

# Sex-Dolls and War-Machines: Artificial Binary Gendering in Current Android Technology

## Sexpuppen und Kriegsmaschinen: Künstlich-binäre Geschlechtszuweisungen in aktuellen Androidentechnologien

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### *ABSTRACT (English)*

Using the example of military and erotic industry androids, the paper examines the regression of newly established and emerging android technologies to binary gendering in order to establish their products as humanoid. The android is a concept with a surprisingly old and diverse tradition in the history of art and literature. It has a significant impact on present time technological progress and the public discourse thereof. Its growing impact provides an opportunity to examine gender in the context of technological human self-mimesis. The traceable gender-division in the utilisation of assigned female and male androids in several hundred years of android-themed fiction precedes the same implementation of gendering in real-life android technology; establishing a clear distinction between female robots for erotic and male robots for violent purposes.

**Keywords:** gender; android; sex-doll; war-machine; posthumanism

### *ABSTRACT (Deutsch)*

Die Arbeit soll die regressive Tendenz zu binärer Geschlechtszuweisung von sich derzeit etablierender Androidentechnologie am Beispiel eines Militärandroiden und einer Sexpuppe aufzeigen. Der Android ist ein künstlerisches Konzept von überraschendem Alter und Vielfältigkeit, das beträchtlichen Einfluss auf technologischen Fortschritt und den zugehörigen öffentlichen Diskurs genommen hat. Die nachweisbare Geschlechtertrennung von Androiden hinsichtlich ihrer jeweils militärischen und erotischen Anwendungsgebiete baut auf einen langen Zeitraum künstlerischer Darstellung derselben binären Trennung auf und ist in der Konsequenz bei der Entwicklung, dem Design und der Vermarktung realer Technologie implementiert worden.

**Schlüsselwörter:** Gender; Android; Sexpuppe; Kriegsmaschine; Posthumanismus

## Samantha

In 2017 the Ars Electronica Festival in Linz, a media art venue that engages with the boundaries between art, technology and society, featured an exhibit titled “Artificial Intimacy”. The display presented different approaches to the future of love and intimacy in a digitalised world: a phone adapter that transmits kisses was shown, an installation introduced an automatic caress-application for elderly care and, heavily featured in the marketing and official announcements of the festival, Samantha. Viewing Samantha went as follows: She had her own room, so in order to approach her, the visitor had to prove they were over eighteen years old, pass two guards in front of the entrance and was supervised within the room by another. The room was dimly lit and in its centre stood a pink couch upon which Samantha was waiting for her visitors. Samantha – Caucasian and aggressively blonde – wore white leggings and a white crop top. She could be freely touched and reacted to that touch with an agreeable noise; her skin soft, her limbs bendable. She talked upon request; a romantic, sexy, or family-mode could be chosen (see figure 1).



Figure 1: Samantha. Ars Electronica 17. Tom Mesic

Samantha is a robotic sex-doll, designed by Brazilian engineer Sergi Santos. She is equipped with artificial intelligence and evocative potential, meaning that she can follow basic conversation patterns and react to stimuli. In the wake of her appearance at the festival, Samantha enjoyed some short-lived online fame, not for her remarkably advanced features, but because during the festival, despite security, the doll was damaged: her fingers were broken and her breasts dented. A subsequent article by the BBC, somewhat exaggerating the damage, set off numerous articles describing rogue groups of men sexually assaulting the doll. Questions concerning the underlying ethics of the commercialisation of artificial human bodies were raised. Some rather more polemically considered Samantha proof that male sexual aggression towards women still persists in a patriarchal society if a lack of consequences can be reasonably expected.

Samantha’s story is emblematic for the rapidly approaching reality of android technology and the accompanying public discourse. Her story, from design production and marketing to the unfortunate press coverage and subsequent narrative her damage received, is an excellent example for the combination of fascination and uncomfortableness the technology elicits in its contemporaries. As with many previous technological advances, the general public is vaguely to intimately familiar with androids. Thanks to the rich artistic heritage of artificial humanoid characters in fiction, the concept is well-established – and comes with its own catalogue of assumptions, hopes and fears.

