PERFORMING PROFILING: ALGORITHMIC ENUNCIATIONS, TRANSGENDER PERSPECTIVES, AND ADA ADA ADA'S *IN TRANSITU*

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ABSTRACT

What kind of reading and viewing space is created within contemporary platforms? While existing research has explored the impact of surveillance, this article moves on to theoretically discuss the intersection of technosocial reading. It examines how algorithmic interpellation and profiling function as enunciative strategies, and how this is explored from a transgender perspective. The article raises theoretical questions about the flattening of enunciation and its implications for a critical reading and observation space. To further explore these concepts, it analyses Ada Ada Ada's year-long *in transitu* Instagram performance. Through this analysis, the challenges posed by fixed, binary gender categorisations prevalent on platforms like Instagram are unpacked. Ada Ada Ada's performance serves as an imminent criticism of the enunciative, representational and gender policies of platforms, demonstrating their arbitrary and absurd nature. Ultimately, *in transitu* invites platform users to reconsider their roles as technosocial readers and observers.

KEYWORDS

Platform Reading, Technosocial Readers, Algorithmic Interpellation, Profiling, Enunciation, Instagram, Gender Recognition, Gender Policies, Queer and Transgender, Ada Ada Ada, Net-art, Performance

How does The Danish artist Ada Ada Ada's transfeminist art project, *in transitu*, shed light on the impact of profiling within social media like Meta's Instagram and the reading space this profiling creates?¹ This article will explore this topic, first through theoretical discussions of algorithmic enunciation and transgender perspectives, and secondly by analysing the *in transitu* project.

Ada Ada Ada's *in transitu* art project specifically investigates how Instagram users are both recognised and misrecognised by profiling and tracking. Ada Ada Ada continues the legacy of trans activist Courtney Demone's campaign #DoIHaveBoobsNow from 2015. Since November 2021, Ada Ada Ada has posted weekly selfies during her gender transition, challenging Instagram's moderation protocols by presenting herself bare-chested with visible nipples on the project's Instagram account, even though Instagram does not allow visible female nipples but bare-chested males (Fig. 1).² Additionally, she submits these images to commercially available gender recognition API services (such as face+ +, face-api.js, Microsoft, Amazon, Clarifai) (Fig. 2).

In addition to its presence on Ada Ada Ada's Instagram account and webpage, *in transitu* has been exhibited as part of several group shows. Notably, it was featured in the exhibition "Ung Dansk Fotografi" (Young Danish Photography) at Fotografisk Center, Copenhagen.³ At the time of writing, Instagram has not yet blocked her profile. However, some images were temporarily banned after more than a year of hormone therapy on March 30, 2023. These images were a week later allowed back on the platform, but several of her images have been marked as "sensitive content", according to Instagram's notifications.

The gender recognition APIs used by Ada Ada Ada often categorise her as female, although the results vary across different services and fluctuate from week to week. Initially, her photos were made as relatively neutral registrations. However, after the first temporary blocking, she began experimenting with different appearances, attitudes, studio lighting, and clothing choices. This exploration aimed to understand how these factors impact gender recognition by commercial services and the potential for blocking and banning from Instagram.

My objective in this article is to analyse Ada Ada Ada's *in transitu* artwork, focusing on how it exposes the profiling mechanisms and

Fig. 1 + 2 Ada Ada Ada: in transitu, no 51, 2022, https://www.instagram.com/p/CID2DR0j5-0/?img_index=1 Image courtesy of Ada Ada Ada.



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gender recognition practices of Instagram and similar platforms. I approach this through the lens of interface criticism drawing from software studies, platform criticism, techno-feminism, aesthetics, and narratology. Specifically, I will examine her artistic performance within the platformed space of Instagram.

While *in transitu* continues the legacy of trans activism–demonstrating transgender individual's right to speak and exist on social media and elsewhere–its primary focus lies on Instagram's and other services' gender recognition and policing practices. Rather than a confessional piece, Ada Ada Ada's artwork centres on instances, when Instagram and gender recognition services perceive her as female leading to the banning of her images and ultimately account closure. The Instagram audience is actively engaged in discussions about gender recognition algorithms, facilitated by Ada Ada Ada's experiments and interactions as demonstrated in figure 1.

In transitu operates as an auto-fictional work, where Ada Ada Ada places herself, her gender, and her body in the spotlight by posting bare-chested images and addressing her transitioning journey every week. However, it is essential not to overlook the performative dimension. I interpret it as an auto-fictional, performative artwork, aiming to avoid what media and gender researcher Tobias Raun has criticised as "'dissecting' readings of personal trans narratives."⁴ My focus remains on Ada Ada Ada's performance, her negotiations with Instagram and other platforms, rather than on her personal transitioning narratives—though these aspects are interconnected in what I consider a performative narrative on how she, as a trans woman during transitioning, is working with and against platforms, which I will discuss more fully below.

As a cis-gendered middle-aged male academic, I recognise that my perspective is specific, limited, and often privileged compared to the marginalisation experienced by transgender individuals. I cannot claim to speak on their behalf. Raun emphasises the importance of a "nuanced representation that allows trans people to have a voice of their own." Furthermore, researchers should situate themselves and avoid "neglecting embodied experience, invalidating the categories through which the subject makes sense of their experiences."⁵

In this article, I aim to incorporate and expand upon Ada Ada Ada's narrative and embodied position within my analysis. Specifically, I

explore how she stages her experiences on Instagram. My initial interest in *in transitu* as an artwork stems from the way it critically exposes gender profiling–a phenomenon affecting everybody, including cis-gendered male academics, albeit less visible for those who more closely align with established categories. Through interface criticism, I analyse what *in transitu* reveals about gender recognition, profiling, and coping strategies.

