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# Life is AI Cabaret
## Queering Alterity through Dataset Curation*

### 1. Entering the first deepfake drag-act

The foundation of the following pages, as well as the theoretical object under consideration, revolves around the artistic platform <www.zizi.ai>, designed by Jake Elwes. Once entered *The Zizi Show* (the precise title of the artwork), we are immediately welcomed by an auditory landscape intertwined with the soundtrack from Bob Fosse's iconic cinematic creation, *Cabaret*. This sonic backdrop is thoughtfully paired with a captivating voice-over, enticing our active engagement in an extraordinary spectacle: the first deepfake drag-act. However, a fundamental question arises: what precisely does this encompass?

As soon as we commence our interaction with the platform, we witness a fluid transformation of drag performances through artificial agents: digital embodiments undergo continuous transitions, evolving into captivating performances that unveil a customized drag experience unfurling upon a virtual stage. After being welcomed, the host of the show, transformed by the use of deepfake technology into a constantly mutable entity, provides us with the necessary tools to initiate the experience. From performer to performance, the platform empowers users to tailor the show letting the spotlight falls on the normativity governing artificial intelligence when recognizing and reproducing human identity. Indeed, central in *The Zizi Show* is the focus on the deficiency in diversity that persists within the training datasets harnessed by neural networks during the developmental phases of a wide array of artificial intelligence computational models.

A pivotal endeavour of the artistic project is thus to squarely address this crucial void by using a peculiar non-human agent: the deepfake.

In the digital age we currently live, the proliferation of AI-based technologies has given rise to new and intricate phenomena within the media landscape. Among these, deepfakes stand as a remarkable illustration of the synergy between artificial intelligence and the manipulation of data extractable from images and videos. Within this perspective, the term 'deepfake' represents a neologism that signifies an audiovisual artefact resulting from the automated alteration of images, crafted through deep neural networks, with the intent of imbuing them with an aura of authenticity. These media artefacts closely approximate the visual attributes of images designed to appear photographic, employing an indexical, spatiotemporal connection. To achieve this, deepfake technology relies on multiple layers of artificial neurons in order to acquire and replicate intricate patterns within datasets. The term 'deep' conveys the inherent complexity of the computational architectures utilized, enabling neural networks to progressively acquire the ability to simulate representations. This elevated level of complexity plays a pivotal role in processing images and videos, as it facilitates capturing and replicating the nuanced visual subtleties that discern authentic content. A distinctive hallmark of deepfakes is, hence, their capacity to manipulate visual data, potentially leading viewers to believe that synthetically produced material is genuinely authentic. These neural networks intricately acquire visual details, encompassing expressive gestures and nuanced features of objects or individuals undergoing replication, thus equipping them to generate content that closely approximates reality.

Nevertheless, it is crucial to underscore that, although the intention may appear to be grounded in deception, no inherent obstacle exists to the production of deepfakes that are openly and distinctly contrived. These are deepfakes wherein their artificial essence can be concretely manifested and reified. This particular scenario is tangibly exemplified in the case of *The Zizi Show* and its act of curating datasets within a performative[1] framework. Subsequently, in the ensuing discussion I will undertake an analysis

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[1]    It appears crucial to emphasize the dual reflection on performativity, the near aporia, flowing through the project. In *The Zizi Show* performance undoubtedly pertains to the gender aspect of cabaret, while simultaneously addressing the gender dimension of identity performance.

of the artistic project, approaching it from multiple standpoints. This will involve employing a semiotic framework, which is attuned to comprehending alterity within our posthuman environment (Braidotti 2019; Ferrando 2019). Additionally, a design perspective will be incorporated, with creativity (Munari 1971; Deni 2016) as its core methodology for addressing ethical and social concerns. This analysis will encompass an exploration of the concepts of enunciation and subjectivation, investigating how their dynamics undergo transformations in our contemporary context.

## 2. Designing alterity through the dataset

A prevailing common thread interwoven throughout drag performances, including our pioneering deepfake endeavour, lies in the embodiment of corporeal rebellion and the deliberate design of its mutability. This defines the constraints normalized by a gender identity logic fixated on categorizing bodies within a binary and oppositional schema. The drag performance itself functions as a potent vehicle for transcending the confines of that normativity, manifesting through the choreography of bodies, the exploration of roles, the deconstruction of genders, and the unfettered expression of desires that subvert the dichotomous portrayal of gender binarism. Throughout the performances, the inherent contrivance of normative discourse can be spotlighted when addressing the binary pattern of gender identity.

