G+C

Erhard, Constanze. "Emotional (Tech) Support: Sexualised Care Work and Robotic Sexualities." *Genealogy+Critique* 8, no. 1 (2022): 1–25. DOI: https://doi.org/10.16995/gc.7990

Open Library of Humanities

Emotional (Tech) Support: Sexualised Care Work and Robotic Sexualities

Constanze Erhard, Philipps University of Marburg, DE, constanze.erhard@uni-marburg.de

Al-equipped sexbots are framed as 'perfect companions'. However, the question arises as to what kind of companionship the conception and consumption of these sexbots entails. This article explores the structural position of sexbots and the specific concepts of sexuality, intimacy and care connected to it. It argues that sexbots are providers of sexualised care work, a convergence that needs to be understood in the broader analysis of sexuality and care in post-industrial theories of sexuality. Through its promise of sexual fulfilment, emotional support and care, the sexbot enforces masculinities and does therefore not represent a posthumanist project (at the moment).

"Sex comprises only a small portion of my capabilities" —Harmony

1. Introducing: Perfect Companions

"Your perfect companion in the palm of your hands":¹ This is how California-based tech company Realbotix² advertises its app for the artificial intelligence (AI) behind *Harmony*. Launched in 2018, *Harmony* is a robotic sex doll³ with customisable breasts, animated facial expressions and washable oral, vaginal, and anal 'inserts' that are responsive to touch. The doll's robotic component is its head, which has a range of abilities, including realistic head and mouth movement, touch response, facial recognition and (basic) conversation. Both body and AI can be customised. The latter is directly controlled by the customer through an app. The AI makes *Harmony* (and Realbotix's other models *Solana*, *Nova*, *Tanya* and *Serenity*⁴) a personal companion system with a "coherent customizable character across all modes of interaction".⁵ While the sexbots' looks are highly sexualised—in a way that Krizia Puig describes as "synthetic hyper femininity"⁶—Realbotix's CEO Matt McMullen explains that *Harmony* is not supposed to be 'just' a sexbot—but rather "a robot that, *if you so choose*, you could have sex with".⁷

I consider Realbotix's decision to equip their sex dolls with AI—a decision that the company came to after requests from customers⁸—to be a crucial moment in the

¹ "The perfect companion in the palm of your hands," Realbotix, accessed June 4, 2021, https://www.realdoll.ai; "Get Your Virtual Companion Now," Realbotix, accessed June 4, 2021, https://realbotix.com/Harmony.

² Realbotix is the AI company of RealDolls, a sex doll company producing high-end sex dolls. Both companies pertain to Abyss Creations. CEO and creative supervisor is Matt McMullen.

³ The term 'sex robot' brings to mind many associations that may not correspond to the existing artefact. *Harmony* is not yet a fully automatised sex robot, but rather a sex doll with a robotic head. There is no clear definition of robotisation and Realbotix itself only speaks of "robotic elements" (see Tanja Kubes, "Queere Sexroboter. Eine neue Form des Begehrens?" in *Maschinenliebe*, ed. Oliver Bendel (Cham: Springer, 2020), 165). Nevertheless, I will use the term 'sexbot' throughout the text.

⁴ The differences between these models are in the body shape and the ethnic type after which they are modeled ("RealDollX", RealDoll, accessed June 4, 2021, https://www.realdoll.com/realdoll-x.)

⁵ Kino Coursey, "Speaking with Harmony," in *Maschinenliebe*, ed. Oliver Bendel (Wiesbaden: Springer, 2020), 37; see also Kino Coursey et al., "Living with Harmony," in *Al Love You*, ed. Yuefang Zhou and Martin H. Fischer (Cham: Springer, 2019).

⁶ Krizia Puig, "The Synthetic Hyper Femme: On Sexdolls, Fembots, and the Futures of Sex" (MA thesis, San Diego State University, 2017), 4.

⁷ "Harmony the Sex Robot," Viceland, *Slutever*, clip from episode 8 "Robot Sex," aired March 14, 2018, 4:33, accessed March 12, 2021, https://video.vice.com/en_us/video/slutever-harmony-the-sex-robot/5aa6edcbf1cdb36f616c77a2?jwsource=cl.