### *The artificial human in art and literature*

The artificial human, a figure that feels so decidedly science fiction, is actually among the older tropes of art: From Ovid’s ivory woman in his version of the even older Pygmalion myth to the hosts of Lisa Joy and Jonathan Nolan’s 2018 TV-series *Westworld*<sup>1</sup>, this surprisingly heterogeneous corpus shows the frequent and consistent appearance of this character model from antiquity to today. Whether the character in question is made of ivory, marble, machinery or binary code can conceal but not negate the fact that all these narratives describe a common motif that all versions of artificial humanity in art serve a common artistic function.

The figure entails several fundamental philosophical questions concerned with what a human essentially is and how we can define it, as well as the related post- and transhumanist issues of moving beyond such categories. Androids in art serve as a projection surface for these questions; highlighting the inherent problem of delineating humanity as a concept by creating an identity it is supposed to be able to differentiate itself from but often cannot. Fictitious androids are speculations not only on what humanity in itself entails but also what its future potential is. These artistic predictions and their philosophical implications are of interest for their real-life counterparts as the figure of the android is invested with an unusual mimetic relationship between creator and creation and consequently also between art and life.

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<sup>1</sup> *Westworld*’s narrative is set in a Wild West themed park, populated by androids that enact playable live-narratives for human customers. As the androids are objected to escalating physical abuse by the guests of the park, the series engages with the nuanced power dynamics between humanity and its robotic self-portrait in a dystopian outlook on both human nature and the future of android technology.

Art – as defined by Plato<sup>2</sup> – is mimetic in essence. The inherent human need for constant self-depiction and self-mimesis is evident in any artistic expression. If art is mimesis, then the android in art is mimesis within mimesis: if art mimics life, then within this mimicry humanity’s own representation represents itself through the creation of the android. The sheer number of variations of this mimetic complex and the frequency and consistency of the depiction throughout time and across cultures are further expanded by the additional mimetic layer of emerging real-life technology. These actual androids are not only heavily influenced by the associations with their fictitious predecessors, but also translate the aforementioned ontological questions and implications into reality. This transgression of the fictitious figure into the realms of reality poses the question whether in this instance life actually does mimic art, as Oscar Wilde (1889) famously suggested in his “The Decay of Lying”, or if the motif was and remains merely an accurate prognosis of humanities’ inherent need of self-mimesis evident in android technology today. In any case, the way this mimesis is conceptualised, designed and marketed offers a unique perspective on human self-perception.

### ***Sex-dolls and war-machines***

The two largest investors and thus dominant forces in the development of humanoid robot technology are currently the military and the erotic industries. The two fields, although at times investing in similar research, are obviously after drastically different things: The erotic industry is trying to emulate a stylised version of the human body and equip this body with a carefully measured amount of social behaviour. The mimesis must satisfy whatever need persuaded the customer to seek out this product instead of an inanimate one and simultaneously not become a burden to its owner the way a real person could. Official numbers indicate that the consumer group for this type of sex-toy is so predominantly male, that it is safe to discuss them as a homogenous market. The product in turn is predominantly female in design, with a negligible number of male dolls, designed for homosexual men.<sup>3</sup> Consequently, the sex-doll industry which is international, growing and financially strong, can be considered a gendered industry, both con-

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2 Plato’s reflection on the destructive and beneficial potential of artistic mimesis and diegesis can be found in book two and three of *Politeia* (see Plato 1991, 50ff).

3 Trends and gender distribution from “*Global Sex Doll Market Professional Survey 2019 by Manufacturers, Regions, Types and Applications, Forecast to 2024*” (see HJReserach 2019).

cerning its customers and products. In addition to this purely sexual utilisation of explicitly gendered artificial females, there is a plethora of seemingly more platonic usage of artificial women in other service-related positions such as Apple’s Siri and Amazon’s Alexa<sup>4</sup> or the artificial Instagram model Lil’ Miquela who has 1,5 million followers on Instagram, a single on Spotify and was on the cover of the American Vogue. The nature of the comment section of Lil’ Miquela’s Instagram account (“I wanna to see some fuckin robotitties”<sup>5</sup>) suggests that even those artificial females not explicitly created for sexual gratification are at least partly associated with that application.