Judith Butler (1990), who embarked on a seminal exploration of drag performances as a theoretical subject within their philosophy, eloquently characterizes this phenomenon as an exposure to vulnerability – a recognition of dispensability that simultaneously carries a subversive potency. Upon severing ties with the notion that private existence can be demarcated from interdependency and reciprocities, Butler's insight resonates: our bodies, by their discourse, inevitably stand as open and exposed entities. Consequently, individual subjective lives become intertwined with the broader tapestry of cultural, political, economic and, of course, technological agents. Negotiating within this intricate web, individual lives artfully tread the delicate equilibrium to secure politics of recognition (Chun 2021). Yet, this overarching openness can only be attained through the acknowledgement of a profound interdependence that envelops the very essence of life itself. This recognition compels us to assume the manifold

responsibilities intrinsic to this openness. Echoing Butler's paradigm, a question arises: how does one navigate this openness within a world progressively undergoing a re-ontologization (Floridi 2022), wherein the fabric of existence is progressively ensconced in data to empower the multifarious tasks executed by artificial intelligence?

In the quest to address this enquiry, I advocate for a thorough exploration of the concept of designing alterity within the realm of artificial intelligence and machine learning. This concept should be regarded as a central focal point for projects that revolve around contemporary data-driven technologies. Therefore, designing alterity refers to the intentional construction and inclusion of diverse and nonconventional perspectives, identities and characteristics within datasets to challenge normative paradigms and amplify underrepresented voices. This concept signifies an intentional departure from conventional data collection practices that often perpetuate biases and reinforce prevailing stereotypes.

Curating datasets, as a preparatory step for training machine learning models, becomes a powerful tool for constructing and enhancing a more equitable AI. The process can involve meticulous selection and inclusion of a wide range of data points that represent varying dimensions of human experiences and identities. This curation transcends the superficial level of diversity by seeking to incorporate data that embody the intricacies of the world in which we live.

Within this perspective, it is pertinent to consider a range of transformations that can be activated through the curatorial process of dataset development. This process can:

– *Challenge bias and stereotypes*. The curation of datasets to encompass diverse demographics, cultures and identities inherently confronts the biases and stereotypes that often pervade existing datasets. This incorporation of a broader spectrum of perspectives equips resulting models to offer a more refined and inclusive comprehension of intricate issues;
– *Promote fairness and equity*. The deliberate emphasis on alterity during dataset curation strives to address issues of fairness and equity. By incorporating a representation of diverse experiences while minimizing biases, technologies stemming from such datasets are better poised to cater to a wide array of user groups reducing discriminatory tendencies; and finally

- *Empower underrepresented communities*. The act of deliberately designing for alterity serves to empower underrepresented communities by acknowledging and valuing their experiences. This inclusivity can subsequently lead to increased visibility, recognition and representation within AI-driven applications, thereby bridging existing gaps in representation.

By delving into these transformations, projects such as *The Zizi Show* can uncover the profound potential of curating datasets with an alterity-driven focus, reaching beyond epistemic limitations and enabling AI technologies to contribute to a more equitable and inclusive landscape. Designing alterity through datasets serves thus as a pivotal avenue for enhancing the inclusivity, fairness and accuracy of AI and machine learning technologies. Directing attention towards the curatorial dimension of datasets allows us to broaden our perspective on the collection of data and the epistemologies that traverse them.

Conceptualizing the design of a dataset in curatorial terms (Cáceres Barbosa and Voto 2021) enables us to consider the continuum (Jo and Gebru 2020) that exists between archives as repositories of socio-cultural data and datasets as clusters of information stored for artificial intelligence comprehension (Voto 2022). From a semiotic standpoint, the act of archiving always involves a process of re-enunciation by using a specific medium that preserves data and stores information, thereby becoming an enduring reminder. However, this process is always bound by its limits and thus necessitates a complementary element that simultaneously serves as a mnemonic and informative one. This supplementary aspect proposes both a technique for data compilation and a technology for the annotation process. Throughout this viewpoint, the informative fallacy of the archive (Acebal, Guerri and Voto 2020) comes into play: beyond its role as a repository, each archive generates knowledge and exerts performative consequences on the ways in which it informs and recalls. This dynamic interaction underscores the reciprocal relationship between information storage and the generation of knowledge within archival contexts.

