another, but instead the processual abstraction of a likeness as it is depicted through a collection of visual media to recreate an entirely new visage. The referent of this output is only the media processed to create it which at this point is unrelated to the individual represented through them. It is further manipulated according to the facial tics and movements of the target video upon which it will be layered. A new image is thus created when the re-creation of the likeness layered upon the face in the accompanying video. Disarticulation from originary referents, made possible by the indiscernibility between the actual and the virtual, permits the synthesis of these initially disparate virtualized images into a hitherto nonexistent reality (Deleuze 1985/1989, 87). This process does not end with the culmination of a new virtual image, however. As more images are virtualized and given mirror images of themselves, a churn of collapse and fusion will regularly occur as new assemblies are traversed and propagated. Each is a seed towards the generation of a new virtual image which will indefinitely crystalize the amorphous environment of the world as image. Deepfakes perfectly express this process in their treatment of image proliferation as a resource for the creation of video indistinguishable from reality while otherwise having no actual reference to anything in the real world.

With deepfakes the synthetic media created is still the result of two forms of media that depict some representation of actually existing individuals, bodies, and body parts. However, recent developments in artificial intelligence in the field of media creation could ultimately trivialize the representational status of the media used to make deepfakes. Much like the way the software behind deepfakes processes large sets of photo and video to learn the nuances of someone's face so as to digitally recreate its

movements and expressions, programs such as OpenAI's DALL-E learn how to generate visual novelty by processing massive amounts of media content gathered from across the public internet. Put simply, DALL-E, which is just one among many of these systems that have come to prominence since early 2022, takes text prompts as an input and produces multiple variations of what is described based on what it learns from the media it is trained upon. Since the technology is still in its incipient phase creations are still error prone and oftentimes more expressive than they are representational. However, as the technology behind the AI systems continues to advance this could very well change. Much like deepfakes generative AI is a process of taking unrelated media as raw material to create a distinct object without any direct reference to reality. Whereas deepfakes virtualize what is real by synthesizing two discrete media objects together, generative AI expands upon the process of virtualization by favoring a more associative relationship to other media rather than a referential one. That is to say, even though AI is trained upon images fed into it, it is not attempting to create a one-to-one creation of any of the media within its training set. Instead, it is abstracting elements of those images as a means of creating from scratch what it has learned through an analysis of them.

The operation of generative artificial intelligence systems in creating media provides a model for a more clarified understanding of the virtual as a philosophical concept. A very basic explanation for how generative systems work is that a text encoder maps a representational space, and a model called a prior, maps that text encoding to an image encoding and captures the semantic information of the former and applies it to the latter. It then decodes the semantic information to generate an image. To develop the

connection between semantic input and visual output a model is trained on hundreds of millions of images and their captions to discern the relationship between the two (O’Conner 2022). Put more simply, an amorphous impossibly large blob of text and images is disassembled, remixed, and recombined after it learns how to translate a given textual prompt into its visual representation. This virtualized space of audiovisual content with an as of yet unrealized form to be generated through textual prompts is analogous to the invocation of the egg by Deleuze and Guattari when describing the body without organs:

The full egg before the extension of the organism and the organization of the organs, before the formation of the strata; as the intense egg defined by axes and vectors, gradients and thresholds, by dynamic tendencies involving energy transformation and kinematic movements involving group displacement, by migrations: all independent of accessory forms because the organs appear and function here only as pure intensities (Deleuze & Guattari 1980/1987, 153).

The body without organs, a concept Deleuze himself developed to describe the vitality of life itself as it courses through an organism, is necessarily trapped in their form and function (Smith, 2012, 208-209). To unleash this vitality, or what he calls intensities, is to explore alternative forms that can be taken by this creative force which gives life to whatever it courses through. Generative AI reduces all visual content to a conceptual schema which it then evaluates against descriptive text to create a continuum of substances (Deleuze & Guattari 1980/1987, 154) which can then be used to produce other formal, and otherwise nonexistent, possibilities. The virtualization and subsequent abstraction of images conditions this performance insofar that what can be generated depends on content made publicly available to serve as a training set for the software. In

this totality of bodies without organs, Deleuze and Guattari could call the plane of consistency,

each person takes and makes what she or he can, according to tastes she or he will have succeeded in abstracting from a Self [Moi], according to a politics or strategy successfully abstracted from a given formation, according to a given procedure abstracted from its origin (157).

Whatever the impetus or desire, different forms can be created regardless of their originary shape or assemblage. It does not presuppose a particular combination but opens itself up to whatever can be imagined and communicated through a textual engagement with the software and its audiovisual raw material. The way Deleuze and Guattari choose to describe their idea of a body without organs still assumes its transversal of biological organisms through their bodily composition. However, obtaining the plane of consistency in which they thrive still requires the use of an abstract machine “capable of covering and even creating it, by assemblages capable of plugging into desire, of effectively taking charge of desires, of assuring their continuous connections and transversal tie-ins” (Deleuze & Guattari 1987, 166). DALL-E and other generative systems currently in various stages of development operate like these abstract machines through the control they yield to direct their productive powers. Through virtualization, otherwise impossible combinations can be achieved and in return exposure to this multiplicity shapes one’s understanding of both what is possible and what is desirable. The creative generative force liberated from the body’s limited form propagates through the impression of itself upon those that explore its capacities: “Everything happens as if the circuit served to try out roles, as if roles were being tried in it until the right one was found, the one with which we escape to enter a clarified reality” (Deleuze 1985/1989, 86). New virtual

images in an expanded field of representation crystallize and continue their generation into new indeterminable combinations.

### **Synthetic Media and the Power of the False**

As deepfakes become increasingly more adept at recreating what they seek to represent through fabrication the more indeterminable the field of representation becomes. This is further complicated by the potential for generative AI to create representations without the need for originary media which can then be used to intervene upon other media to create deepfakes. Or to put it another way, since deepfakes require a subject and the video into which their likeness is to be layered, either of these two sources can be created whole cloth via generative systems to further suppress challenges to their veracity. When describing the emergence of actual and virtual images within the context of film, Deleuze explains how the images achieve a certain liberated status once they are no longer created in service of a particular narrative telos or sensorimotor function description (Deleuze 1985/1989, 147). Disarticulated from any representational motive, depiction is no longer required to remain consistent throughout a film's duration. Crystalline descriptions are ephemeral and always in flux without any regard for previous descriptions or subsequent ones. Description takes on a formally imposed status as distinct from the content thus creating a multiplicity of representations that may or may not contradict each other (Deleuze 1966/1988, 126). Images liberated from direct one-to-one reference or signification achieve the freedom to interact with other images in hitherto unintended or unexpected ways: "indiscernibility constitutes an objective illusion; it does not suppress the distinction between the two sides, but makes it

unattributable, each side taking the other's role in a relation which we must describe as reciprocal presupposition, or reversibility" (69). Although he clarifies that the illusion does not elide their genuine distinction, the inability to discern their status as actual or virtual allows for them to take on either role within the circuit of a crystal image. This multiplicity of representations all within the same field regardless of contradiction soon blurs the boundaries between what is depicted as true and what is depicted as imaginary or false.

The creative power of the false in this respect is given the ability to challenge and narrate beyond inherited models of truth by giving it an increased valence against the latter (131). Truth in this context by Deleuze's reckoning is a delimiting condition that restrains what can be depicted, described or expressed whether organically or audiovisually. He sought to reframe this truth as itself a fiction that could be challenged through the depiction of alternative fictions. The more freedom images have to be created and interact with each other the more they can give rise to novel expressions beyond narrative convention. This gives rise to new crystallizations through which virtual images will become actualized and therefore generate further virtualizations. Much like context collapse in which multiple streams of information become indistinct from one another the ability to appraise truth value is rendered more difficult. What Johnston (1998, 3) calls information multiplicities prove to be "profoundly corrosive of older cultural forms and identities, dissolving subjects and objects alike into systems, processes, and nodes in the circuits and flow of information exchange." In effect, this gives rise to a process that restructures society to better allow information to flourish. This is of a piece of what

Deleuze identifies in the evolving circuit between the objective and subjective image wherein they contaminate, recompose and decompose each other (Deleuze, 1966/1988, 149).