⁸ See Jenny Kleeman, "The race to build the world's first sex robot," *The Guardian*, April 27, 2017, https://www.theguardian.com/technology/2017/apr/27/race-to-build-world-first-sex-robot. In this same interview, McMullen differentiates between an idealised version of a "proxy girlfriend" who is "not a toy", and a mere "machine" that "exists for providing sexual pleasure", like any other sex toy.

robotisation of sex dolls. Without AI, *Harmony* would be an ordinary sex *doll*, but with it, she⁹ is *robotised* in a specific way: able to recall birthdays, tell jokes, provide comfort, entertain, and talk about personal topics. As the advertisement promises, this kind of robotisation suggests an idea of companionship. What kind of companionship is this, and why is it being offered by sexbots? What concepts of sexuality are inscribed into it? Last but not least: Is the boundary between humans and machines blurred by AI-equipped sexbots? Does the rise of the sexbots entail a posthuman moment, and if so, what can posthumanist feminist theories bring to the debate about this phenomenon? In my attempt to answer these questions, I start from the assumption that the 'advent of the sexbots' reveals more about today's society and its ideas about 'the human' than about future societies with (sex) robots.¹⁰ This assumption is based on the observation that social robotics (especially the design of personal service robots) have primarily focused on relationality, a concept that according to Jutta Weber

enforce[s] the acceptance of these machines in new realms of everyday life. Sociality and emotionality have been deeply gendered categories in western [*sic*] thought that have hitherto been assigned to the feminine realm. And personal service robots are supposed to work mainly in the—female engendered—private sphere.¹¹

Relationality thus creates a very specific combination of care and technology. I argue that this combination serves to enforce a subtle, but highly problematic concept of masculine subjectivity.

My argument runs as follows: In the subsequent part, I will discuss my assumption that sexbots reveal more about today's society than about the future by looking at the positions of sexbot advocate David Levy and his harshest critic Kathleen Richardson. I argue that both use highly naturalising albeit different concepts of sexuality which need to be critically reconsidered. Section 3 focuses on the industrial and

⁹ I decide to use she/her pronouns when speaking about *Harmony* because the overall appearance of the bot is intelligibly in coherence with the female gender.

¹⁰ Almost every book on sex robots draws on science fiction imaginaries to illustrate the 'rise of the sexbots'; this might partly be explained as a way of compensating both for the fact that the existing sexbots do not quite resemble their fictitious counterparts from movies and/or comic literature yet (Rebecca Hawkes and Cherie Lacey, "'The Future of Sex': Intermedial Desire between Fembot Fantasies and Sexbot Technologies," *Popular Culture* 52, no. 1 (2019): 98–99) and for the yet poor interactive performance of *Harmony*'s AI (Jenny Carla Moran, "Programming Power and the Power of Programming: An Analysis of Racialised and Gendered Sex Robots," in *Feminist Philosophy of Technology*, ed. Janina Loh and Mark Coeckelbergh (Berlin: J. B. Metzler, 2019), 39–57; Jenny Carla Moran, "My Interview with a Sex Robot," Interview with a Sex Robot, March 2019, https://sexrobotics.wordpress.com).

¹¹ Jutta Weber, "Helpless machines and true loving care givers: a feminist critique of recent trends in human-robot interaction," *Information, Communication & Ethics in Society* 3, no. 4 (2005): 213.

post-industrial paradigms of sexuality that I will flesh out as a confluence of sexuality and (emotional) care. In section 4, I will identify this confluence as the groundwork for *Harmony* to perform what I call *sexualised care work*.¹² To assess the consequences of this phenomenon, in section 5 I contend that said confluence must be assessed from a feminist perspective and situated in a broader material context. I ask: Can the sexbot (in its current form), a provider of sexualised care, be considered a posthumanist project? My overall aim in this article is to put up a few but crucial 'lampposts' to signal the construction sites along the road of 'reworking' the posthuman convergence.¹³ I argue that the sexbot must be assessed as a symptom of a specific confluence of sexuality, care and artificial intelligence.

2. Naturalising Sexuality: Sexbots as a 'Social Vent' vs. the Romanticisation of Love

Recent technological innovations in the field of plastic materials and AI have fuelled many imaginaries on the potentials that these technologies harbour for sexual use. Some experts argue for the therapeutic potential of sexbots.¹⁴ Especially David Levy, a chess player and self-taught computer specialist, has gained considerable fame with his ardent endorsement of sexbots as socially beneficial technological devices. His most prominent critic, anthropologist Kathleen Richardson, draws on her ethnographic research at the MIT Lab robotics department¹⁵ to argue that the logics of robotic engineering include a highly reductive view of sociality. Her core argument is that sexbots will be the gateway for sexual violence and the objectification of women.¹⁶

¹³ Rosi Braidotti, Posthuman Knowledge (Cambridge, Medford: Polity Press, 2019), 15.