## 3. Rendering alterity opaque through curated datasets

As articulated by Umberto Eco in his work *A Theory of Semiotics* (1976), semiotics serves as the discipline dedicated to the study of all that can be em-

ployed for deception. This foundational principle underscores the utility of resorting to the discipline within today's digital iconosphere, as it aids in unravelling the nuanced implications that can be attributed to a visual fabrication. It is not a stretch to recognize that, throughout the course of human history, the manipulation of representations has been a recurring phenomenon, inciting a reciprocal cognitive interaction between the realms of fiction and perception. Similarly, it is evident that in our contemporary landscape we confront a visual culture in which falsifications and counterfeits are influenced by intentionality that transcends the realm of the human. Within this context, the presence of artificial agents, such as deepfake technology, operates to enunciate reality in a transparent manner. In the words of the art critic and semiotician Luis Marin (1989), this enunciation generates an effect of reality,[2] albeit one in which the material essence is significantly diminished.

One of the key concepts upon which semiotics has been built is that of enunciation, which serves as the instance of mediation between the language – *langue*, intended as a language even beyond the verbal one –, in its capacity as a collective repository, and the speech – *parole* –, as its concrete realization. In this context, the drag deepfake performances presented by *The Zizi Show* can be understood as practices of enunciation of alterity. These performances highlight the inherent tension in which identities are embodied – a tension that arises between the repository of collective writings and expectations concerning the enactment of gender identity on

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[2]     The concept of "effect of reality" encompasses both the negotiation of ingrained habits and the interaction with stimuli. Since we have become accustomed to this notion of reality, it appears genuine and, simultaneously, it engages with the physiological aspects of human perception. It is within this negotiation that synthetic technologies, giving rise to deepfake, find their place: deepfake engage in a dialogue with the Western visual culture, generating reality effects that seem plausible to our visual senses. Yet, they introduce a subtle nuance of meaning: deepfakes utilize an array of tools to veil their artificiality. This concealment, however, carries implications, especially concerning the horizons of representation and access to contemporary visual culture. Technological advancements have equipped artificial intelligence with the ability to generate images from scratch, thanks to the proliferation of machine learning and generative adversarial networks. This capacity is marked by a potent and nearly imperceptible suspension of disbelief. However, it is evident that machine learning erodes many beliefs associated with artificial intelligence, as it has a propensity to reinforce and perpetuate social biases. This renders the technology neither entirely artificial nor genuinely intelligent (Crawford 2021). In light of these concerns, a significant drawback of these technologies is their reliance on data, wherein the training set might inadvertently replicate human values and biopolitical constraints. Consequently, the collection of data frequently ends up reifying hegemonic power structures.

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one hand and the tangible, individual performances on the other. In effect, these practices act as a medium of mediation between these layers. Furthermore, following the work of Marin on visual enunciation (1989), it is possible to distinguish between transparency and opacity in enunciation, which is the difference between representation and its displaying. An image can show itself transitively, in a transparent enunciation, when representing something; but it can also display a reflexive manifestation, in an opaque enunciation, when presenting a representation that reflects upon its own composition, its materiality.

The enunciative process undoubtedly encompasses the involvement of both human and non-human agents, resulting in a dynamic interplay that resonates within our posthuman ecosystem. Positioned as intermediaries between the expressions of identity performances and the socio-cultural foundations of identification, the process of subjectivation also engages with the construction of meaning and its subsequent incorporation into patterns. The enunciative praxis of subjectivity, therefore, constitutes the level at which the issue of gender power dynamics, as well as the gender agency within its environment, can be addressed. Therefore, this level of analysis can also questions the formation of social meaning and the manner in which it becomes a habit, to use the vocabulary of Charles S. Peirce, consequently fostering a predisposition to action. The collective set of habits governing gender dynamics, permeating discourses and language, seamlessly influences our actions without undergoing interrogation or critical examination, ultimately regulating our behaviours and attitudes – a form of conditioning denoted by Teresa De Lauretis (1984) as "experience".[3] In essence, the enunciative praxis of subjectivity underscores the nature through which social sense-making occurs and how these habits,

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[3]    As defined by de Lauretis in her *Alice Doesn't*, experience is: «the general sense of a process by which, for all social beings, subjectivity is constructed. Through that process one places oneself or is placed in social reality, and so perceives and comprehends as subjective (referring to, even originating in, oneself) those relations-material, economic, and interpersonal-which are in fact social and, in a larger perspective, historical. The process is continuous, its achievement unending or daily renewed. For each person, therefore, subjectivity is an ongoing construction, not a fixed point of departure or arrival from which one then interacts with the world. On the contrary, it is the effect of that interaction-which I call experience; and thus it is produced not by external ideas, values, or material causes, but by one's personal, subjective, engagement in the practices, discourses, and institutions that lend significance (value, meaning, and affect) to the events of the world» (1984: 159).

originating from the gendered realm, become embedded within our actions. This concept prompts an interrogation of the unexamined societal constructs that underpin our behaviours and shape our identities, as well as highlighting the influence of such constructs on the formation of individual and collective experiences such as, for instance, the discourses on technologies.