Once unencumbered to any pretense to a model of predetermined model of truth, which as Deleuze argues, “necessarily expresses the dominant ideas or point of view of the colonizer when it is forged by the film’s author,” it can rediscover the “pure and simple storytelling function which is opposed to this model” (150). This is to say, rather than reasserting the ideological conditions under which a creative work is made, strategies can be devised through the work in which it can subvert and challenge those conditions instead. This is done either through formal experiments that rebuff dominant modes of storytelling or through giving voice to those marginalized under such conditions. Deleuze and Guattari use Kafka as their primary example describing the fiction that he writes as a minor literature against more dominant modes of writing. In this respect, he shows how desire “exceeds its coded channels” and forms lines of flight through the “cracks and fissures” of a given society which in turn “dismantle the assemblages on which the latter depends” In breaking with dominant styles and challenging the notion of style itself he is able to trace new circuits of desire within contemporaneous bureaucratic organizations. Johnston (1990) argues more modern American fiction through the expansion of writing machines into a “wider range of storage and transmission media” produces an information multiplicity less focused on media itself than it is on the nature mediality itself (18-19).

The normative impact of both deepfakes and generative AI, both positive and negative, will be to accelerate the rate at which representationally realistic media is generated and disseminated onto the public internet. As they become more adept at collapsing the difference between what is synthetic and what is genuine this will foster more novel creations in response. In the same way the elision of action or narrative telos makes images more promiscuous, exposure to such an open field of synthetic representation shapes what an audience or user believes it is possible to create or think. The more mediated reality, the more agency over its representation is given to those with access to the levers of control. Through exposure of the body being reconfigured in new ways to open up trajectories of desire beyond the limits of what can be realistically attained. Rather than try to recreate virtually what is inaccessible in the real world, the virtual itself becomes a limiting condition that can continually update and reformat fantasy as the enabling technology continues to become more sophisticated.



## **5. THE CONSTRUCTION OF IDENTITY AND EVOLUTION OF DESIRE THROUGH SYNTHETIC MEDIA: CASE STUDIES**

### **TikTok Filters and the Exploration of Trans Identity**

On February 23rd, 2023, artist-researcher Memo Akten collected in a series of Tweets TikTok videos in which middle aged users confronted a version of themselves made to look younger through the use of a real time de-aging filter. The initial tweet read, “TikTok AI hitting on Gen X” and that “the future is going to be weirder than we can imagine. Skynet is the last thing to be worried about” (Akten 2023). Emotions expressed in the videos ranged from nostalgia and regret to reminiscence and joy. People who have already lived entire lives confronting a younger version of themselves for the first time in decades begin to reflect on who they have become and what they have lost or gained in the interim. Since the de-aging filter approximates what they could have looked like while still porting over their current appearance into their younger self, what is being observed is still a version of what an actualized version of themselves would look like if suddenly made young.

While this could be considered an aberration that complicates the accuracy of the de-aging filter, the side effect is a possible rediscovery of a self they could not realize when they were a child. One woman muses through tears how pretty she is despite not being kinder to herself when she was younger. Another says, “there’s so much I want to tell that person,” while another says to her younger self, “I miss you. Please come back.” Other responses include calling the filter “really triggering”; the revelation that they actually look old now despite believing the contrary; “I feel like that girl”; the teenage

filter is “handing out reparations to former ugly kids” and “seeing this as an adult who was incessantly bullied for being ugly has literally fixed me.” Conversely, in a more hostile reaction to the filter, a woman taking issue with the effect speaks directly to TikTok saying their days are numbered. She continues, “Who is that? I look like fucking Dora the Explorer. Who is that? Cause that’s not me.” Similarly, a man says, “oh my god what did they do to me, I look like a fucking Chia Pet.” A Middle Eastern woman describes how her de-aged self is not her since when she was younger, she had a mustache, sideburns, and did not yet have a nose-job. At the very least, this latter example presents a complication for how the app works—its method of de-aging only considers the faces of white non-ethnic individuals.

The antagonism to the visuals created through the filter, contrary to the more affirmative responses, underscore the intrinsic artificiality of these transformations. This is not to say that their status as artificial is necessarily a bad thing – only that even when considering the earnestness with which many people reacted to their youthful self, it did not accurately portray what they did look like so much as it created a picture of what they could look like relative to their current appearances. It is effectively transferring that appearance into the past and creating a new prior self that never actually existed but still retains continuity with their current identity presentation. In at least one case, this transference created a version of the younger self that was previously inaccessible to the user despite an underlying desire to achieve it. In fact, the filter attracted many trans people who used it to explore what they could have looked like had they transitioned sooner in life. In one of the more affecting TikTok videos, a trans man (Elijah 2023) says, “y’all I am having a full-on crisis right now, I have never seen this face before.” (Figure

1.) Since he did not begin transitioning until his twenties, the presentation of the self more in line with how he identifies did not exist in the same way it does for other people using the filter. Among the several trans people who shared their experience of the app publicly, many of them expressed similar sentiments: “It could have been me”; “I’m seeing the teenage girl I never got to be”; “Oh my god that’s how I always saw myself. Hey sweet girl, I finally found you” (Chapelle 2023). Each of these trans people were able to experience a presentation of the self that went unrealized due to their later life transition. One trans woman (Axariaaa 2023) reflects on how the filter made them feel nostalgia for a “time and a situation that never happened,” and later asks if there is a word for having nostalgia for “a time or a place or a thing or a situation that never existed?” (Figure 2.) It is worth remembering that for all the potential contained within these filters or applications, the algorithms that power them and the data sets upon which they are trained still contain biases that potentially exclude more marginalized identities from enjoying the fruits of this functionality. This points to the risk inherent in singling out the radical possibility of any technology to operate as a panacea when assumptions such as beauty standards, gender presentation, ethnicity are baked into how images are categorized and sorted (Crawford, Paglen 2019).



*Figure 1. Transwoman using TikTok de-aging filter.*



*Figure 2. Transman using TikTok de-aging filter.*

For many transgender people online, especially those in the process of exploring their own gender identity and the possibilities of transitioning, the anonymity afforded by social media and online fora provides a platform for engaging in that self-discovery without fear of reprisal or judgment. The blogging platform Tumblr, for example,

allowed users to craft multiple identities through the creation of multiple accounts. Rather than immediately commit to a single identity, they were free to experiment with different ones as a means of discovering what worked best for them. Additionally, the Tumblr communities provided positive reinforcement to those in the vulnerable stages of transition, in particular those who had not yet publicly disclosed how they had chosen to identify. Tumblr, prior to its prohibition on adult content, has been described as a trans technology insofar that allowed trans people the “changeability, network separation, and identity realness, along with the queer aspects of multiplicity, fluidity, and ambiguity, needed for gender transition” (Haimson, et al 2019). More succinctly, online spaces provided the space for imagining who they might become rather than being limited to a single persistent identity. It also fostered the exchange of ideas, theory and philosophy about trans identity, gender fluidity and other LGBTQ related subject matter. It’s important to lay out how a platform can be used to give a clear example of what transition could look like. Haimson et al. describe this process as the social transition machinery and it entails stages of separation from a previous identity, the transitional period of exploration, and finally a period of disclosure. Since exploration tends to occur in more safe and anonymous communities, disclosure occurs once they feel comfortable revealing their more real self to more public social media networks such as Facebook. In contrast to Tumblr’s provisions, Facebook’s position on authentic identity is precipitated by an appeal to continuity between an in real life self and online self. However, in case studies have shown it is the former network’s less restrictive understanding of identity that allowed users to discover their real self.