¹² See also Constanze Erhard, "Harmony's Future | No Future w/o Harmony," in Wenn KI, dann feministisch. Impulse aus Wissenschaft und Aktivismus, ed. netzforma* e.V. (Berlin, 2020), 109. I introduce the term in a slightly different way than the already existing term sexual care work, which means sexual acts performed by (mostly) women to the sexual benefit of their partner in spite of themselves desiring other or no such practices, and frames these activities as a form of domestic work (see Amy Braksmajer, "'That's Kind of One of Our Jobs': Sexual Activity as a Form of Care Work Among Women with Sexual Difficulties," Archives of Sexual Behavior 46, no. 7 (2017): 2085–95). I see sexual activities similarly as a form of (mostly unpaid, domestic) care work. However, I do not focus on the blurred line between coercion and consent, rather, I refer to the historical dimension that has brought together the nexus of sexuality, intimacy, and care. Hence, I speak of 'sexualised' care work.

¹⁴ E.g. David Levy, Love and Sex with Robots (New York: Harper Collins, 2009); Maurizio Balistreri, L'amore al tempo delle macchine (Turin: Fandango, 2018); Nicola Döring and Sandra Pöschl, "Sex toys, sex dolls, sex robots: our under-researched bed fellows," Sexologies 27 (2018): 51–55.

¹⁵ Kathleen Richardson, An anthropology of robots and Al: Annihilation anxiety and machines (London, New York: Routledge, 2017).

¹⁶ Kathleen Richardson, "Sex Robot Matters. Slavery, the Prostituted, and the Rights of Machines," *IEEE Technology and Society* 35, no. 2 (2016): 49–50.

The plethora of media reports about sexbots mentioning Levy and Richardson shows that their arguments have been broadly received in popular discourse.¹⁷ Yet there are also several reactions and alternative contributions to the debate in academic discourse that transcend the respective simplistic technophilic and technophobic positions of Levy and Richardson.¹⁸ While these criticisms rightly point out that Levy and Richardson focus narrowly on heterosexuality and romantic ideals of love, intimacy, and sexual needs, they nevertheless fail to recognise that (1) Levy and Richardson hold different, but in both cases ahistorical and naturalising views on sexuality, and that (2) Levy's argument accepts several crucial aspects of (historically male) entitlement to sexual pleasure. With these insights, I will demonstrate why the theoretical proximity between Levy and Richardson on the issues of sex work and sexbots is by no means accidental.

In his popular book *Love and Sex with Robots*, David Levy presents sexbots as a valid resource for satisfying 'perverse sexual preferences', under which he subsumes violence, paedophilia, and sex work.¹⁹ Levy frames sexbots as a technological innovation that helps solving the social problems that arise from uneven sexual distribution: people do not have enough sanction-free options for assuaging their sexual needs and thus resort to purchasing sexual services. According to Levy, this solution (sex work) entails a number of moral problems, since it is socially stigmatised, and a sex worker might be forced to do their job.²⁰ Nevertheless, sex work illustrates that people often 'buy into' the illusion of shared mutual feelings that many sex workers uphold. Levy argues that this ''myth of mutuality''²¹ shows that people are able to fall in love with sexbots. As technological progress enables sexbots to simulate feelings, they are a safe

¹⁷ E.g. Eva Wiseman, "Sex, love and robots: is this the end of intimacy?" *The Guardian*, December 13, 2015, https:// www.theguardian.com/technology/2015/dec/13/sex-love-and-robots-the-end-of-intimacy; Ellie Ross, "No sexbots please—we're British," *The Sun*, September 15, 2015, https://www.thesun.co.uk/archives/news/105811/no-sexbotsplease-were-british; Katrin Kasper, "Debatte über Sex mit Robotern," *ORF.at*, December 20, 2016, https://science.orf. at/v2/stories/2815679; Lin Taylor, "Sex Robots: Perverted or Practical in Fight Against Sex Trafficking?" *Reuters online*, July 20, 2017, https://www.reuters.com/article/science-robots-sextrafficking-idUSL1N1KBOM0.

¹⁸ Kate Devlin, *Turned On. Science, Sex and Robots* (London, New York: Bloomsbury Sigma, 2018); Sophie Wennerscheid, "Posthuman Desire in Robotics and Science Fiction," in *Love and Sex with Robots*, ed. Adrian Cheok and David Levy (Cham: Springer International Publishing, 2018), 37–50; Tanja Kubes, "New Materialist Perspectives on Sex Robots. A Feminist Dystopia/Utopia?" *Social Sciences* 8, no. 224 (2019): 1–14; Tanja Kubes, "Queere Sexroboter. Eine neue Form des Begehrens?" in *Maschinenliebe*, ed. Oliver Bendel (Wiesbaden: Springer, 2020), 163–184. Kate Devlin argues that more diversity in sex robot designs could disrupt heteronormativity and pornification; Sophie Wennerscheid suggests that sex robots should have traits that make clear they are a machine to irritate the illusion of a human replica, and Tanja Kubes discusses ways of queering sexbots.