In transitu sheds light on how gender is defined and, in many ways, constrained by platforms, their advertising models, gender recognition services, and AI. These insights hold relevance for our contemporary, increasingly contentious, understanding of gender. To provide context for Ada Ada Ada's project, I will discuss the significance of the transgender perspective as a unique insight into gender recognition. However, before getting to this, I will discuss how platforms frame the reading space for their users and readers.

PROFILED READING SPACES

Digital platforms relentlessly target, track, and survey users. The more people engage-seeing, reading, and responding-the more precisely they are profiled. While this phenomenon has been extensively studied by the American sociologist Shoshana Zuboff and others6 its effects remain less explored. Ethnographer and information theorist Shuang Frost has looked into how gig workers "form distinct communities which enable them to engage in collaborative as well as disruptive practices in pursuit of ends which may or may not align with those of the platform companies".7 Yet, what remains under-researched, is how platform users perceive, read, and respond to this targeting and surveillance, beyond instances of direct manipulation. What kind of reading and viewing space emerges within contemporary platform use? How can profiling be addressed, if not countered? And what types of reading, listening, and viewing cultures, along with reception models, does this complex landscape foster? These questions are part of the development and understanding of technosocial literacies.

Observing users' reading and viewing habits on platforms is inherently challenging if extended beyond concrete examples. Many users experience hesitation when liking and in other ways interacting with commercial or promoted content, aware that doing so contributes to targeting and tracking. Research on digital ad fatigue highlights this issue, potentially undermining targeted advertising and the platforms reliant on this business model.⁸ Targeted ads trigger "psychological reactance" against the ads, when Facebook users' "perceptions of autonomy, freedom threat, and intrusiveness" are invoked. Consequently, users may "resist or change their attitudes or behaveiours in the opposite direction advocated in the message to regain threatened or lost freedom."⁹

Such direct measures of targeted advertisement suggest that reading and reception models within profiled reading spaces are evolving. This prompts further discussions about how platform users comprehend the nuanced and far-reaching effects of reading and viewing shaped by platform algorithms—effects that permeate social media and extend across various aspects of platform culture, from streaming to searching to generative AI. How do platform users navigate the profiling embedded within these platforms? How do they learn to read and observe the mechanism that stages them? Consider the concept of *meta-reading*: electronic literature researcher Manuel Portela, in his analysis of Daniel Howe and John Cayley's electronic literature, *The Readers Project*, describes how readers become metareaders—engaging not only with the content but also the profiling or "their own act of reading the program reading."¹⁰

Despite increasing awareness that algorithmic profiling (co-) produces their reading space, platform users often encounter deliberate obfuscation. Platforms are designed to conceal the production and editing of text, diverging from the transparency advocated by Howe and Cayley's literary work.

Since the early 2000s, algorithmic platforms have gained popularity, with content distribution increasingly managed by profiling algorithms and surveillance capitalism. The effects of this are the creation of digital neighbourhoods or filter bubbles of like-minded interests and users.¹¹ Platforms arrange their content to their advertisers, professional media producers, policymakers, and users alike. Digital communication researcher Tarleton Gillespie sheds light on the discursive work of platforms like YouTube. As he writes,

[t]he term 'platform' helps reveal how YouTube and others stage themselves for these constituencies, allowing them to make a broadly progressive sales pitch while also eliding the tensions inherent in their service: between user-generated and commercially-produced content, between cultivating community and serving up advertising, between intervening in the delivery of content and remaining neutral.¹² Gillespie mainly analyses the discursive work of the concept of platform, without going further into how the distribution of content is algorithmically managed within platforms or how they, through algorithms, narrate in terms of narrative theory. To approach this, I will in the following explore narrative theory to understand how platforms instigate a narrative function, manage the acts of uttered enunciation, and construct an implied reader. I will briefly describe how the narratological concepts are defined, before discussing how they can be transferred to platforms and related to *in transitu*.

ALGORITHMIC ENUNCIATION

The concept of *enunciation* comes from linguistic and literary narrative theory with roots in structuralist theory from scholars such as Benveniste, Greimas, and Genette with later influences from Foucault, Barthes, and Deleuze.¹³ Narratology researcher Gorm Larsen defines enunciation as follows:

According to Benveniste, humans 'insert' and 'arrange' themselves as subjects through language; the concept of 'I' is realised in language; for him, linguistic forms that indicate personhood allow us to operate with the category of a person beyond language. Enunciation is thus anchored by all linguistic elements that refer to the speaking 'I' – pronouns and adverbs that anchor the speaking person spatially and temporarily. Consequently, enunciation becomes a performative category, and the markers of enunciation are the traces of the act of enunciation: Enunciation is the action of speaking and narration.¹⁴

Enunciation has expanded beyond literary theory to encompass visual semiotics. For instance, visual semiotician Maria Giulia Dondero employs enunciation to look at painting and photography.¹⁵ Ada Ada Ada's *in transitu* explores enunciation by using platforms continuously. As an example of how she questions her enunciation, she writes "The logic seems to be: Short hair = Male. Long hair = Female. Long hair on one side only = 50% Make/50% Female" (Fig. 1 and 2). However, art historian and literary theorist Johanna Drucker argues that a crisis of enunciation and narrative construction is arising in relation to social relativity. Drucker contends that algorithmic profiling tends to create a state of "amongness," characterized by "identity without alterity." She explains, that

[a]esthetic activity and authorial identity have generally been constructed as oppositional 'othering'. Literary language is often conceived as 'other' than ordinary language, usually for some explicitly or implicitly 'valuable' purpose, and the authorial subject (like all subjects in language) has been understood as constituted by a binary opposition to an 'other' within an enunciative system.