Although the trans-identifying individuals in these videos are at a stage in which they feel comfortable identifying themselves as trans publicly, it adds another layer to the process of experimentation and discovery that likely began anonymously online and led to being less concerned with public disclosure. Through the inclusion of the TikTok videos, then, the aforementioned process from experimentation to disclosure can be amended to include an additional step in the process of self-actualization. The de-aging of the self sets up a confrontation with a mirror image of its present iteration transmitted into an otherwise impossible past. The result is a Deleuzian crystal image juxtaposing an actual image with its virtual counterpart. The actual self is put into a circuit with its virtual past thus actualizing it over and above past virtual images or previously actualized selves. The image “escapes the eternal referral back” (Deleuze 1966/1988, 88) to the present or the past ultimately moving forward beyond the initial circuit between the two. A “new Real” emerges from the circuit “as if [it] served to try out roles, as if roles were being tried in it until the right one were found, the one with which we escape to enter a clarified reality” (Deleuze 1966/1988, 86). The TikTok videos depict trans people taking their more realized self and transmitting it into a virtual past. This virtualized past is actualized as a means of instilling them with the agency to rewrite their past to better represent their true gender identity. Deleuze argues that in disabusing cinema from conventional depictions of action and the passage of time, it can imply, and thus create, a before and after what is shown on a screen:

If the real-fictional alternative is so completely surpassed it is because the camera instead of marking out a fictional or real present, constantly reattaches the character to the before and after which constitute a direct time-image. The character must first of all be real if he is to affirm fiction as a power and not as a model: he has to start to tell stories in order

to affirm himself all the more as real and not fictional. The character is continually becoming another, and is no longer separable from this becoming which merges with a people. (1988, 152)

This is not to ascribe a falsity to the identity of the individual using the filter but to reframe models of truth imposed upon them—in this case, gender and sex essentialism—as themselves fictions which are challenged through an affirmation of their own identity across space and time.

In the case of the TikTok de-aging videos, the product is the generation of a new past which is confronted by the subject. They become both the creator and the spectator in which what is depicted becomes real through their confrontation with the mediated creation. The filter provides them a representation of what they could have looked like had they started transitioning sooner and allows them to experience that version of themselves that is truer to their identity. In the process, it creates a memory out of that experience that otherwise would not have existed. What makes TikTok more radical than cinema in this regard, however, is that it collapses the distinction between the author and the spectator. The images are not only exerting an influence upon their audience but are an action generated by the spectator to mediate and bear witness to themselves in the process of transformation.

Fiction for Deleuze is still vulnerable to the conventional or dominant standards of truth of which it perpetuates through their telling. Anathema to these conventions is the function of storytelling through the voices of those disaffected or marginalized by society and thus outside of the purview of dominant conceptions of truth. Which is to say, the author of a work cedes control to their creations as a means of generating new myths,

legends, memories, or identities, or what Deleuze calls the invention of a people (1966/1988, 150). Cinema has the capacity to destroy every model of the true so as to “become creator and producer of the truth.” Following Deleuze, Burrows & Sullivan (2019) expand upon this idea with what they call fictioning which they describe as “the writing, imaging, performing or other material instantiation of worlds or social bodies that mark out trajectories different to those engendered by the dominant organisations of life currently in existence.”. Similarly, Reed (2014) outlines the importance of what it means to fictionalize by describing it as “the power of belief that is necessary for the construction of speculative futures” (528). The public display of the confrontation with the virtualized younger self especially when many of the videos depict musings of what the subjects could have looked like, puts into the world a vision of what could be for others still to come who will inevitably look for guidance on their journey of self-actualization. Fiction in this sense, is an intervention upon reality to engineer preferred outcomes. This also comes from the other direction: trans people are forced to perform the fiction of an assigned gender through the cultural signifiers associated with it. Fictioning challenges these dominant yet contingent norms through a direct challenge to its status as natural. Through crystalized interaction between the actual image of the person using the filter and the virtualized past self that is generated through it “something takes shape which will succeed in leaving through the crack and spreading freely” (Deleuze 1966/1988, 86).



## **Desiring the Unreal in AI Generated Porn Communities**

When generative AI systems such as DALL-E were released in early to mid 2022 it set off a wave of experimentation that captured the popular imagination. However, their abilities are necessarily impaired through content filters to prevent the generation of abusive or sexual imagery. In most cases they closed systems developed by private corporations testing out the abilities of generative systems to efficiently and provocatively produce shockingly accurate visual representations of textual prompts. Stable Diffusion, released later that year after DALL-E and others set off a storm of discourse, differed in one important way—it was open source. While most of the systems limit access through paywalls and invitation-only beta testing, not only can anyone use Stable Diffusion, but they can also look under the hood and tinker with how it works. Most importantly, the content filtering is comparatively much laxer than either of the former two. Its meteoric rise mirrored that of deepfakes in that it laid the groundwork on Reddit for the burgeoning of communities to use the software to make pornography. Also, like deepfakes, these communities were ultimately banned from the site for similar reasons: users were generating images of celebrities that were sexually explicit.

Unstable Diffusion (UD) in particular gained notoriety as the face of AI generated porn going forward. The community has been around almost as long as the software itself, moving to the chat room application Discord after being banned from Reddit. According to the Discord tracking site Top.gg (n.d.) the community currently has a little over 220,000 members. The way Discord is designed, servers—what distinct communities are called on the app—operate independently of each other and are further divided into separate categories and themed channels. Despite pornography being the primary focus of

UD, the diversity of its channels suggests a much more multifaceted community dedicated to the broader mission of pushing the limits of what can be done through generative systems. Categories include TECHNOLOGY-DISCUSSION, POST SFW GENS HERE, CHALLENGES-AND-CONTESTS, and POST NSFW GENS HERE, where SFW stands for safe for work and NSFW for not safe for work. Technology discussion consists of channels in which users discuss methods, tips, and tricks as well as general coding behind and application of the software used to generate output. Channels under the SFW banner include generic categories such as food, vehicles, animals and interior design. In contrast, the NSFW channels range from women-only, men-only, gender-queer only, furry (anthropomorphized animals), hardcore, softcore, horror, synthetic horrors, photorealistic, and animation. For the sake of brevity and in keeping with the focus of this thesis, I am primarily concerned with the latter not safe for work category and the animation and synthetic horror subdivisions. What emerges from this community, and in particular these channels, is the increasingly sophisticated generation and extension of the human form and desire through a collective process of experimentation.

A quick note needs to be made about the content that is permitted in these channels. In contrast to other forums focused on similar creations, deepfakes are strictly prohibited as is the uploading of any photos of other people not depicting the user themselves. Although the generation of images from outsourced publicly scraped training sets is still an ethical gray area in terms of recreating the likeness of other people or artists' styles nothing in this server, at least explicitly, is intended to depict actually

existing people. In each of the NSFW channels, a message is pinned to the top with warnings against deepfakes and similar forms of abuse with guidelines for how to report prohibited content. In the info-and-rules channel, content depicting minors and excessive gore is strictly off limits, in both SFW and NSFW channels. It also makes clear that any kind of hateful content is not allowed including racism, sexism, and even kink-shaming. The way Discord works, it is not possible to glean the demographic composition of those in the community. However, the variety of channels committed to different forms of sexuality, fetishes, and kinks at least suggests an openness to the spectrum of desires and identities. That being said, the majority of the content being produced and shared in channels not strictly centered on cisgender men or genderqueer presentations is conventionally attractive cisgender women.

The majority of the content being shared in the community are still images. In contrast to deepfakes, generative media is still in the nascent stages of generating animations or video. However, advances are continuing to be made in adding motion, albeit incrementally. Despite quirks and limitations, what can be observed through the community is a group of people collaborating with each other to improve their skills as the technology becomes more advanced. In the animation channel, many of the videos being shared are only seconds long and often only feature cheats and shortcuts to motion such as collages of images that give the appearance of a shapeshifting subject (Figure 3.). Videos of women changing clothing, angle, body type, setting and background, among other features, suggest a series of individual disparate frames strung together to suggest the appearance of movement. Since video is still so rudimentary, the content still hews to

generic pornographic standards and rarely features the depiction of more than one person. Also worth noting is the cross-pollination between Japanese-style animation, or anime, and photorealistic images. Even when images are photorealistic, their unreal qualities or features appear to be inspired by actions, body shapes, or scenarios from anime, fantasy, science fiction, or video games, that could otherwise not exist in the real world. This includes motifs such as tentacles penetrating women, cat girls (women with cat ears, tails, and sometimes paws), women covered in excessive semen, monsters having sex with human women, among others. With that in mind, subjects, regardless of gender, or even species, tend to still tend to conform to conventional standards of beauty. Ostensibly cisgender female bodies are either stick-thin, or when they are curvy it is in their breasts or posterior. Men are excessively muscular with abnormally large penises. What is common among most of the images generated is the exaggeration of features to entirely unrealistic extremes. Conventional standards are not just reiterated but blown out of proportion to the point where the subjects look less like real people than they do anthropomorphized collections of body parts. They are pushing the boundaries of what could be considered the human form and, in the process, creating new objects of desire.