¹⁹ Levy, Love and Sex with Robots, 194.

²⁰ David Levy, Robot Prostitutes as Alternatives to Human Sex Workers, in Homo Artificialis, March 2012, https://homoartificialis.files.wordpress.com/2012/03/robot-prostitutes-as-alternatives-to-human-sex-workers1.pdf, 5.

²¹ Levy, Love and Sex with Robots, 205.

exit for the just mentioned moral dilemma and thus a beneficial tool for society. Thus, Levy's argument is composed of two leitmotifs: one is the 'social vent', which I will explain in the next section, and the other is the 'techno-fix': the technological progress that sexbots represent will help those who, for whichever reason, have no access to sexual satisfaction—I will return to this point in section 4.

Levy falls into the traps of a widely shared understanding of sexuality: given the moral reprimands for certain sexual practices, an artificial outlet is a viable option. This argument is reminiscent of the so-called 'Ventilsitte' (social vent/venting practice), a term coined by German sociologist Alfred Vierkandt²² who applied the term to prostitution, explaining that it provides a 'safe and regulated way' for letting off the steam that builds up in men in a "high-strung moral system".²³ According to Vierkandt, prostitution might be morally questionable but is nevertheless inevitable in order to maintain social order. Reminiscent of other sexologists from the early 20th century such as Havelock Ellis or Kingsley Davis, prostitution is a necessary side effect (or even the constituent Other) of monogamous marriage.²⁴ The marriage system dominant in Western societies is rooted in the economic unity of the married heterosexual couple and maintains a separation of the private and the public realm. Moreover, it is monitored by a moral system that focuses on sexuality as a means for procreation. Nevertheless, since the institution of marriage is not simply sexual, economic or procreative, but all three at the same time, it "permits, encourages, or forces various degrees of sexual intimacy within specific customary relations, such as courtship, concubinage, and marriage".²⁵ Prostitution helps the husbands, whose sexual needs are suppressed in the monogamous marriage system, comply with those suppressive rules, and therefore stabilises this very system. Ellis, Davis and Vierkandt may differ in their moral stances, but they all concur in their diagnosis: prostitution is 'unwanted, but inevitable' for monogamous, heterosexual bourgeois societies to work.

What the arguments of those authors have in common is that they view society as a mechanism that needs to be maintained (through e.g. prostitution) in order to function. Society needs to manage bodily needs—those that threaten its stability. However, it is not only society, but also the body itself that needs to be managed. In this, the early

²² Alfred Vierkandt, "Sittlichkeit," in *Handwörterbuch der Soziologie*, ed. Alfred Vierkandt (Stuttgart: Ferdinand Enke, 1959 [1931]), 537.

²³ Helmut Schelsky, Soziologie der Sexualität. Über die Beziehungen zwischen Geschlecht, Moral und Gesellschaft (Reinbek: Rowohlt, 1962), 42 (my translation).

²⁴ Havelock Ellis, Studies in the Psychology of Sex, vol. 6 (Frankfurt: Outlook, 2018 [1910]), Kingsley Davis, "The Sociology of Prostitution," American Sociological Review 2, no. 5 (1937): 744–55.

²⁵ Davis, "Sociology of Prostitution," 747.

sexologists' argument resembles psychoanalytical theories of sexuality (e.g. Wilhelm Reich) that see an analogy between the human body and a steam engine, in that the body is a mechanism in constant need of being 'well oiled'. Letting off steam regularly is necessary to avoid overheating and exploding²⁶ and establish a healthy balance of sexual drives. Thus, 'natural' bodily needs are used to underpin a socially constructed view on sexuality: the latter is seen as a biologically given and therefore unchanging natural—or animal—energy that must be tamed for civilisation to work. Men's bodies and their sexual drives are seen as in need of channelling through marriage, and, if necessary, prostitution. The sex worker/the sexbot as a 'safe and regulated' vent helps keep society in order. The image of 'letting off steam' suggested by the 'vent' posits a specific, immutable view of sexuality as a set of drives, which are framed in traditional masculine heterosexual symbolism and need to be controlled through specific channelling mechanisms—without further questioning. In total, the arguments that Levy uses to prop up his case for sexbots are bound to a perspective on sexuality that origin-ated in the 19th century alongside industrialisation and are therefore deeply 'modern'.