Nowadays, a widespread, albeit somewhat dystopian, perception of artificial intelligence as a vehicle of transparent enunciation exists. In contrast, the work of Jake Elwes advocates for an exuberant opacity, a form of opacity that challenges the conventional enunciation of gender identity. The performances designed in *The Zizi Show* have been meticulously crafted to visualize and embody the visual rhetoric of identification, thereby altering it within the automated framework of our data culture. To achieve this, the project meticulously curates the opacity of the dataset encompassing facial and bodily images, which includes a diverse array of portraits depicting drag personas. This curatorial effort serves as a catalyst, sparking a profound transformation within the underlying weights of the neural network. The neural network's internal weights thus diverge from the entrenched norms that have been shaped by conventional training datasets, which often adhere to a binary gender framework. By deviating from this established norm, the neural network utilized in the design of drag performances within *The Zizi Show* embarks on an uncharted exploration that gravitates toward the expansive and multifaceted realm of queerness. Through this opaque trajectory of divergence, the neural network showcases its capacity to transcend the confines of normativity in identity representation, embracing a paradigm characterized by fluidity, nonconformity and a broad spectrum of gender identities.

Sensitized by this curated gesture of opacity, the neural network undergoes a profound recalibration of its interpretive framework. As a result, it gains the capability to authentically encapsulate, reproduce and even amplify the nuanced features that define the enunciation of drag subjectivity. This reconfiguration testifies to the transformative potential embedded within the infusion of diversity into training datasets, further advancing the trajectory towards AI models that mirror and celebrate the intricate tapestry of posthumanity.

## 4. Placing alterity in the latency of the dataset

It is within the latent space – an abstract mathematical representation of detected features within the training data of the neural network – where the recalibration of the dataset occurs. This space enables the generation of artificial images from multiple data points, each containing informative features. Deep neural networks possess the capacity to discern underlying patterns within data, which can be further explored by crafting algorithms to delve into the latent potentialities of learnt distributions. This undertaking yields original instances of data creation devoid of design rules, yet retaining a distinctive semblance of reality.

In this perspective, the latent space serves as a spatial dimension where the transformation of an image from potentiality to actuality becomes feasible. It resides within the virtual realm of creativity, delineating the coordinates of all conceivable outputs. Similar to how a generative grammar of language transcends limitations to a set of utterances, the latent space shares this generative characteristic: it is not a repository, but rather a spatial domain characterized by a hierarchical strategy to dissect any given input. The analytical process initiates with elementary features such as edges and angles, progressively advancing towards more sophisticated ones like noses and eyes. Essentially, the latent space represents the highest-level conceptual compression of input data, standing as the penultimate step before the neural network's final output. Nonetheless, this spatial dimension remains elusive to human perception due to its intricate nature, typical neural network latent spaces exist as hyperspheres with approximately 100 dimensions.

Throughout the training process of a neural network, the latent space is designed, narrowing the realm of potentialities and subsequently enhancing the relevance of visual patterns. A narrower latent space reproduces the input, while an excessively wide one generates nonsensical outputs. In the creation of deepfake drag performances for *The Zizi Show*, deliberate constraints were applied to the latent space of an existing neural network for facial recognition. The network had been trained on a predominantly homogeneous dataset with a notable Western bias. To challenge gender constructs and explore the significance of facial features in reproducing gender identities, the latent space was enriched with a thousand images of drag personas. This augmentation prompted the network to generate

exaggerated and discordant facial features and body forms. The outcome assumes an opaque quality, materializing the ever-evolving exaggeration of the face, apt at highlighting the intersection between gender and genre as a performative mechanism of identity.

The opacity within the latent space of the dataset employed in *The Zizi Show* facilitated a transformation within facial and bodily representations that do not exist in the physical world or the virtual domain. By rendering the latent space of the dataset reified, the project establishes a foundation for reevaluating the entrenched patterns that dictate the significance of gender identification in facial perception within the era of deepfakes. This raises the last question: is there truly a minimal visual pattern that signifies a gender identity when projected onto a face?