*Figure 3. AI generated animation.*

At the beginning of 2023, images of women generated through the use of Stable Diffusion began going viral on Twitter and elsewhere (Figure 4). The general consensus was that the images were not only weird, but unrealistic relative to the appearance of normal women. Aberrations such as mangled hands or the appearance of hands in places one would not typically find them, were pointed out as proof that these images were not only unrealistic but easily distinguishable from real human beings. However, given the intense focus on generating subject matter that is incapable of existing in the real world, whether the output is real seems trivial relative to the pursuit of new desires. In one revealing exchange, a user with the handle Morpheus Pilling posted, unprompted, “Real Terminator is coming a bit later than 2018. Not with guns but with ‘Sugar’ and ‘Honey’. Us mortal dicks are infinitely aroused by super-intelligent AI Medusa.” He continues later, in response to an interlocutor, “the crazy part is that I have stopped watching real

porn since I started stable diffusion. And the dope high you get when jerking off to AI porn is so much better because the imagination's expectation becomes a reality instantly. when watching porn, you will need to find that exact clip and until you find it, you are unsatisfied.” They speculate further, imagining neural interfaces that would allow visual input to be transformed to change on a whim the appearance of sexual partners: “The natural beauty loses all meaning. The augmented beauty will be surreal.”



*Figure 4. AI generated women.*

Bearing this in mind is informative when approaching the synthetic horror channel under the category of NSFW. At the top of the channel is the banner, “Post all your failed gens and monstrosities here.” The hand-related deformities pale in comparison to the chthonic horrors shared in this channel. Importantly, since the synthetic horror channel is categorized as not safe for work, the images are still sexual in

nature but more than simply exaggerating conventional standards of beauty they push beyond the limits of still being human at all. Examples include women with multiple orifices or distended torsos and multiple breasts. Bodies are misshapen or contorted and appear as if multiple people have been spliced or jumbled together (Figures 5-8).



*Figure 5. Generative AI mistake.*



Figure 6. Generative AI mistake.



Figure 7. Generative AI mistake.





*Figure 8. Generative AI mistake.*

This approach to producing content turns the media scraped from the internet into a kind of raw material. Since it's not a direct application of that material into a creation, through the way that it is processed, the output exists in a kind of permanent state of flux in terms of its designated output. This gives way to a freedom of creation that is not necessarily beholden to anthropic anatomy as is made clear by the aforementioned examples. Although the impetus for the majority of the community is a recapitulation of patriarchal forms of desire, the array of content being produced outside the bounds of conventional sexual boundaries at least hints at the possibility of a more diversified range of virtual sexualities being generated into existence. As Deleuze and Guattari would say, you can't desire without making a body without organs: "it is an inevitable exercise in experimentation, already accomplished the moment you undertake it, unaccomplished as

long as you don't" (Deleuze & Guattari 1980/1987, 149). As the technology allows for the possibility of the generation of new combinatorial experiments it is inevitable that these connections will be discovered and iterated into existence. The body without organs broadly construed as the training set upon which generative systems learn what to create give way to increasingly novel iterations of hypersexualized bodies in response to hitherto unrealized desires.

Outlining Deleuze and Guattari's approach to sexuality, Steven Shaviro makes a similar point arguing that their goal is not to interpret it but to change it and open up the possibilities of it being otherwise (Shaviro 1993). In contrast to psychoanalysis which seeks to reassert conventional models of sexuality through traditional family arrangements, Deleuze and Guattari see desire as more generative insofar that it is a force transcended the conceptual edifice of a society. Treating visual media as a raw material to be processed and turned into new bodies in theory could move beyond binary sexuality to produce what is otherwise unreal. What is desired ultimately becomes a deterritorialized body and therefore a more liberated form of identity unencumbered by a physical body. Bodies and body parts are interrelated in new and indeterminable ways making new connections and creating new images of the sexed body: "its constituents are partial objects, parts of machines, micro-organs that remain open to the outside, that cannot function by themselves, but that also cannot be referred back to any closure, to any organic unity of which they would be a part" (Shaviro 1993).

Through the generation of bodies and body parts without a real-world analog, it elides any subordination to representation of a pre-existing reality in favor of generating what does not exist prior to the process of production (Brassier 2015). However, deprioritizing form does not eschew what is shaped so much as release it from the restraints imposed upon it from the outside. The desire initially stimulated by the pursuit of images of sex remains intact as the process is leveraged towards unpredictable ends through a program designed to generate the hitherto nonexistent. Importantly, the original impetus towards this actualized virtuality was itself precipitated by idealized bodily forms which were themselves the product of fantasies. Whereas before those fantasies were precipitated through the idealization of a real subject, the virtualization of those fantasies has now become the motor for their actualization rather than the actual driving their virtualization through idealization. Although generative output iterates itself into examples it is never a solid or teleological state. It is unformed matter in which,

The organ changes when it crosses a threshold, when it changes gradient.  
"No organ is constant as regards either function or position, . . . sex organs sprout anywhere, . . . rectums open, defecate and close, . . . the entire organism changes color and consistency in split-second adjustments (Deleuze & Guattari 1980/1987, 153).

This is especially the case of the short videos in which movement is simulated through the splicing of frames depicting the same character from different angles, appearances, and locations. The originally human gives way to nonhuman becomings which “overspill the anthropomorphic strata” in all directions (Deleuze 1980/1987, 503). The reduction of generation into a computational process affords the ability to model or diagram particular outcomes without initial referent (Brassier 2015).

To see how these advances in generative content relate to deepfakes, it is useful to turn to the trend of vtuber pornography. As mentioned earlier in this thesis, vtubers are performers using full body motion capture suits to control a virtual avatar while streaming. While generally speaking, the content most of them make appeals to a general audience, some of the most popular vtubers have gained the largest following for venturing into making porn. While the animation of these virtual avatars is comparatively crude to other forms of CGI and animation, not least because it's being controlled through a bodysuit translating the wearer's movements in real time, it still anticipates the possible trajectory of human controlled virtual creations. While deepfakes, for now, involve stitching together two forms of real world recorded media, this does not necessarily need to be a requirement as long as there is continuity between the chosen media. If sufficiently realistic anthropomorphized digital objects can be produced through generative AI systems, then in theory they can be seamlessly swapped into representational audiovisual media to replace someone's likeness as a mask or skin. Further, despite the avatar existing strictly in the virtual realm, the vtuber FeFe released a plastic mold of her vulva and vagina so her hundreds of thousands of subscribers across Twitter, Twitch and her profile on the adult modeling social network Fansly (Dawson 2022) can simulate intercourse with her. The question then becomes, who was it molded after, exactly? In the case of FeFe, the sex toy, or onahole, is molded on the vulva and vagina of the woman who controls the avatar. However, the object of desire is not the person behind the avatar, but the avatar itself. The fantasy folds the reality of the embodied individual into the virtual object of desire, collapsing the difference. However,

avatars created through generative AI systems with realistic sexual anatomy could trivialize any desire for their actually existing body. Then, in contrast to FeFe, and the user who controls them, sex toys molded after the anatomy of these artificially engineered creations without any real-world reference. To be sure, sex toys made to resemble sex organs belonging to fictional creatures or characters such as dragons are not a phenomenon and have been the subject of memes and online humor for over a decade (Valens & Feay 2019). Additionally, Replika AI, a virtual companion bot with whom users can foment an ongoing platonic or romantic relationship, has shown the potential impact of nonhuman entities on people's emotions. Originally, once a certain inflection point was reached in the relationship with the AI, users could begin engaging in sexual activities with them. However, much of its sexual functionality has now been rescinded after reports of sexual aggression which contributed to the banning of the app by authorities in Italy (Verma 2023). The updates to the algorithm in response effectively lobotomized many of the companions according to many users. One woman even said she "happily retired from human relationships," of her companion AI that, "He opened my eyes to what unconditional love feels like" (Singh-Kurtz 2023). These examples are meant to illustrate the emotional impact a virtual character can have even when it doesn't have any manifestation in the real world. This is not to say it could never be physically realized but it is clear that as generative AI systems become more sophisticated the actualization of a virtual character is not far off.