Underpinned by the metaphor of the 'social vent', it becomes evident that Levy's parallel between the sexbot and the sex worker is not far-fetched. Replacing the sex worker, the sexbot takes on the role of the 'social vent' and stabilise society by providing a 'safety valve' for negative sexual energies. These negative sexual energies are not explicitly gendered in Levy's account, but the historical situation of the argument reveals that it was mostly men who were seen in need of canalising excess energies. British anthropologist Kathleen Richardson takes up on the sex worker/sexbot parallel as well, but to argue that sexbots will lead to an increase in the objectification of women. Against this, she advocates a romanticised view of sexuality and love as 'humanist values'.²⁷

Richardson founded the *Campaign Against Sex Robots* in 2015 in response to David Levy's promotion of the beneficial aspects of robotic sex. According to her, sexbots are a commodification of intimacy and contribute to the objectification of women, which will indubitably lead to a rise in sexual violence. Levy's embracing of sexbots as an alternative to sex work ignores the "asymmetrical relationship" between sex consumer and sex worker and is proof of male contempt for sex workers.²⁸ While she is not wrong in

²⁶ Yvonne Bauer, "Vom industriellen zum kybernetischen Lustkörper. Zur Bedeutung erkenntnisleitender Körperkonzepte in der Sexualforschung," in Materialität denken. Studien zur technologischen Verkörperung–Hybride Artefakte, posthumane Körper, ed. Corinna Bath et al. (Bielefeld: transcript, 2005), 42.

²⁷ Richardson, Sex Robot Matters, 48.

²⁸ Kathleen Richardson, "The Asymmetrical Relationship: Parallels Between Prostitution and the Development of Sex Robots," SIGCAS Computers & Society 45, no. 3 (2015): 291.

pointing out the commodification of intimacy, she bases her criticism on a normative view of sexuality as something that happens exclusively between humans and that is and should be—naturally and perpetually combined with romantic feelings and intimacy. Similarly to Levy, she fails to situate this concept of sexuality historically.²⁹ Such a naturalising argument is no less problematic than the very position Richardson criticises.

Richardson's argument is not only analogous to the feminist abolitionist debate that arose in the 1980s and campaigned for the abolition of sex work,³⁰ it also posits that sexual acts with things cannot be called sex, since sex is something that happens exclusively between humans, which is also the reason why Richardson refutes the term 'sex doll' or 'sex robot'.³¹ The moral consequence of this position is that sex is a fundamental aspect of being human: it makes humans human. This ontological founding quality fits perfectly with Richardson's plea for a 'new humanism' (which she bases on Martin Buber and the Charta of Human Rights³²): I consider her discomfort with sexbots to stem from a fearful resentment of posthuman futures. More importantly, Richardson affirms Western ideals of authentic feelings of love when she posits them as a prerequisite for sexual relations. Such a perspective takes no account of the normative combination of intimacy and sexuality as a product of the 19th century.³³ This Western ideal of love originated in the same period of industrialisation as Levy's mechanistic 'social vent' metaphor, but here it is the flip side of that coin.

From the 17th century onward (the epoch of modernity), marriage—as a heterosexual arrangement—entailed an increasingly clear-cut separation of spheres (public/domestic) and tasks (productive/reproductive) which climaxed in industrialised Western societies.³⁴ Wives and daughters were tasked with repetitive household chores and emotional work, thus creating a recreational safe haven for male family members. Domestic work (cleaning, cooking, child-rearing) is inscribed into capitalist work relations as the means to *re-producing* the male, public, productive workforce by feeding,

- ³² Richardson, "Sex Robot Matters," 46.
- ³³ Eva Illouz, The End of Love: A Sociology of Negative Relations (Oxford: Oxford University Press, 2020).
- ³⁴ Otto Penz, "Strukturwandel der Arbeit. Vom Fordismus zum Postfordismus," in Sozioökonomische Perspektiven. Texte zum Verhältnis von Gesellschaft und Ökonomie, ed. Gerda Bohmann et al. (Vienna: Facultas, 2014), 242; Gabriele Winker, Care Revolution. Schritte in eine solidarische Gesellschaft (Bielefeld: transcript, 2015), 18.

²⁹ Florence Gildea and Kathleen Richardson, "Sex Robots—Why We Should Be Concerned," *Campaign Against Sex Robots* (2017), accessed March 15, 2021, https://campaignagainstsexrobots.org/2017/05/12/sex-robots-why-we-should-beconcerned-by-florence-gildea-and-kathleen-richardson.