Drucker's concepts of "among-ness" or "within-ness" within social media platforms shed light on the tension between text produced through algorithmic profiling and literary narrative. According to Drucker, this kind of profiled text production serves as a "counterpoint to critique" or even the end(s) of critique, and as a potential threat to literary fiction and aesthetic activity.¹⁶ Corporate datadriven platforms strategically leverage cognitive resonance, amongness, and within-ness to exploit social empathy within an affective economy, at the expense of difference and otherness.¹⁷ As the enunciative system is flattened and becomes increasingly invisible, the space for navigating the text and engaging in literary reading diminishes. The literary reading's interpretation of different (implicit) voices, perspectives, and representational claims gets less underpinning. There is diminishing space left to produce a distinct fictional alterity.

This levelling or obfuscation of enunciation leaves readers and viewers increasingly uncertain about how to understand, read and evaluate texts and images in a nuanced manner. Platform users, at the very least, must develop new reading and observation strategies. Artworks like *in transitu* can aid in this process. Reading and observing are intricate, intellectual, and highly educated processes. Readers and observers encountering these algorithmic mechanisms will gradually adapt their reading and observation habits, becoming more aware of how the output they receive is generated. Over time, they may develop a sense of meta-reading.

Not all texts or images are read or perceived in the same way; nuanced reading practices have emerged. These practices involve questioning astute narrators, considering implicit and limited perspectives, and appreciating irony and ambiguity in literature. Similarly, in visual art, off-screen actions and effects of the pictorial space contribute to nuanced interpretation. Close reading is not the sole contemporary form of reading,¹⁸ attentiveness is also fostered through technical means. Additionally, what we perceive as "modern distraction" is "an *effect*, and in many cases a constituent element of the many attempts to produce attentiveness in human subjects."¹⁹

Even before the advent of today's datafied platforms, art and visual historian Jonathan Crary described "the way in which shifting organizations of power and changing models of subjectification have (...) demanded reciprocal refashionings of attentive behavior," and he relates this to the personal computer, noting that "they are methods for the management of attention that use partitioning and sedentarization, rendering bodies controllable and useful simultaneously, even as they simulate the illusion of choices and 'interactivity'."²⁰

This discussion of attentiveness applies to both reading and observing. When considering visuality, concepts such as "techniques of the observer," "ways of seeing," and "machine vision" provide additional possibilities for discussing observation and perception within a mediated and algorithmic culture.²¹ Therefore, reading and observing are not inherently 'pure' human abilities that have only recently been corrupted by algorithms. Instead, they have always been co-produced within a mediated, technologized context, dating back to the invention of print. Today, this co-production of reading integrates algorithmic profiling. I will now turn to the reader roles that are co-produced, in order to understand how Ada Ada Ada performs these roles in *in transitu*.

THE TECHNOSOCIAL READER

As exemplified by profiling, contemporary reading and observation extend beyond human agents. When reading, listening, viewing, and interacting on platforms and social media, there is an increasing awareness of the effects the reading produces. This includes how the reading is also read, such as when liking, clicking, scrolling, or watching a video—or avoiding this interaction to prevent the effects of tracking. The philosopher of technology Beatrice Fazi has explored reading by humans and machines, considering "what it means to read in ways that humans cannot." She argues to "open up a conceptual space that would allow us to inhabit this proximity, but at the same time also dwell and build on the alterity." Drawing on Jonathan Crary's *Suspensions of Perception*, Fazi investigates the "technosocial experiences of perception that normalize us in terms of contemporary subjects, amidst computational interplays of attentiveness and distraction." She emphasizes that these questions are pivotal for the future of humanities, "because it involves assessing the shape and destiny of literacy, understanding, judgment; activities and faculties upon which all humanities work is predicated."²²

A conceptual model for Fazi's type of technosocial reader is the "lurker." According to digital media art theorist Olga Goriunova, a lurker is a human reader who mirrors the algorithmic readers and agents involved in algorithmic profiling.²³ Furthermore, profiling is integral to the creation of digital subjects. Goriunova characterises the digital subject as a "combined promise of identitarian uniqueness, intimate access, and legal accountability, as well as the creative potential for misidentification and theatrical performance of an aspect of one's subjectivity." As she argues, "the face becomes the new fingerprint," but with the possibility of adding masks and makeup as "digital subjects also offer sites of reinvention, liberation, and play." Essentially, Goriunova defines the digital subject as "neither a human being nor its representation but a distance between the two."²⁴

In this context, digital subjects are not data-doubles or simple representations of users. Instead, they emerge as intricate mappings of interaction networks and data profiling—a continuous production of prediction, often for commercial purposes. These digital subjects are simultaneously targeting users as consumers, while maintaining a distance created by the data market. If a user has searched for shoes, it may influence 'their' digital subject more than, for example, the user's philosophical values due to the exploitability in the data market. Consequently, digital subjects tend to align with shallow market interests rather than deeper aspects of identity. This results in a commodified version of identity, easily marketable.

Interestingly, this distance between the felt identity and its representation as a digital subject might generate a space for alterity, if platform users do not fully identify with the commercialised digital identity, contrary to Drucker's argument. As Goriunova argues, "struggle over the distance is political through and through: to claim and maintain distance is a matter of keeping and developing alternative options of becoming and living with our digital subjects."²⁵

To navigate this production of digital subjects, maintaining a reflective and critical space becomes a performative method for reading and perceiving how one is profiled. Users can resist or engage with their digital subject in a performative way as in *in transitu*. Even influencers, by leveraging profiling mechanisms, can be seen as exploiting the system, though often in a less critical way. Goriunova's example is Amalia Ulman's Instagram performance *Excellences & Perfection* (2014), where Ulman performs as a glamorous, vulnerable young woman. After a while, Ulman discloses it as fiction. However, the project can be seen as a "reflection on how they are compelled to manufacture their digital persona."²⁶

Consequently, there is potential for developing critical reading and observation strategies, if platform users increasingly recognise the distance between themselves as technosocial readers and profiled digital subjects. How can we better understand how this distance is created and what kind of space it leaves for the technosocial reader?