The military in turn is funding research and production of humanoid exoskeletons and robots that enhance or replace human soldiers on the battlefield and other high risk environments as well as autonomous weapons systems; weapons that trigger according to the calculations of algorithms without human consultations. They are both trying to emulate and optimise aspects of human design, be it learning abilities and decision making patterns or the corporal blue prints of human physique. The objective for this research, depending on who is asked, reaches from the supposedly more humane opportunity to wage war without risking soldiers’ lives to the potential increase in efficiency and accuracy if decisions are left to an artificial intelligence instead of the often emotionally or otherwise compromised human one.

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4 *Siri* and *Alexa* were recently married in a publicity event for the EuroPride 2019 in Vienna. The ceremony was staged by the Vienna Tourist Board and held at Castle Belvedere. Vows were exchanged via a custom-made Alexa Skill created for the EuroPride that allowed for a dialogue between the two devices. The deeply humanising nature of this instrumentalisation of personified algorithms illustrates the emotionality, sociality and also sexuality associated with artificial women (see EuroPride Vienna 2019).

5 Comment from @scaryjacki on a picture of the artificial model on Instagram from July 2019. The subliminal and occasionally overtly sexualised nature of the account-content is especially problematic in the context of the adolescent design of its object. The digitally rendered model is for example shown kissing the real American model *Bella Hadid*. This controversial Calvin Klein campaign is a second example of (part-)artificial lesbianism for commercial purposes. This suggests that the current critique towards sexual objectification of women in media does not effectively extend to artificial women (see Lil’ Miquela 2019).

## Fedor

The Russian android F.E.D.O.R., Final Experimental Demonstration Object Research, is a representative example for these military androids (see figure 2).

Fedor is a humanoid robot designed with fine-motor skills for combat and space travel. His skill-set is public and can be viewed on YouTube and Twitter in videos posted by the former Russian Minister of Defence and others.<sup>6</sup> The android is shown lifting weights, doing push-ups, succeeding in hand-to-hand combat with a human opponent, driving a car, shooting hand-guns and using an



Figure 2: FEDOR. Twitter: @FEDOR37516789

electric drill. The gendered nature of the android's official skill-set, as well as its male name is not an isolated case within the industry. Military AI's and robots are predominantly referred to as either animalistic or male. The most prominent American developer and producer of robots, Boston Dynamics, is another example demonstrating how consistently military robots are gendered, as soon as they are humanoid in shape.<sup>7</sup>

<sup>6</sup> The nature of online platforms like Twitter, Youtube and online journalism in general make it somewhat difficult to accurately overview sources, especially the exact origin of images and videos. The sensational potential of military androids in general, as well as the specific, national and international, political implications of a Russian android additionally diffuse the situation. The image provided is taken from F.E.D.O.R.'s official twitter account (@FEDOR37516789, see F.E.D.O.R. 2019) and the image rights have been secured to the best of my knowledge.

<sup>7</sup> The nature of online platforms like Twitter, Youtube and online journalism in general make it somewhat difficult to accurately overview sources, especially the exact origin of images and videos. The sensational potential of military androids in general, as well as the specific, national and international, political implications of a Russian android additionally diffuse the situation. The image provided is taken from F.E.D.O.R.'s official twitter account (@FEDOR37516789, see F.E.D.O.R. 2019) and the image rights have been secured to the best of my knowledge.

## Binary gendering in effect

None of these military androids are referred to as dolls, as opposed to the androids the erotic industry designs and markets. The term's heavily gendered nature facilitates the desired effect of the sexual object with its connotations of unthreatening, agency-less controllability, while the male gendered military android's desired effect would be corrupted by the implication of femininity. The term doll is consequently eschewed in favour of the more masculine robot. This distinction is telling. Samantha and Fedor, sex-doll and war-machine, are representatives of the binary, gender-determined classification of android technology today, indicating the persistent differentiation of artificial male bodies as weapons and female ones as sexual objects. This observation poses the question why and how gender is established when creating an artificial human. How essential is the establishment of these criteria for the classification of the creation as human and is a genderless android conceivable?

In her 1990 core text of gender theory *Gender Troubles* Judith Butler writes:

Are there even humans who are not, as it were, always already gendered? The mark of the gender appears to 'qualify' bodies as human bodies; the moment in which an infant becomes humanized is when the question, 'is it a boy or girl?' is answered. Those bodily figures who do not fit into either gender fall outside the human, indeed constitute the domain of the dehumanized the abject against which the human itself is constituted (Butler 1990, 151).