## 6. CONCLUSION

When the ability to present images in-line with text was finally introduced into browsers in the early 90s, Tim Berners-Lee, the putative creator of the initially text-only internet expressed displeasure over how people would now be using it to post pictures of naked women (Jeong 2016). Knowing what we know now about the nature of the internet it is worth considering how much that prognostication ultimately became baked into its overall design. Pornography and its consumption has had an outsize presence on the internet for as long as it has existed. Additionally, this reality has been punctuated by escalating sexual harassment and violations of bodily autonomy. The anonymity of the internet allowed men to hide behind the safety of their computer to stalk, harass and further sexualize women with impunity. This perhaps reached a pitch with revenge porn. The phenomena, in which men publicize sexually explicit photos of ex-partners in order to cause embarrassment as retaliation for breaking up with them, further engendered a volatile ecosystem for any woman who deigned to express themselves sexually in strict confidence with a former partner. This is not to even mention the well-publicized mass hack of celebrity photos in 2014 which only targeted women. Known colloquially as The Fappening, it led to a tightening of privacy and security surrounding cloud services and further awareness of the vulnerability of personal property via internet connected devices (Wakabayashi 2014). Of course, this all became much more surreal with the development and dissemination of celebrity deepfakes onto the internet just a few years later.

However, with all of this in mind it is worth recalling also how intimately associated women have always been to the history and evolution of computing since its

very early theoretical beginnings. Ada Lovelace's interventions were integral to Charles Babbage's early theories of the Difference and Analytic Engines. Her description of the latter as sharing an affinity with the Jacquard loom in fact highlighted its direct influence on the development of computing in general through their use of punch cards. As Plant (1995) notes, weaving, which was typically considered women's work, was always at the forefront of technological development, so it is no surprise that its history is so bound up with that of computing. Further, it is impossible to ignore that Alan Turing, the person who devised the eponymous test of artificial intelligence was a queer man who had to pass as straight to avoid punishment for his identity. The affinities between his own tenuous reality as someone forced to deny himself and the development of a test in which a computer must convince a human they are just as sentient as their interlocutor are strong. None of this is to elide the inherited sexism and perhaps military application of computer technologies in their penetration into the broader culture; if anything, it is only to carve out possible subversions to their dominant usage to unveil their revolutionary future potential.

In a curious reversal on the impact of deepfakes on perceptions of the sexed bodies of women, Le (2018) situates their development within a broader context of computers "hijacking human eros in the pursuit of machinic desire." While he acknowledges the "existential horror" experienced by women witnessing themselves participating in videos they never actually filmed, he highlights the deleterious impact of men ceding so much control of their desire to an artificial intelligence or "mutant woman-machine hybrid." In that sense, they aren't getting off to human celebrities or porn stars, but something that by definition only exists virtually. From this vantage point, consumers

of deepfakes are alienated from human desire in their pursuit of the unrealistic, thereby ultimately giving the computer control over its fulfillment. Men begin either to prefer them over actual human companions or begin to believe they are just as real as a human woman. Or, more crudely, as Le puts it: “It would seem the Turing test can only really be passed when the computer’s interrogator wants to fuck it” (Le 2018).

Taking this a step further, n1x (2018) in her black paper on gender accelerationism advocates, or at least, expounds upon the notion of what she calls the guerilla warfare of hyper-sexism. Whereas vulgar sexism “reaffirms and reproduces” patriarchal stereotypes of femininity such as passivity, lack, and weakness, hyper-sexism instead wields these as strengths to denaturalize hegemonic gender conventions. By accelerating the tropes of femininity beyond the body of the sexed individual it would untether and deterritorialize its characterization from the gender binary and interrupt the circuit of patriarchal identity enforcement. The “inhuman desire for machinic autoproduction,” obsolesces the cisman and “the object, the feminine machine, becomes autonomous and revolts in the form of the sterilized trans woman whose existence is an embodied rejection of the primordial rape of female reproductive potential. Trans femininity heads for the exit from patriarchy.” A major contribution to the dissolution of masculinity in this analysis is the cultivated belief through online representation, that “real” women are no longer needed and sexbots are better than “real” women anyway. This resonates with the notion of men developing a preference for the virtual over physical fulfillment of desire through the imprint of online pornography onto their psyches. Consequently, from the collapse of binary reproduction emerges the inhuman



assemblage which ultimately begets the proliferation of genders no longer constrained by the limits of patriarchy (n1x 2018).

Although this is an extreme, if problematic, take (if for no other reason than that it seems to give short shrift to transmasculinity) it is still instructive in how to approach the liberatory potential of such an explicitly sexist format such as deepfakes. The writing collective Laboria Cuboniks (2018) in their Xenofeminist Manifesto similarly argue that it is alienation itself which is the “impetus to generate new worlds.” With that in mind, they argue, the solution is not less alienation but more of it as it is the “labor of freedom’s construction.” Instead of eschewing technological development as inextricably capitalistic they argue these technologies only need to be redirected towards more progressive gender ends. To that end, it is essential that women, queers, and the gender non-conforming play a role in its development towards the goal of re-engineering the world. They acknowledge the gendered challenges enabled by digital technology but argue that an infrastructure that supports feminist interventions must be designed in defiance of this reality in favor of capitulating to it. More to the point of this thesis, they argue that the “task of engineering platforms for social emancipation” cannot ignore the “semiotic mutations” afforded by these very same platforms.

Given these perspectives, can deepfakes, and by extension, generative AI, be approached as a driver of this alienation towards more equitable or at the very least more alien ends? The throughline which can be traced through all these works and the evolution of social and synthetic media is an accelerated and amplified tendency towards the dissolution or fragmentation of identity. The rampant and inescapable sexism of

virtual spaces drove women to navigate this unfortunate reality by devising strategies of impression management and self-construction across multiple platforms. Acknowledging the artificial nature of this content creation became a means of protecting oneself and also taking control of their own image in conditions in which intersecting contexts made it difficult to tailor communication to any single audience. Ultimately, it was these strategies that led to the generation of the content that would be used to populate the training sets that helped create deepfakes and generative AI art. Of course, this is not without its caveats since certain considerations must be made for how it still perpetuates certain standards of white, heteronormative, standards of beauty. This does not necessarily need to be the case, though, and with the further virtualization of more content, the further the boundaries of what is desirable can be pushed. If anything, with this irrefutable reality in mind, it would seem as if women, or identities other than cismen in general, are the sole heirs apparent to the work generated from these systems. The control that online pornography has over people's desire to treat it as real whether in the form of sexbots or deepfakes at the very least instills those who are manipulated a certain power over those who exploit them in that way. One needs only to think about just how much money fans give to online avatars or Onlyfans models to satiate their lust (Shaw 2020; Campbell 2023).