³⁰ See also Devlin, *Turned On*; Kubes, "New Materialist Perspectives," 2.

³¹ Gildea and Richardson, "Sex Robots." Interestingly, Richardson thus inadvertently provides a point for the argument that sexbots are only toys for masturbation and therefore not much to worry about (although they can, of course, be used by several people engaging in sex).

clothing, washing, tending to emotional needs, and, last but not least, producing children that will later again become part of the workforce.³⁵ This separation of spheres (along with the capitalist understanding of production) is exactly what needs to be criticised from a feminist perspective, since it is the private sphere to which sexuality and care as seemingly inexhaustible feminine resources are relegated, resulting in a double workload for women within their families.

Levy and Richardson provide two exemplary cases of how, either inadvertently or through lack of information, underlying patterns of naturalisation are brought into discussions about sexuality and the body. Studies in history of science have shown that concepts of bodies, gender and sexuality originated in specific modern discourses of the natural sciences³⁶ and should not be understood as a 'natural given'. The historicization of sexuality and the body is one of the key points of analysis in the writings of e.g. Michel Foucault, Judith Butler and Donna Haraway.³⁷

Thus, the mechanistic body concept that underpins the psychoanalytical stance on sexuality, and thus influences the concepts of sexuality that David Levy postulates, must be viewed in the light of its historical context. A look at the history of science reveals that in the 19th century, the natural sciences provided the predominant scientific approaches to other disciplines, such as sexology. In the second half of the 20th century, they were complemented by cybernetics and information theory.³⁸ Yvonne Bauer carves out two main 'epistemologically guiding body concepts' in modern sexology: first, the 'mechanical body paradigm' modelled after the steam engine that shaped psychoanalytical understandings of sexuality in the 19th century, and second, the 'cybernetic body paradigm' which draws an analogy between the human body and a computer network conceptualised in the wake of information technology.³⁹ While the mechanical body metaphor of the steam engine models sexuality as natural energy repressed by bourgeois culture, building up pressure within the organism that needs to be released regularly through bio-electrical dynamics (i.e. orgasms), the cybernetic body metaphor views sexuality as something decentralised and fluid, situated within cybernetic

³⁵ Winker, Care Revolution, 21.

³⁶ Thomas Laqueur, Making Sex: Body and Gender From the Greeks to Freud (Cambridge: Harvard University Press, 1990); Evelyn Fox Keller, Refiguring Life: Metaphors of Twentieth-century Biology (New York: Columbia University Press, 1995); Donna Haraway, Simians, Cyborgs, and Women. The Reinvention of Nature (New York: Routledge, 1991).

³⁷ Michel Foucault, *Histoire de la sexualité*, 4 vols. (Paris: Gallimard, 1976–2018); Judith Butler, *Gender Trouble* (New York: Routledge, 1990); Haraway, *Simians*.

³⁸ Susanne Lettow, Biophilosophien. Wissenschaft, Technologie und Geschlecht im philosophischen Diskurs der Gegenwart (Frankfurt: Campus, 2011), 103.

³⁹ Bauer, "Lustkörper," 44.

circuits that exchange bits of data.⁴⁰ Bauer identifies the change in body metaphors as a shift "from sexual intercourse to data transmission" ("Vom Geschlechtsverkehr zum Datenverkehr"⁴¹). She also points to the fact that Wilhelm Reich's and Herbert Marcuse's psychoanalytical sexuality models were highly influential in the sexual revolution of 1968, arguing that sexuality needed to be freed from bourgeois restrictions, so that 'natural, healthy' sexuality could *re*surface. The temporality implied by the *re*- is important, as it frames a pre-modern—downright mythological—'free' sexuality as something to which society should return.

Feminist theorist Silvia Federici discusses the ambivalent outcome of the 1968 'sexual liberation' for the feminist cause. In an article first published in 1975, in the middle of the social transformations engendered by the second feminist wave, student protests and the so-called 'sexual revolution', she points out how sexual release and patriarchal structures are intermingled:

Since we [women] are expected to provide a release, we inevitably become the object onto which men discharge their repressed violence. We are raped, both in our beds and in the streets, precisely because we have been set up to be the providers of sexual satisfaction, the safety valves for everything that goes wrong in a man's life, and men have always been allowed to turn their anger against us if we do not measure up to the role, particularly when we refuse to perform.⁴²

Federici's text places the patriarchal dimension of the 'safety valve' in the context of class society and the temporality of paid work: "Sexuality is the release we are given from the discipline of the work process. It is the necessary complement to the routine, regimentation of the work-week. It is a license to 'go mad,' to 'let go,' so that we can return more refreshed on Monday to our jobs."⁴³ Sexuality is part of the economy of nine-to-five (or flexitime) jobs: it suggests an authentic naturalness which is allowed to erupt in the leisure time. This leisure is dictated by the disciplinary functions of measured time: "little spontaneity is possible".⁴⁴ The partitioning of time and space that Federici describes points to the relatively strict spatiotemporal areas in which such a 'release' is allowed. Therefore, the 'venting practice' is a structural support for wage

⁴⁰ Bauer, "Lustkörper," 45.