The strategy behind profiling that generates digital subjects can be described as algorithmic interpellation. For instance, consider how users are interpellated by Facebook's 'reactions' (such as 'like,' 'haha,' 'smile,' etc.). Artistically explored by the computational media artist Benjamin Grosser in his work *Go Rando* (2017), this artistic plugin generates random Facebook reactions, allowing users to directly experience the tension between maintaining their public social appearance and Facebook's data harvesting and profiling.²⁷

Social science researchers Rosie DuBrin and Ashley E. Gorham draw from Marxist philosopher Louis Althusser's classic concept of interpellation. They describe it as akin to a police officer hailing an individual in a crowded street, shouting, "Hey, you there!" The individual recognises that the call was intended for them and thus becomes subject to the hailing authority. DuBrin and Gorham identify three key components of interpellation: "subjectivity/subjection, recognition/misrecognition, and materiality/immateriality."²⁸ Interestingly, this closely resembles enunciation, as described by Larsen in the quote above.

Expanding on Althusser's concept, DuBrin and Gorham argue that on-demand algorithms, such as those used by social media platforms, are "hyper-interpellative." These algorithms "center[s] capitalist reproduction in the process of subject formation" as an "even more intensified instance of interpellation."²⁹ Unlike earlier forms of interpellation, hyper-interpellation is highly individualised and closely aligned with business models. Interestingly, like Goriunova's portrayal of the digital subject as a political struggle, DuBrin and Gorham also highlight the potential for politics. Drawing from the French philosopher Jacques Rancière's perspective, they see politics emerging, when misfitting or misrecognition occurs:

By supplementing our conceptualization of the on-demand algorithm as a hyper-interpellative mechanism with Rancière's distribution of the sensible, that is, thinking the apparatus's interpellative distribution of the sensory world as a police ordering, we are better prepared to see how and where algorithmic politics irrupts.³⁰

In summary, platforms disseminate content through mechanisms of hyper-interpellation and policing, perpetuating a continuous commercial process of digital subjectivation. However, within this process lies a political struggle and the possibility of misfitting. Interpellative misrecognition offers a glimpse into the platform apparatus's policing, potentially fostering critical space. In the following sections, *in transitu's* relevance to transgender perspectives and questions of enunciation will be addressed before analysing how this interpellative misrecognition can manifest in practice.

TRANSGENDER PERSPECTIVES AND ENUNCIATION

Ada Ada's *in transitu* can be viewed as an artistic exploration of the policing and politics surrounding a crucial form of algorithmic interpellation and profiling: specifically, how gender recognition is employed to censor images on Instagram. To prevent Instagram from being used for what might be perceived as sexual content, pictures displaying visible female nipples are prohibited and removed from public profiles, while visible male nipples are allowed. Consequently, questions related to transitioning, identity, and sexuality are particularly relevant for critically understanding the policing and politics of platforms like Instagram. Additionally, *in transitu* engages in an important contemporary discussion about the intimate relationships between gender, sexuality, and algorithmic culture and profiling.

Despite some progress in recognising transgender people in some countries since the 1920s, following early treatments and categorisation by Jewish German sexologist Magnus Hirschfeld in Berlin, gender non-conforming, non-binary, or cross-binary identities continue to challenge religious and national conservatives. Even certain feminists from the 'gender-critical' Trans-Exclusionary Radical Feminist (TERF) movement argue against distinguishing between sex and gender.³¹ Critiquing or transcending the binary framework of biologically based sex signifiers essentially deconstructs established semantic structures of identification, creating trouble for those who believe gender to be biologically given.³² This closely relates to enunciation.

Contemporary debates about pronouns, the recognition of transgender people, legal rights, and discussions surrounding access to gendered institutions or non-gendered restrooms all fall under the umbrella of enunciation—specifically, who has the authority to define transgender people's gender. When combined with methods of diagnosing and treating gendered bodies, including hormone therapy, puberty blockers, and gender-affirming surgery, it becomes evident that accepting transgender people's right to self-define their gender remains a significant challenge for some. Despite practical solutions being available, transgender people often face severe discrimination and a lack of recognition. Enunciation has evolved into a political and ideological issue.

Gender and design researcher Os Keyes argues that the issue relates to our reluctance to view gender as contextual: "Western society does not like to think of gender as contextual in the slightest." Keyes continues:

A person is expected to be authentic at all times and for this to mean the same thing at all times. A person's gender must be 'natural': it must meet the overarching expectation that it consistently matches across space and time, all the way back to birth. The very existence of trans people, which proves the illegitimacy of such a claim of naturalness, is thus treated as an affront. We are often met with invalidation, harassment, assault, and the constraint of life chances since pushing us out of sight and existence is the one certain way to keep the myth of naturalness alive.³³

Keyes's argument gains support from anthropologist Michael Lambek's discussion of the authentic identity prevalent in Western modernity. This concept of authenticity is directly relevant to the data profiling of platforms like Instagram. The digital subject is far from being authentic. It is continually produced by crossing vectors from a plurality of situations, mapped into social neighbourhoods of other digital subjects with similar interests, and targeted through the market of data capitalism. Ada Ada Ada's experiences perfectly demonstrate this, particularly how she is targeted by gendered advertisement, which I will get back to in my analysis below. Transgender people's experience is particularly exposing the problem since they encounter this targeting in explicit and often hurting ways–Keyes characterises it correctly as administrative data violence. Transgender people, like digital subjects, are transitioning:

[o]ur sense of who and what we can be is constantly shifting, unfolding, changing, and never completed: it varies between places with different rules, expectations, and possibilities and alters as we proceed through life and engage in the continuous and never-ending process of becoming. This roiling complexity of identity is *particularly* apparent to transgender (trans) people: those of us who transition between gender categories and identities.³⁴

THE TECHNIQUES OF GENDER (MIS-)RECOGNITION

In transitu explores the drama of pronouns and who enunciates them, as well as the drama of enunciation and gender characterisation, including how it has become algorithmically driven. Ada Ada Ada's project offers a real-world examination of algorithmic enunciation and gender recognition while revealing the arbitrariness of gender recognition models. Her project demonstrates the potential discrimination caused by allowing commercial services to evaluate people based on predefined, binary genders and controlling access via US moral ethics, even beyond national borders.

As argued by Keyes, the result is potentially data violence, and as pointed out by the trans activist Janus Rose: "If we allow these assumptions to be built into systems that control people's access to things like healthcare, financial assistance or even bathrooms, the resulting technologies will gravely impact trans people's ability to live in society."³⁵ Fortunately, Instagram does not control all of this, but it serves as a useful laboratory, and its policing has consequences that extend beyond the allowance of nudity.

After the initial ban in March 2023, Ada Ada Ada has, as mentioned above, experimented with what it takes to be perceived as a specific gender. An example of this is the comments on how gender recognition algorithms react to her hairstyles (Fig. 1 and 2). She often explores how she is enunciated by the interpellative algorithms of gender recognition and how this leads to policing. However, the ultimate proof of the policing would be the deletion of her images



from Instagram, as happened temporarily on 30 March 2023. She notes that it is unclear "whether this was an automated takedown or whether a human moderator was involved," but her account appears to have been subjected to "shadowbanning," meaning that it becomes less visible and "no longer shows up in search or feed recommendations."³⁶ In this sense, even the deletion is kept invisible, though exposed by Ada Ada Ada. On 5 April 2023, the image was reinstated, again with no explanation (Fig. 3).

Over the project's extended period from its beginning in December 2021, it becomes increasingly clear how Ada Ada Ada turns gender recognition into a public performance. She systematically works with the discriminating feedback she gets from the algorithmic enunciation to further explore the profiling, to which she is subjected as a minority digital subject. She does this by literally exposing herself in different situations–partly clothed, with make-up, or in varying lighting. Expanding beyond artistic expression, the project underscores the arbitrariness and absurdity of the gender recognition models prevalent on platforms like Instagram. *in transitu* exposes the binary and biased understanding of gender that these models are built on, constructed through image sets such as ImageNet.³⁷

Building on the discussion above on the production of the digital subject and how it is co-created by market interactions, Ada Ada Ada has also explored Instagram's gender recognition. The platform addresses her as both male and female in the ads served on her profile. For example, she sometimes receives ads related to egg donation and menstruation products, while at other times, she is served ads related to sperm donation. Misgendering is often experienced as a form of painful data violence by transgender people, as pointed out by Keyes. In this context, the misgendering becomes an act of enunciation and hyper-interpellation carried out by the profiling algorithm.³⁸

Consequently, manifesting the theoretical arguments by DuBrin and Gorham, *in transitu* highlights a specific distribution of the sensible, and the way gender is constructed in our culture(s), policed by hyper-interpellative algorithms. The project demonstrates that sex and gender is not only biologically constructed but also culturally and technologically enforced. It involves not only a gendering of faces but also gendering through and within gender recognition models. This algorithmic interpellation relies on predictive models



<u>bda_ada_ada_art</u>) tried running @in_transitu_ig images through #StableDiffusion without a prompt. These are the results. ...

For this experiment, I took four images from my in transitu project and asked Stable Diffusion to create variations on them without any textual prompt. The images are from various points in my gender transition, going from very recent to very early.

The results reveal something quite interesting about how Stable Diffusion works and can be used. It seems you can actually do a kind of pseudo gender streeotype recognition through SD. This is not really that surptising, considering that the image generator reliss or image recognition to own create images in the first place. Technically, it follows that in order to generate an image of a woman, it wants to be able to recognize what a woman look like.

Anyhow, imago #2, #3 and #4 exhibit quito clear stereotypical gender expressions, albeit somewhat distorted. I'm not really sure what's happening in #1, but I quite like It.

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Fig. 4 Ada da Ada: *in transitu*, Stable Diffusion variations, https://www.instagram.com/ p/CqU2raHsH-Z/?utm_source=ig_web_copy_link&img_index=1. Image courtesy of Ada Ada Ada.



Fig. 5

Ada Ada: *in transitu*. Generating Stable Diffusion "trans" pictures from noise. https://www.instagram.com/p/Cragc7as5ty/?utm_source=ig_web_copy_link&img_index=1. Image courtesy of Ada Ada Ada.

and image sets, which have implications for the data market. Ada Ada's reflection on gendered ads reveals that other elements contribute to the shaky nature of gender recognition. While this artistic performance primarily focuses on Instagram, it would be naïve to believe that similar effects do not occur in other administrative systems within our datafied society. Instagram and Meta's widespread data brokerage–central to their main business model and income revenue–likely exhibits comparable dynamics with ripple effects into other platforms and services.³⁹

Led by the discoveries in the project. Ada Ada Ada also conducts several other experiments. For example, she explores how the generative AI platform Stable Diffusion generates new images prompted by the images from the *in transitu* project. Besides covering the nipples, it recognises her gender through what she calls "a kind of pseudo gender stereotype recognition," and generates new images of women (Fig. 4). In other experiments, she compares the results of adding "trans" to the prompts for "a photo of a woman" or "man," as well as when she prompts for "a photo of a trans woman" while feeding noise textures into Stable Diffusion. This allows her to examine how the system constructs "trans" when generating pictures from noise (Fig. 5). She posted four leopard-printed trans women, that she 'found' within Stable Diffusion, suggesting that 'inside' the statistical machine learning and generated from the depth of the Large Language Models, characters exist that break with the binary patterns of gender recognition.