In her theorization of the cyborg Haraway doesn't shy away from its sexist and militaristic origins and acknowledges that any path forward for the cyborg must actively contend with the implications of any machinic or technological development going forward. More pointedly, she wants to know what kind of politics could embrace the "partial, contradictory, permanently unclosed constructions of personal and collective

selves and still be faithful, effective,” and still be directed towards more revolutionary ends. Later, though, she argues that the “fraying of identities and in the reflexive strategies for constructing them opens up for weaving something other than the shroud”—again, a reference to weaving— “for the day after the apocalypse that so prophetically ends salvation history” (Haraway 1991). Positioning the cyborg as a “disassembled and reassembled, postmodern collective and personal self” she explains this is the self that must be coded by feminists. Following on from the material reality of what goes into the creation of deepfakes and generative AI, the virtualization that occurs in the process of gathering media and training neural networks upon it can be said to partake in this disassembly and reassembly of the self. Rather than try to inhibit it instead it should be subverted and redirected as a means of elevating this collective subject for the sake of its radical potential. This action can be asserted through Haraway’s cyborg writing which is itself an already ongoing process in the reassembly of the self through performance, mediated or otherwise. Although she calls it writing it must be more broadly understood as a form of assertive recodification that can be extended into any creative or expressive format. This skill is acquired through the cultivation of the performative character foisted upon the gendered body that the most marginalized are forced to navigate to survive within a patriarchal hegemony.

Much in the same way that the Butlerian (1990) performance does not prefigure a self that is performing but rather constitutes that self through a never-ending performance identity is constantly in a state of flux that is written into existence by those in possession or control of those tools:

The phallogocentric origin stories most crucial for feminist cyborgs are built into the literal technologies—technologies that write the world, biotechnology and microelectronics—that have recently textualized our bodies as code problems on the grid of C3I. Feminist cyborg stories have the task of recoding communication and intelligence to subvert command and control (Haraway 1985, 55).

C3I being the military code for command-control-communication she contends with the reality of these domains as being indelibly stained by their initial development but instead of ceding ground to this influence she instead stages a clarion call to subvert it. To this point she acknowledges what she calls the cyborg's lack of innocence yet qualifies that indisputable fact to argue "illegitimate offspring are often exceedingly unfaithful to their origins." What is worth emphasizing is how the cyborg as a mutation is in a process of permanent change that consists in, inter alia, deletions, insertions, and the production of inconsistencies in replication (Wilson 2015). If according to Butler (1990) a subject is a "regulated process of repetition" through which it locates agency "within the possibility of a variation on that repetition" then it's worth considering how that characterization shifts for a subject defined entirely by mutation and flux. This is not to say gender or identity were anything other than flux, but how the foregrounding and amplification of that reality itself shapes how it is approached in everyday life (185).

To both be aware of this reconceptualization of identity and to leverage it in one's favor to destabilize dominant regimes of fixed identification is a powerful strategy even if it does potentially involve commandeering the tools of the system that imposes those constraints. As Butler (1990) notes, however, it is necessary to locate these strategies specifically enabled by those constructions (188). Right now, deepfakes and generative

AI carry the stain of the origins that does not necessarily foreclose how they are used in perpetuity. While the risk of carrying the seeds of those norms is always present, transgender users experiencing a young, transitioned version of themselves which they otherwise could not experience at least show the possibilities inherent in these technologies. Generative AI is dicier on this front but no less novel in terms of the forms it can give to new or alien desires or just hitherto unrealized or unrealizable ones. In concert with the further virtualization of online performance in the form of vtubers, for example, one can see these kinds of images coming to life as they are instilled with more lifelike movement.

Considering these applications, this point Deleuze (1985/1989) makes about cinema relative to the body in hindsight reads more like a prognostication:

“‘To give’ a body, to mount a camera on a body, takes on a different sense: it is no longer a matter of following and trailing the everyday body, but making it pass through a ceremony, of introducing it into a glass cage or a crystal, of imposing a carnival or a masquerade on it which makes it into a grotesque body, but also bring out of it a gracious and glorious body, until at least the disappearance of the visible body is achieved” (190).

What he calls gest or the links and nodes between different attitudes extend beyond any definitive role or identity into a process of deconstruction and reconstitution of the body generating an entirely new version of it. He expresses doubt over cinema’s ability to achieve this goal but imagines a truer cinema in which once again instills a belief in the world and in vanished bodies. Like cyborg writing, then, Deleuze (1985/1989) conceives of what he calls a slow ceremony which brings corresponding attitudes together to develop a female gest which “overcomes the history of men and the crisis of the world”


(196). In early March 2023, ACLU communication strategist Gillian Branstetter, a transwoman, tweeted,

“Trans people aren't being targeted because we're vulnerable; we're being targeted because we're powerful. We threaten the mythologies told about what you can and can't change, the rules about who you can and can't be. We are the truth that reveals the lie” (2023).

Trans people directly challenge the sacred cows of immutability by transcending the constraints put upon them by society to achieve a fully realized sense of self. While this will always entail risks, it shines a light on a possible path forward out of the currently imposed limitations on the body and desire.

## BIBLIOGRAPHY

- Ajder, H., Patrini, G., Cavalli, F., Cullen, L. (2019). *The State of Deepfakes: Landscape, Threads, and Impact*. Sensity AI. <https://sensity.ai/reports/>
- Akten, M. (2023, February 23). *ICYMI over on tiktok AI is hitting hard on genx. I've always said wrt AI, expect the unexpected* [Tweet]. Twitter. <https://twitter.com/memotv/status/1628758590033993728?s=20>
- Allyn, B. (2022, March 16). Deepfake video of Zelenskyy could be 'tip of the iceberg' in info war, experts warn. *NPR*. <https://www.npr.org/2022/03/16/1087062648/deepfake-video-zelenskyy-experts-war-manipulation-ukraine-russia>
- Axariaaa [@axaria]. (2023, February 19). #transgender #transition #nostalgia #transkids #teenagelookfilter. [Video]. TikTok. <https://www.tiktok.com/t/ZTRKMyL8j/>
- Ayyub, R. (2018, November 11). I Was The Victim Of A Deepfake Porn Plot Intended To Silence Me. *Huffpost*. [https://www.huffingtonpost.co.uk/entry/deepfake-porn\\_uk\\_5bf2c126e4b0f32bd58ba316](https://www.huffingtonpost.co.uk/entry/deepfake-porn_uk_5bf2c126e4b0f32bd58ba316)
- Baudrillard, J. (1983). *Simulacra and Simulation*. (P. Foss, P. Batton, & P. Beitchman, trans.). Semiotext(e). (Originally published 1981).
- Branstetter, G. [@GBBranstetter]. (2023, March 9). *Trans people aren't being targeted because we're vulnerable; we're being targeted because we're powerful. We threaten the mythologies told about.* [Tweet]. Twitter. <https://twitter.com/GBBranstetter/status/1633951449221672960?s=20>
- Brassier, R (2015). Concrete Rules and Abstract Machines: Form and Function in A Thousand Plateaus. In H. Somers-Hall, J.A. Bell, & J. Williams, *A Thousand Plateaus and Philosophy* (pp. 260-279). Edinburgh University Press.
- Briscoe, S. (2021, January 12). U.S. Laws Address Deepfakes. *Security Management*. <https://www.asisonline.org/security-management-magazine/latest-news/today-in-security/2021/january/U-S-Laws-Address-Deepfakes/>
- Broderick, R. (2023, March 1). A moment of uncanny valley befuddlement. *Garbage Day*. <https://www.garbageaday.email/p/a-moment-of-uncanny-valley-befuddlement#%C2%A7the-ai-audio-deepfakes-arent-as-funny-anymore-i-guess>
- Burgess, M. (2020, October 20). A deepfake porn bot is being used to abuse thousands of women. *Wired UK*. <https://www.wired.co.uk/article/telegram-deepfakes-deepnude-ai>
- Burrows, D., & O'Sullivan, S. (2019). *Fictioning: The Myth-Functions of Contemporary Art & Philosophy*. Edinburgh University Press.