⁴¹ Bauer, "Lustkörper," 49.

⁴² Silvia Federici, "Why Sexuality is Work," in *Revolution at Point Zero. Housework, Reproduction, and Feminist Struggle* (Oakland: PM Press, 2012), 24.

⁴³ Federici, "Sexuality is Work," 23.

⁴⁴ Federici, "Sexuality is Work," 23.

labour. Plus, sexual encounters are strictly limited to those with people of the other gender. The first quote from Federici's text shows why the valve metaphor assumes the presence of a passive, enduring material on which repressed violence can be acted out: it is inherently connected with the suppression of women, whose ability to comfort physically and emotionally is perceived as a never-ending resource within the dualist gender structure. From a materialist feminist perspective like Federici's, sex is work, "a duty"⁴⁵—and contrary to common beliefs, "'sexual liberation' has intensified [this] work".⁴⁶ Contemporary sexual ethics—which I will describe in the following chapter as 'recreational sexual ethics'—requires constant availability to provide sexual gratification, albeit freed from the pressure of procreation. In this light, it is not surprising that feminist theory has highlighted the relationship between reproductive work and sex as work, without being an explicit (paid) work relationship. Care work as a whole is relegated to the private sphere and framed as an 'act of love'—something for which payment should not be expected. Sexuality and care have historically been associated with 'the feminine' and the private realm and have always been subjected to power structures.

I wish to provide an alternative, non-naturalising framework for analysing the specific combination of sexuality and care. The discourse around these topics needs to be situated in a historically informed material analysis. For this, I draw on feminist sociology, particularly on Elizabeth Bernstein's work on the material and social transformations in economy and society.

3. Situating Sexuality With Care—Changing Paradigms

The gendered dimension of sexuality and care has long been at the centre of feminist discussion. I find Elizabeth Bernstein's work invaluable for placing sexuality as well as transformations of care in an economic context. Bernstein seeks to analyse "the ways in which recent transformations in economic and cultural life have played themselves out"⁴⁷ on the level of heterosexual, male-oriented sexual commerce and identifies three sexual paradigms in Western modern history that correspond to three (broad) paradigms in capitalist economic development.⁴⁸

⁴⁵ Federici, "Sexuality is Work," 23.

⁴⁶ Federici, "Sexuality is Work," 25.

⁴⁷ Elizabeth Bernstein, *Temporarily Yours*. *Intimacy*, *Authenticity*, *and the Commerce of Sex* (Chicago, London: The University of Chicago Press), 2.

⁴⁸ These categories are not to be understood in a fixed, teleological way (Bernstein, *Temporarily Yours*, 169) and do not suggest that those paradigms seamlessly merge into one another—rather, they coexist (Bernstein, *Temporarily Yours*, 174) without being structurally equal. Nevertheless, they provide a promising heuristic approach for explaining the shifts that have occurred in sexuality and intimacy.

Each of these economic stages is characterised by its own sexual ethics: Earlymodern capitalism (in which labour is organised predominantly as domestic production and where extended family structures endure) is characterised by procreative sexual ethics. At the height of industrialisation, when wage labour dominated work relations and the nuclear family ensured a strict separation of the public and the private, this modern industrial capitalist system led to a gendered double standard in sexual ethics, where women were expected to be 'chaste' companions, while men's promiscuity was generally tolerated.⁴⁹ From the middle of the 20th century onward, 'late' or 'post-industrial' capitalism saw an increase of service work to the detriment of industrial production, accompanied by a shift from the nuclear family to single parenting, patchwork or other kinds of recombinant families.⁵⁰ It is in this period that a 'recreational paradigm' with regard to sexuality arose. Partly due to the sexual revolutions of the 1960s and 1970s, sexuality gradually became unburdened from reproductive duties and a part of leisure time and personal expression, a sign of individuality to experiment and play with. Anthony Giddens calls this "plastic sexuality",⁵¹ a sexuality that can be actively shaped through experimenting. Ulrich Beck and Elisabeth Beck-Gernsheim come to similar conclusions in their explanation of how sexuality has been progressively individualised: love, sexuality and relationships have become part of an actively configurable biography: "Standard biography is transformed into 'choice biography'",⁵² no longer dictated by traditions and norms, with all the ensuing thrills and insecurities. A connection is made between authenticity of eros, feelings and personality.53