## 5. Towards conclusions

Deepfake technology is emerging as a significant advancement aimed at addressing a prevailing concern in contemporary societies: the concept of disembodied identities, where visual and textual representations of individuals circulate independently of their physical presence. This phenomenon has its origins well before the advent of audiovisual media and electronic databases, with the circulation of such depictions laying the foundation for certain human identities to detach from their physical embodiment. The nineteenth century witnessed the introduction of novel communication technologies like telegraphy, photography, telephony and the phonograph, which brought new mediated forms to these representations. This amplification led to an eerie phenomenon of omnipresent non-physical replicas permeating society, distinct from their human counterparts. It is in this context that, in 1886, Frederic Myers of the *British Society for Psychical Research* introduced the term "phantasms of the living" to describe the proliferation of these humanoid duplicates (Gates 2011).

While we have grown accustomed to these phantasms' presence and their roles in representation within our lives, the era of computerization has sparked a resurgence in their quantity, manifestations and applications. This resurgence has intensified the challenge of re-embodying these depictions within society. In the pursuit of reuniting disembodied identities, artefacts like standardized documents, archives and administrative procedures for managing individual identities have supplanted the more per-

sonal and informal trust and recognition inherent in smaller-scale social structures. But how to re-embody a deepfake?

The investigation into *The Zizi Show* and its intricate interplay involving the curation of datasets and the performative enunciation of subjectivity has demonstrated an intention to formulate a design methodology aimed at the re-embodiment of alterity within the context of algorithmic reproducibility. By analysing this project through diverse lenses, we have unveiled how semiotic insights and design perspectives intersect, providing a proposal for designing alterity into the evolving landscape of posthuman creativity. Employing creativity as a catalyst for addressing ethical and social concerns underscores the project's significance in prompting critical discussions at the juncture of art and technology. Through an examination of enunciation and subjectivation, we have demonstrated how these concepts morph within the context of our ever-changing contemporary milieu. In the end, *The Zizi Show* stands as a testament to the potency of design exploration in skilfully navigating the intricate nexus of identities, realities and perceptions within the dynamic landscape of the contemporary world.

# References

**Acebal, Martín; Guerri, Claudio; Voto, Cristina**
2020     "The Performativity of the Archive from a Semiotic Perspective", *Southern Semiotic Review*, 13(2), 31-47, <https://doi.org.10.33234/ssr.13.3>.

**Braidotti, Rosi**
2019     *Posthuman Knowledge*, Cambridge, MA, The MIT Press.

**Butler, Judith**
1990     *Gender Trouble: Feminism and the Subversion of Identity*, New York, Routledge.

**Cáceres Barbosa, Andrés Manuel; Voto, Cristina**
2021     "Archive, Practices, and Memory Policies. The Centro Editor de América Latina from a semiotic perspective", *Signata*, 12, <doi.org/10.4000/signata.3071>.

**Chun, Wendy Kyong Hui**
2021     *Discriminating Data. Correlation, Neighborhoods, and the New Politics of Recognition*, Cambridge, MA, The MIT Press.

**Crawford, Kate**
2021     *Atlas of AI: Power, Politics, and the Planetary Costs,* New Haven, CT, Yale University Press.

**de Lauretis, Teresa**
1984     *Alice Doesn't: Feminism, Semiotics, Cinema,* Bloomington, Indiana University Press.

**Deni, Michela**
2016     *Conception et creation*, In Wikicreation. Institut ACTE UMR 8218 (Univ. Paris 1 Sorbonne, CNRS) / LabEx CAP, 1-20.

**Eco, Umberto**
1976     *A Theory of Semiotics*, Bloomington, Indiana University Press.

**Ferrando, Francesca**
2019     *Philosophical Posthumanism,* London, Bloomsbury.

**Floridi, Luciano**
2022    *Etica dell'intelligenza artificiale*, Milano, Raffaello Cortina.

**Gates, Kelly**
2011    *Our Biometric Future: Facial Recognition Technology and the Culture of Surveillance*, New York, New York University Press.

**Jo, Eun Seo; Gebru, Timnit**
2020    "Lessons from Archives: Strategies for Collecting Sociocultural Data in Machine Learning", *Conference on Fairness, Accountability, and Transparency (FAT\*'20)*, January 27-30, 2020, Barcelona, Spain, <doi.org/10.1145/3351095.3372829>.

**Marin, Louis**
1993    *Opacité de la peinture. Essais sur la représentation au Quattrocento,* Paris, Éditions de l'École des hautes études en sciences sociales.

**Munari, Bruno**
1971    *Artista e designer*, Bari, Laterza.

**Voto, Cristina**
2022    "From archive to dataset. Visualizing the latency of facial big data", *Punctum. International Journal of Semiotics*, 8(1), 47-72, <doi.org/10.18680/hss.2022.0004>.