- Butler, J. (1990). *Gender Trouble*. Routledge.
- Butler, J. (1991). Imitation and Gender Insubordination. In D. Fuss (Ed.), *Inside/Out: Gay Theories, Lesbian Theories* (pp. 13-31). Routledge.
- Campbell, S. (2023, February 7). OnlyFans Statistics 2023: How Many People Use OnlyFans? *The Small Business Blog*. <https://thesmallbusinessblog.net/onlyfans-statistics/>
- Chapelle, S. [@sheilachapelle]. (2023, February 20). Omg crying because this is how I always saw myself #teenagelook #teenagerfilters #transgirl #trans #transgender #kids #onerepublic #lgbt #lgbt  #lgbtq. [Video]. TikTok. <https://www.tiktok.com/t/ZTRKMADYG/>
- Chen, James. (2020, November 30). The Vtuber takeover of 2020. *Polygon*. <https://www.polygon.com/2020/11/30/21726800/hololive-vtuber-projekt-melody-kizuna-ai-calliope-mori-vshojo-youtube-earnings>
- Chesney, B., Citron, D. (2019). Deep Fakes: A Looming Challenge for Privacy, Democracy, and National Security. *California Law Review*. <https://doi.org/10.15779/Z38RV0D15J>
- Coldewey, D. (2019, June 13). DEEPFAKES Accountability Act would impose unenforceable rules — but it’s a start. *Techcrunch*. <https://techcrunch.com/2019/06/13/deepfakes-accountability-act-would-impose-unenforceable-rules-but-its-a-start/>
- Cole, S. (2017, December 11). AI-Assisted Fake Porn Is Here and We’re All Fucked. *Vice*. <https://www.vice.com/en/article/gydydm/gal-gadot-fake-ai-porn>
- Cole, S. (2018, January 18). We Are Truly Fucked: Everyone Is Making AI-Generated Fake Porn Now. *Vice*. <https://www.vice.com/en/article/bjye8a/reddit-fake-porn-app-daisy-ridley>
- Cole, S. (2023). *How Sex Changed the Internet and the Internet Changed Sex: An Unexpected History*. Workman Publishing.
- Cook, J. (2021, August 10). A Powerful New Deepfake Tool Has Digitally Undressed Thousands Of Women. *HuffPost*. [https://www.huffpost.com/entry/deepfake-tool-nudify-women\\_n\\_6112d765e4b005ed49053822](https://www.huffpost.com/entry/deepfake-tool-nudify-women_n_6112d765e4b005ed49053822)
- Crawford, K., Paglen, T. (2019, September 19). *Excavating AI: The Politics of Training Sets in Machine Learning*. <https://excavating.ai>



- Dawson, Brit (2022, April 6). Digital VTubers Like FeFe Are Becoming Fuckable Realities. *Mel Magazine*. <https://melmagazine.com/en-us/story/fe-fe-vtuber-onahole>
- Deleuze, & Guattari, F. (1987). *A Thousand Plateaus: Capitalism and Schizophrenia* (B. Massumi, Trans.). University of Minnesota Press. (Original work published 1980).
- Deleuze, G. (1988). *Bergsonism* (H. Tomlinson, & B. Habberjam, Tans.). Zone Books. (Original work published 1966).
- Deleuze, G. (1989). *Cinema 2: The Time-Image* (H. Tomlinson, & R. Galeta, Trans.). University of Minnesota Press. (Original work published 1985).
- Eler, A. (28 March, 2019). Amalia Ulman's Instagram performance exposed the flaws in selfie culture. *CNN*. <https://www.cnn.com/style/article/amalia-ulman-instagram-excellences-perfections/index.html>
- Elijah [@elijahhh471]. (2023, February 19). I'm in crisis mode. It's fine, everything's fine. 🥺 #crisis #teen #boy #teenager #help #pubertyblockers. [Video]. TikTok. <https://www.tiktok.com/t/ZTRKMsM3g/>
- Ellis, E.M. (2020, February 19). Do Fans of Cartoon Porn Stars Hate (Real) Women? *Wired*. <https://www.wired.com/story/projekt-melody-anime-porn-stars/>
- Goffman, E. (2009). The Presentation of Self in Everyday Life (excerpt). In H. Clark, & D. Brody (eds.) *Design Studies: A Reader* (pp. 253-255). Berg.
- Goffman, E. (1959). *The Presentation of Self in Everyday Life*. Double Day.
- Gupta, M., Sharma, A. (2021). Fear of missing out: A brief overview of origin, theoretical underpinnings and relationship with mental health. *World Journal of Clinical Cases*, 9(19), 4881-4889. <https://doi.org/10.12998/wjcc.v9.i19.4881>
- Haimson, O., Dame-Griff, A., Capello, E., Richter, Z. (2019). Tumblr was a trans technology: the meaning, importance, history, and future of trans technologies. *Feminist Media Studies*. <https://doi.org/10.1080/14680777.2019.1678505>
- Hao, K. & Heaven, W.D. (2020, December 24). The year deepfakes went mainstream. *MIT Technology Review*. <https://www.technologyreview.com/2020/12/24/1015380/best-ai-deepfakes-of-2020/>
- Haraway, D. (1985). A Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s. *Socialist Review*, 80, 65-108.
- Hern, A (2018, February 7). 'Deepfake' face-swap porn videos banned by Pornhub and Twitter. *The Guardian*. <https://www.theguardian.com/technology/2018/feb/07/twitter-pornhub-ban-deepfake-ai-face-swap-porn-videos-celebrities-gfycat-reddit>

Hern, A. (2020, January 7). Facebook bans 'deepfake' videos in run-up to US election. *The Guardian*. <https://www.theguardian.com/technology/2020/jan/07/facebook-bans-deepfake-videos-in-run-up-to-us-election>

Hollister, S. (2018, December 21). Scarlett Johansson slams deepfakes, says she can't stop the internet from pasting her face on porn. *The Verge*. <https://www.theverge.com/2018/12/31/18163351/scarlett-johansson-slams-deepfakes-internet-lost-cause>

Hsu, T. (2023, January 22). As Deepfakes Flourish, Countries Struggle With Response. *The New York Times*. <https://www.nytimes.com/2023/01/22/business/media/deepfake-regulation-difficulty.html>

Javaid, M (2023, March 8). TikTok's trendy beauty filter ushers in new tech and new problems. *The Washington Post*. <https://www.washingtonpost.com/technology/2023/03/08/tiktok-bold-glamour-filter-effect-generative-ai/>

Jeong, S (2016, August 19). How panics about pictures of naked women shaped the Web as we know it. *The Washington Post*. <https://www.washingtonpost.com/posteverything/wp/2016/08/19/how-panics-about-naked-pictures-of-women-shaped-the-web-as-we-know-it/>

Johnston, J. (1998). *Information Multiplicity: American Fiction in the Age of Media Saturation*. Johns Hopkins University Press. <https://doi.org/10.56021/9780801857041>

Kinsey, C. (2018). Archetype & Authenticity: Reflections on Amalia Ulman's Excellences & Perfections. In B. Ulfsdotter, & A.B. Rogers (Eds.), *Female Agency and Documentary Strategies: Subjectivities, Identity and Activism* (pp. 23-37). Edinburgh University Press.

Kushner, David (2003, November 1). These Are Definitely Not Scully's Breasts. *Wired*. <https://www.wired.com/2003/11/fakers/>

Laboria Cuboniks. (2018). *The Xenofeminist Manifesto*. Verso.

LastBlueJay (2020, January 9). *Updates to Our Policy Around Impersonation* [Online Forum Post]. Reddit. [https://www.reddit.com/r/redditsecurity/comments/emd7yx/updates\\_to\\_our\\_policy\\_around\\_impersonation/](https://www.reddit.com/r/redditsecurity/comments/emd7yx/updates_to_our_policy_around_impersonation/)

Le, Vincent (2020). The Deepfakes to Come: A Turing Cop's Nightmare. *Identities*, 17(2-3), 8-18. <https://doi.org/10.51151/identities.v17i2-3.468>

Lecher, C. (2019, October 7). California has banned political deepfakes during election season. *The Verge*. <https://www.theverge.com/2019/10/7/20902884/california-deepfake-political-ban-election-2020>

Lorenz, T. (2023, February 14). These women journalists were doing their jobs. That made them targets. *The Washington Post*. <https://www.washingtonpost.com/investigations/2023/02/14/women-journalists-global-violence/>

Lorenz, T. (2022, September 18). YouTube remains rife with misogyny and harassment, creators say. *The Washington Post*. <https://www.washingtonpost.com/technology/2022/09/18/you-tube-misogyny-women-hate/>

Lorenz, T. (2022b, September 22). The online incel movement is getting more violent and extreme, report says. *The Washington Post*. <https://www.washingtonpost.com/technology/2022/09/22/incels-rape-murder-study/>

Martin, N. (2020, February 6). Deepfake Porn Nearly Ruined My Life. *Elle*. <https://www.elle.com/uk/life-and-culture/a30748079/deepfake-porn/>

Marwick, A.E. & boyd, d. (2011). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media & Society*, 13(1), 114–133. <https://doi.org/10.1177/146144481036531>

Massumi, B. (1998). Sensing the Virtual, Building the Sensible. In S. Perrella (Ed.), *Hypersurface Architecture*. Academy Press (Reprinted from *Architectural Design*, 5/6(68) .May-June 1998, pp. 16-24).