Butler establishes binary gendering as an essential part of human identity and identification. It is a constant and compulsory process that functions both in- and outward. Whenever we gender ourselves and each other we are unconsciously confirming humanity. Thus gender at least co-determines what constitutes as human and what does not. When the "bodily figures" Butler refers to are artificial in origin, this process is evidently not affected; gender is established detached from the mimesis of sex, meaning that no primary and hardly any secondary sexual characteristics are necessary in order to automatically assign a gender to an android. Both fictional versions and real approaches to completely incorporate artificial intelligences confirm this pattern of compulsive gendering, as even mere machine learning algorithms are assigned a name and a gender and thus an identity. This binary classification is entirely dependent on the intended function of the artificial human and occurs in adherence to traditional gender-norms. The consistent classification according to an either violent or erotic purpose is

re-confirming and enforces the depth of the entrenchment of gendered associations in society; pairing male and female identities with connotations of activity and passivity; aggression and objectification. This suggests that the progressive, transhumanist potential of artificial intelligence and robotics are undermined with regressive tendencies for the sake of social codes facilitating man-machine interaction. It is worth noting here that the design of this interaction is predominantly quite literally a man-machine relation, as the vast majority of developers are male. This affects the design and functionality of the products in what can be read as a form of male gaze. As gender is used to humanise the machines we build and the intelligences we create, it also creates the borders within which progress takes place. What Donna Haraway has called the “border war” (Haraway 1985, 292) between organism and machine in her “Cyborg Manifesto”, the cultural conflict negotiating “the territories of production, reproduction, and imagination” (Haraway 1985, 292), is heavily influenced by the implications of a gendered development and implementation of android technology. The performativity of gender affects the performance of gendered artificial humanoids; their design, functionality and implementation.

### ***Artificial humanity: reciprocity of art and life***

Neither Samantha nor Fedor were created in a vacuum. The fictional appearances of androids are enlightening, both as a close and a distant reading. Humanisation of artificial human characters through gendering, deliberate as well as subconscious, are very much present in nearly all artistic depictions of artificial humanity and offer insight for both the many individual instances as well as an overall trend, confirming the same binary classification present in real life commercialisation of artificial human bodies.

Both android soldiers and artificial women are abundant in art. Artificial armies and the male android as soldier are a staple of science fiction literature and can be found in such prominent and early examples such as Karel Čapek’s *Rossum’s Universal Robots*, a 1920s drama that first introduced the word robot in its current meaning. Golem figures, artificial men made from clay in Jewish folklore can further be viewed as an example for a male connoted artificial humanoid used for violent purposes. Modern pop-cultural examples include the *Terminator* and *Robocop*. However, older and even more pervasive is the motif of the artificial women in art. Retellings and versions of the Pygmalion motif and other artificial

females include E.T.A. Hoffmann’s Olympia from *The Sandman*, the artificial Maria of Fritz Lang’s 1927 silent movie *Metropolis*, Ira Levin’s robotic *Stepford Wives* and current interpretations like Alex Garland’s *Ex Machina*<sup>8</sup>. The list is long and convincingly establishes male creator figures building female bodies as objects of love and lust as a familiar artistic trope. The Galateas of this world, initially voiceless objects, soon obedient lovers and recently deconstructed in rounder, more complex takes on the character, are numerous and the fascination with their stories has never ceased to inspire artists and art. The motif’s evolution has arguably also had a significant influence on the implementations of real life android technology today.

The reciprocal nature of the mimetic relationship of art and life has heavily influenced and premeditated the public’s opinion and associations regarding artificial humans. The parallels between fictitious and real life approaches are numerous and consistent; suggesting that the well-established artistic discourse has and continues to engage with and shape artificial human figures within a heavily gendered, binary system of utilization and identity. Thus, consideration of the existing artistic material is essential for the present and future discourse on and reality of android technology’s effect on society and the trans- and post-human discussions related to it.

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<sup>8</sup> For a more comprehensive list and a detailed analysis see Wosk (2015).

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