These two images demonstrate that potentially a more positive inclusion of a non-conformist understanding of gender might be hidden in the depth of machine learning. In a more pessimistic understanding, generative AI is becoming increasingly adept at spotting and recognising transgender people. According to Rose and Keyes, this can be harmful and dangerous in countries, where being a transgender person is illegal or suppressed, even in situations in countries where the general policy is supposed to be gender inclusive. As Keyes argues: "Systems administered by nonstate actors can commit violence against particular populations and create space for additional violence by third parties." Keyes continues by quoting Anna Lauren Hoffmann's definition of data violence: "The harm inflicted on trans and gender nonconforming people not only by government-run systems, but also the information systems that permeate our everyday social lives."⁴⁰

Ada Ada Ada explores the apparatus behind gender recognition, how it fits and misfits. Thus, we could argue, drawing on Dubrin and Gorham's application of Rancière, she turns the policing of the algorithmic interpellation into politics by demonstrating its distribution of the sensible. In other words, she explores and uses the visible language of gender by playing with the distance between her image and the ways it is (mis-)represented and (mis-)recognised as a digital subject.⁴¹ In this sense, she is not a mute lurker.⁴² but uses her position actively. Her project is inherently political, as evidenced by the numerous audience comments on her images, which suggest new ways to experimentally address gender recognition algorithms and participate in discussions about their politics. As one comment states: "The tension is rising." Ada Ada Ada herself points out that *in transitu* has developed into a platform for discussions of "topics" such as the censorship of female bodies and queer bodies as well as the biases of algorithms, how they selectively perceive some and ignore others." In this sense, she would be sad to see it deleted, even though that was its original purpose.43

The case of transitioning is especially well-suited for this performance, not least faced with the exposure of Instagram's Victorian morality. However, there is also a problem related to this. in transitu echoes a practice in the transgender community of posting pictures of bodily changes during gender transition as a way of showing mutual support. In this sense, the project can be seen as a continuation and homage to other transitioning projects. However, transition images are also captured to automatically 'out' transgender people by making gender recognition algorithms 'learn' to recognise transgender people. Since it is still dangerous (if not illegal) to be transgender in many countries, this adds further risks of being targeted and persecuted. in transitu demonstrates how these algorithmic mechanisms operate on Instagram, suppressing trans women's freedom of speech and in general sexualising female nipples-even if it was originally meant as a way of banning pornography on the platform.

Alongside being a poignant performance of gender and platform criticism, *in transitu* demonstrates how *every* body is captured, modelled, and recognised by machine vision and profiling. This also includes cis-gendered bodies, although such recognition is less remarkable and less frequently discovered. The gendered gaze, now technologically implemented, becomes visible through its misgendering. As Keyes points out, data systems work by stripping data of contextuality and relating them to other contexts. Thus, gender becomes associated with interest and ads for sports, nightlife, or even medicine as demonstrated by Ada Ada Ada's 'gendered ads' Instagram story.⁴⁴ Even if gender recognition services do not always agree on a 100% fixed gender result, the surveillance marketing algorithms construct the digital subject assuming it is male or female.

Ada Ada is able to reflect humorously on this, but it also reveals a problematic tendency. Keyes argues that considering trans lives is important for critical data studies. These studies

must consider the contextuality of gender specifically and identity more broadly, the way data systems work to *strip* contextuality, and how to preserve and rebuild that. It must consider not only the flows of data but the eddies: the *dead* data, left static and in place until it is reanimated in a temporal context where it can do harm. Only then can we work to be free.⁴⁵

Keyes advocates for a more careful use of data that includes reflection on contextuality, leading to less stable, binary, and static results. Ada Ada Ada's project, with its varied, dissimilar answers from gender recognition services and the Stable Diffusion trans women (Fig. 5), shows that a less binary system is not necessarily incompatible with the technology. The problems arise when it is implemented within a binary system of gendered ads and Instagram's version of Victorian morality erases any context. Besides, other non-conformist genders exist deeply buried in the language models as the example with the leopard-printed trans women shows (Fig. 5). In this sense, Instagram acts as an extension of the TERFs mentioned above, arguing that gender is only binary.

If we detach generative AI and machine learning from Western ideas of 'natural,' decontextualized gender and identity, a liberation from such a gender economy would be possible. Currently, the opposite seems to be happening, as demonstrated by *in transitu*. Furthermore, the de-contextualization inherent in most algorithmic data collection and use, including in the construction and use of digital subjects, is part of the problem. This leads to the amplification of bias in data that is often algorithmically correlated to other data without a clear, conscious, or critical understanding of the effects of the original decontextualization. Algorithmic target marketing is a good example, but other, often more serious, examples of data violence exist. In other words, biases such as sexism, racism, and populism are reinforced, especially when combined with strong profiling of content. This problem potentially proliferates, for example, through data brokerage⁴⁶ or other kinds of correlations of databases, when used without clear awareness of the biases of the systems and platforms.⁴⁷

Whereas the social sciences have standards for using data cautiously and reflecting on its contexts, this is not typically part of platform algorithms' use of data. Instead, data is often seen as 'raw' and harvested automatically removing the context.⁴⁸ Consequently, there is an urgent need to develop new technosocial literacies of how content is served and staged on platforms from social media to generative AI. Techniques, such as levelling enunciation, hyperinterpellative mechanisms, and algorithmic policing, play a crucial role in this development. A transgender perspective can be a concrete way to foster such literacies, and platforms that are conscientious of how people are reading and observing platforms might potentially be less condescending.