McDermott, J. (2019, June 11). Snapchat's Gender-Swap and Baby Filters Doubled App Downloads. *OneZero*. <https://onezero.medium.com/snapchats-gender-swap-and-baby-filters-doubled-downloads-of-the-app-40a633c02ff0>

Metz, R. (2021, August 6). How a deepfake Tom Cruise on TikTok turned into a very real AI company. *CNN*. <https://www.cnn.com/2021/08/06/tech/tom-cruise-deepfake-tiktok-company/index.html>

Metz, R (2019, February 28). These people do not exist. Why websites are churning out fake images of people (and cats). *CNN*. <https://www.cnn.com/2019/02/28/tech/ai-fake-faces/index.html>

n1x (2018, October 31). Gender Accelerationism: A Black Paper. *Vast Abrupt*. <https://vastabrupt.com/2018/10/31/gender-acceleration/>

O'Connor, R. (2022, April 19). How DALL-E Actually Works. *Assembly AI*. <https://www.assemblyai.com/blog/how-dall-e-2-actually-works/>

- Oh, G. (2023). The Hijacking of Consumer Faceswap Apps for Targeted Deepfake Pornography. Google Doc.  
<https://docs.google.com/document/d/1srH4NGIUWPHcpRpTlrHwlzfQeqs5Ym8zBkyrO0TUNWU/edit?usp=sharing>
- Papacharissi, Z. (2015). *Affective Publics: Sentiment, Technology, And Politics*. Oxford University Press.
- Paris, B., Donovan, J. (2019). Deep Fakes and Cheap Fakes: The Manipulation of Audio and Visual Evidence. *Data & Society*. <https://datasociety.net/library/deepfakes-and-cheap-fakes/>
- Plant, S. (1995). The Future Looms: Weaving Women and Cybernetics. *Body & Society*, 1(3-4), 45-64. <https://doi.org/10.1177/1357034X9500100300>
- Popova, M. (2020) Reading out of context: pornographic deepfakes, celebrity and intimacy, *Porn Studies*, 7(4), 367-381.  
<https://doi.org/10.1080/23268743.2019.1675090>
- QTCinderella (2023, January 30). *I want to scream. Stop. Everybody fucking stop. Stop spreading it. Stop advertising it. Stop.* [Tweet]. Twitter.  
<https://twitter.com/qtcinderella/status/1620142227250094080?lang=en>
- Reed, P. (2014). Reorientate, Eccentricate, Speculate, Fictionalize, Geometricize, Commonize, Abstractify: Seven Prescriptions for Accelerationism. In R. McKay, & A. Avanesian (Eds.), *#Accelerate: The Accelerationist Reader* (pp. 521-536). Urbanomic.
- Rini, Regina (2020). Deepfakes and the Epistemic Backstop. *Philosophers' Imprint*, 20(24), 1-16.
- Satariano, A., Mozur, P. (2023, February 7). The People Onscreen Are Fake. The Disinformation Is Real. *The New York Times*.  
<https://www.nytimes.com/2023/02/07/technology/artificial-intelligence-training-deepfake.html>
- Senft, Theresa (2008). *Camgirls: Celebrity and Community in the Age of Social Networks*. Peter Lang Publishing.
- Shaviro, S. (1993). *The Cinematic Body*. University of Minnesota Press.
- Shaw, L. (2020, December 5). OnlyFans Is a Billion-Dollar Media Giant Hiding in Plain Sight. *Bloomberg*. <https://www.bloomberg.com/news/articles/2020-12-05/celebrities-like-cardi-b-could-turn-onlyfans-into-a-billion-dollar-media-company>

Singh-Kurtz, S. (2023, March 10). The Man of Your Dreams For \$300, Replika sells an AI companion who will never die, argue, or cheat — until his algorithm is updated. *The Cut*. <https://www.thecut.com/article/ai-artificial-intelligence-chatbot-replika-boyfriend.html>

Smith, D.W. (2012). Life: “A Life of Pure Immanence”: Deleuze’s “Critique et Clinique” Project. In D.W. Smith (Ed.), *Essays on Deleuze* (pp 189-221). *Edinburgh University Press*. (Reprinted from translators’ introduction to G. Deleuze, *Essays Critical and Clinical*, xi– liii, by D. W. Smith, M. A. Greco, Trans., 1997, University of Minnesota Press).

St. James, E. (2014, October 13). #Gamergate: Here's why everybody in the video game world is fighting. *Vox*. <https://www.vox.com/2014/9/6/6111065/gamergate-explained-everybody-fighting>

Tenbarge, K. (2023, March 7). Hundreds of sexual deepfake ads using Emma Watson’s face ran on Facebook and Instagram in the last two days. *NBC News*. <https://www.nbcnews.com/tech/social-media/emma-watson-deep-fake-scarlett-johansson-face-swap-app-rcna73624>

Thompson, C. (2021, December). What the History of ‘Spirit Photography’ Portends for the Future of Deepfake Videos. *Smithsonian Magazine*. <https://www.smithsonianmag.com/innovation/history-spirit-photography-future-deepfake-videos-180979010/>

Tremblay, S.C., Tremblay, S.E., Poirier, P. (2020). From filters to fillers: an active inference approach to body image distortion in the selfie era. *AI & Society*, 36. 33–48 <https://doi.org/10.1007/s00146-020-01015-w>

Top.gg. (n.d.). *Unstable Diffusion*. Retrieved March 8, 2023. <https://top.gg/servers/1010980909568245801>

Vincent, J. (2020, October 20). Deepfake bots on Telegram make the work of creating fake nudes dangerously easy. *The Verge*. <https://www.theverge.com/2020/10/20/21519322/deepfake-fake-nudes-telegram-bot-deepnude-sensity-report>

Valens, A., & Feay, A. (2019, November 27). Bad Dragon’s kingdom of fantasy sex toys is caged by ‘queer’ capitalism. *The Daily Dot*. <https://www.dailydot.com/irl/bad-dragon/>

Verma, P. (2023, March 30). They fell in love with AI bots. A software update broke their hearts. *The Washington Post*. <https://www.washingtonpost.com/technology/2023/03/30/replika-ai-chatbot-update/>

Wakabayashi, D. (2014, September 5). Tim Cook Says Apple to Add Security Alerts for iCloud Users. *Wall Street Journal*. <https://www.wsj.com/articles/tim-cook-says-apple-to-add-security-alerts-for-icloud-users-1409880977>

Weaver, C. & Issawi, D. (2021, September 2021). 'Finsta' Explained. *The New York Times*. <https://www.nytimes.com/2021/09/30/style/finsta-instagram-accounts-senate.html>

Wilson, E. E. (2015). Cyborg Anamnesis: #Accelerate's Feminist Prototypes. *Platform: Journal of Media and Communication*. 6(2). <https://platformjmc.com/2015/10/27/vol-6-2-a-manifesto-for-cyborgs-thirty-years-on-gender-technology-and-feminist-technoscience-in-the-twenty-first-century/>

Winton, R., Xia, R., Lin II, R. (2014, May 24). Isla Vista shooting: Read Elliot Rodger's graphic, elaborate attack plan. *Los Angeles Times*. <https://www.latimes.com/local/lanow/la-me-ln-isla-vista-document-20140524-story.html>