From its inception as a transitioning performance, *in transitu* uses gender recognition and Instagram as a stage to reflect on how all platform users are being staged and enunciated. With Ada Ada Ada's artwork, it is possible to gain insight into the profound implications of these systems, particularly for marginalized communities. *in transitu* can be seen in relation to other examples of performative uses of Instagram, whether done commercially by influencers or reflectively by fourth-generation feminist artists such as Amalia Ulman, Arvida Byström, or Maja Malou Lyse. Ada Ada Ada performs by the rules of the algorithm within these platforms but also exposes how they work and how Instagram culture is constructed in a way that would not be possible to expose without entering into the algorithmic machinery. In this way, Ada Ada Ada opens a space for critique from within.

Ada Ada Ada demonstrates how to resist platform profiling through her exploration of algorithmic interpellation and enunciation strategies. Even though she is controlled and policed by gender-binary structures, as all are on and off platforms like Instagram, she does not allow them to unilaterally define her and her gender. Instead, she continues to explore the techniques and technologies of gender (mis) recognition. As a transgender person, it is necessary to challenge defined, stable, biologically given, and non-contextual sex and gender roles. In furthering this, she maps out a space for critical alterity as a technosocial reader, and other platform users can learn from her performance to become meta-readers and -observers. Through her trans-feminist performance of profiling, she confronts face recognition and returns its gaze as a form of political resistance.

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- 2 Ada Ada Ada, *in transitu*. 2022-. See https://ada-adaada.art/projects/in-transitu.
- 3 Ada Ada Ada, in transitu.
- 4 Tobias Raun, "Trans as Contested Intelligibility," *lambda nordica* 19, no. 1 (2014): 13–37, https://lambdanordica. org/index.php/lambdanordica/article/view/404, 16.
- 5 Raun, "Trans as Contested Intelligibility," 28; 30.
- 6 Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: PublicAffairs, 2019).
- 7 Shuang Frost, "'Gig Communities': Rediscovering Gig Work Practices via Community-of-Practice Lens," ICIS 2022: Digitization for the Next Generation, Copenhagen, Denmark, 2022.
- 8 Fatih Çelik, Mehmet Safa Çam, and Mehmet Ali Koseoglu, "Ad Avoidance in the Digital Context: A Systematic Literature Review and Research Agenda," *International Journal of Consumer Studies* 47, no. 6 (2023): 2071–2105, https://doi.org/10.1111/ijcs.12882, https://onlinelibrary.wiley.com/doi/abs/10.1111/ ijcs.12882.
- 9 Seounmi Youn and Seunghyun Kim, "Understanding Ad Avoidance on Facebook: Antecedents and Outcomes of Psychological Reactance," *Computers in Human Behavior* 98 (2019): 232–44, https://doi.org/10.1016/j. chb.2019.04.025, https://www.sciencedirect.com/ science/article/pii/S0747563219301736, 232.
- 10 Manuel Portela, Scripting Reading Motions: The Codex and the Computer as Self-Reflexive Machines (Cambridge, MA: The MIT Press, 2013), 346.
- 11 Zuboff, The Age of Surveillance Capitalism; Eli Pariser, The Filter Bubble: How the New Personalized Web Is Changing What We Read and How We Think (Penguin Publishing Group, 2011); Wendy Hui Kyong Chun, Updating to Remain the Same: Habitual New Media (Cambridge, MA: The MIT Press, 2016).
- 12 Tarleton Gillespie, "The Politics of 'Platforms," New Media & Society 12, no. 3 (2010): 347–64, https://doi. org/10.1177/1461444809342738.
- 13 Gorm G. Larsen, "Subjektivitet i fortællinger," K&K 101 (2006): 140-63, https://doi.org/10.7146/kok. v34i101.22330.
- 14 Larsen, "Subjektivitet i fortællinger," 145 (my translation).
- 15 Maria Giulia Dondero, "The Theory of Enunciation: From Linguistics to Visual Semiotics," in *The Language of Images: The Forms and the Forces* (Cham: Springer International Publishing, 2020), 15–48.

- 16 Johanna Drucker, *The General Theory of Social Relativity* (Canada: The Elephants, 2018), 73.
- 17 Cf also Tung-Hui Hu, *Digital Lethargy: Dispatches from* an Age of Disconnection (Cambridge, MA: The MIT Press, 2022).
- 18 N. Katherine Hayles, "How We Read: Close, Hyper, Machine," ADE Bulletin 150 (2010): 62–79, https://doi. org/10.1632/ade.150.62, https://www.ade.mla.org/ bulletin/pdf/7915.
- 19 Jonathan Crary, Suspensions of Perception: Attention, Spectacle, and Modern Culture (Cambridge, MA, and London: MIT Press, 1999), 49.
- 20 Crary, Suspensions of Perception, 72, 75.
- 21 Jonathan Crary, Techniques of the Observer: On Vision and Modernity in the Nineteenth Century, October Books (Cambridge, MA: MIT Press, 1990); John Berger, Ways of Seeing (London: Penguin, 2008); Mitra Azar, Geoff Cox, and Leonardo Impett, "Introduction: Ways of Machine Seeing," Al & Society 36, no. 4 (2021): 1093–1104, https://doi.org/10.1007/s00146-020-01124-6; Jill Walker Rettberg, Machine Vision: How Algorithms Are Changing the Way We See the World (Newark: Polity Press, 2023).
- 22 M. Beatrice Fazi, "Distraction Machines? Augmentation, Automation and Attention in a Computational Age," New Formations 98 (2019): 85–100, https://doi. org/10.3898/NEWF:98.06.2019., 97; 98; 99; 100.
- 23 Olga Goriunova, "The Lurker and the Politics of Knowledge in Data Culture," International Journal of Communication 11 (2017), http://ijoc.org/index.php/ ijoc/article/view/6203. Cf also Christian Ulrik Andersen and Søren Pold, "The User as a Character: Narratives of Datafied Platforms," Computational Culture, no. 8 (2021), http://computationalculture.net/the-user-as-acharacter-narratives-of-datafied-platforms/ and Christian Ulrik Andersen and Søren Bro Pold, "a. username? – A Profile Without Qualities: Exploring Amazon through Art and Literature," in Practicing Sovereignty: Digital Involvement in Times of Crises, ed. Bianca Herlo, Daniel Irrgang, Gesche Joost, and Andreas Unteidig (Bielefeld: transcript Verlag, 2021).
- 24 Olga Goriunova, "The Digital Subject: People as Data as Persons," *Theory, Culture & Society* 36, no. 6 (2019): 125-45, https://doi.org/10.1177/0263276419840409, https://journals.sagepub.com/doi/ abs/10.1177/0263276419840409, 127; 128.
- 25 Goriunova, "The Digital Subject," 130.
- 26 Goriunova, "The Digital Subject," 141.
- 27 Andersen and Pold, "The User as a Character."
- 28 Rosie DuBrin and Ashley E. Gorham, "Algorithmic Interpellation," Constellations 28, no. 2 (2021): 176–91, https://doi.org/10.1111/1467-8675.12568, 179.
- 29 DuBrin and Gorham, "Algorithmic Interpellation," 178.
- 30 DuBrin and Gorham, "Algorithmic Interpellation," 186.
- 31 Sandy Stone, "The Empire Strikes Back: A Posttranssexual Manifesto," in *The Transgender Studies Reader*, ed. Susan Stryker and Stephen Whittle (United Kingdom: Routledge Taylor & Francis Group, 2006), 221–35.

- 32 Biologists have pointed to the fact that binary sex is not biologically given, but variations exist in both humans and other mammals. See L. Zachary DuBois and Heather Shattuck-Heidorn, "Challenging the Binary: Gender/Sex and the Bio-Logics of Normalcy," American Journal of Human Biology 33, no. 5 (2021): e23623, https://doi. org/10.1002/ajhb.23623. Hence the argument of sex binarity as being more natural in a biological sense is questionable even if the cultural dimensions of gender are left out.
- 33 Os Keyes, "(Mis)gendering," in Uncertain Archives: Critical Keywords for Big Data, ed. Nanna Bonde Thylstrup, Daniela Agostinho, Annie Ring, Catherine D'Ignazio, and Kristin Veel (Cambridge, MA: MIT Press, 2021), 340-41.
- 34 Keyes, "(Mis)gendering," 340.
- 35 Rose, Janus. 2019. "I'm a trans woman here's why algorithms scare me." Dazed. https://www.dazeddigital. com/science-tech/article/43211/1/ trans-algorithm-machine-learning-bias-discriminationchelsea-manning-edit.
- 36 Ada Ada Ada: "Yesterday, my post was taken down by Instagram", https://www.instagram.com/p/ CqczOObDeW0/?utm_source=ig_web_copy_link, in transitu, https://www.instagram.com/in_transitu_ig/.
- 37 Kate Crawford and Trevor Paglen, "Excavating AI: The Politics of Images in Machine Learning Training Sets," A/ & Society 36, no. 4 (2021): 1105–16, https://doi. org/10.1007/s00146-021-01162-8.
- 38 Ada Ada Ada: "Gendered ads" story (https://www. instagram.com/stories/ highlights/17983355624377803/) from https://www. instagram.com/ada_ada_ada_art/.
- 39 According to an analysis from 2021, Instagram "shares a staggering 79% of your data with other companies. Including everything from purchasing information, personal data, and browsing history" (Stokel-Walker, Chris. 2023. "Instagram is sharing 79% of your personal data with third parties." *Cybernews.*, https://cybernews. com/privacy/instagram-is-sharing-79-of-your-personaldata-with-third-parties/).
- 40 Keyes, "(Mis)gendering," 343.
- 41 Goriunova, "The Digital Subject."
- 42 Goriunova, "The Lurker."
- 43 Quoted from Fotografisk Center's Instagram video story: "ADA ADA ADA. Get a behind-the-scenes insight..." https://www.instagram.com/reel/C01N_jMhHO/?utm_ source=ig_web_copy_link from https://www.instagram. com/fotografiskcenter/.
- 44 Ada Ada Ada: "Gendered ads" story (https://www. instagram.com/stories/ highlights/17983355624377803/) from https://www. instagram.com/ada_ada_ada_art/.
- 45 Keyes, "(Mis)gendering," 344.
- 46 Chris Stokel-Walker, "Instagram Is Sharing 79% of Your Personal Data with Third Parties," *Cybernews*, 2023.
- 47 Safiya Umoja Noble, Algorithms of Oppression: How Search Engines Reinforce Racism (New York: New York University Press, 2018).
- 48 Lisa Gitelman, *Raw Data Is an Oxymoron* (Cambridge, MA: MIT Press, 2013).