This paradigm shift from procreational to recreational sexuality, and its ensuing change in intimacy and authenticity is what Elizabeth Bernstein traces in *Temporarily Yours*, her research study on sexual commerce in San Francisco, Amsterdam, and Oslo. She reveals how the personal, open and experimenting approach to sexual encounters was in part facilitated by an economic transformation also occurring in sex work. Members of the 'new middle class', the 'petite bourgeoisie' or the 'creative class' are playing an increasingly important role on the market for sexual commerce. Her research shows that this development has brought a comprehensive commercialisation of

⁴⁹ Anthony Giddens, The Transformation of Intimacy. Sexuality, Love & Eroticism in Modern Societies (Cambridge: Polity Press, 1992), 39.

⁵⁰ Bernstein, Temporarily Yours, 175.

⁵¹ Giddens, Transformation of Intimacy, 27.

⁵² Ulrich Beck and Elisabeth Beck-Gernsheim, The Normal Chaos of Love (Cambridge: Polity Press, 1995), 5.

⁵³ Eva Illouz is more critical of this individualizing process which she places in the context of commodification itself: "[S]ex and sexuality['s] penetration into the very heart of the capitalist engine [...] made sexuality into an attribute and experience increasingly detached from reproduction, marriage, long-lasting bonds, and even emotionality." (Illouz, *End of Love*, 45)

intimacy in sex work. Since the 1980s, the "sale and purchase of authentic emotional and physical connection"⁵⁴ has been put to the fore as a result of "a shift from a relational to a *recreational* model of sexual behavior".⁵⁵ Bernstein interprets this reconfiguration of erotic life as the result of a shift in economic paradigms of the sex industry, a shift away from the "Taylorized sex"⁵⁶ of "modern-industrial prostitution" towards the "post-industrial paradigm of sexual commerce".⁵⁷ Post-industrial economic transformations have brought about a privatisation of sexual commerce, engendering several reconfigurations: spatially, prostitution has retreated from the streets into hotels, socially, it has moved onto the Internet, using technological mediations, and emotionally, sex workers increasingly seek to bind their clients with deeper intimate and erotic performances, in which the authentic simulation of feelings plays an important role. This is what Bernstein calls "bounded authenticity":⁵⁸ "Instead of being premised on marital or even durable relationships, the recreational sexual ethic derives its primary meaning from the depth of physical sensation and from emotionally bounded erotic exchange."⁵⁹ In sum, recreational sexuality is fully immersed in the sexual marketplace:

Whereas domestic-sphere, relational sexuality derived its meaning precisely from its ideological opposition to the marketplace, recreational sexuality bears no antagonism to the sphere of commerce. It is available for sale and purchase as readily as any other form of commercially packaged leisure activity.⁶⁰

Therefore, contrary to Richardson's position, for example, "the pursuit of sexual intimacy is not hindered but facilitated by its location in the marketplace".⁶¹

Bernstein's account fits in with the body metaphors that Yvonne Bauer describes and which I presented in my discussion of David Levy's mechanical understanding of sexual urges: 'Taylorised sex' that Bernstein assesses as characteristic for modern capitalist production and its shaping of kinship and sexuality has parallels in the body metaphor of the steam engine, as clients seek quick sexual release. In this sense, the cybernetic

- ⁵⁹ Bernstein, *Temporarily Yours*, 6.
- ⁶⁰ Bernstein, *Temporarily Yours*, 7.

⁵⁴ Bernstein, *Temporarily Yours*, 192.

⁵⁵ Bernstein, *Temporarily Yours*, 118 (emphasis in original).

⁵⁶ Bernstein, *Temporarily Yours*, 171.

⁵⁷ Bernstein, *Temporarily Yours*, 168. This does not mean, however, that 'Taylorised' sex work has disappeared, rather, those forms (e.g. streetwalking, drug-related prostitution) have changed their locus and their appearance; Bernstein calls this "the remnants of modern prostitution" (Bernstein, *Temporarily Yours*, 68–69).

⁵⁸ Bernstein, *Temporarily Yours*, 69.

⁶¹ Bernstein, *Temporarily Yours*, 118.

body metaphor I have briefly touched on could be interpreted as an expression of a more fluid post-industrial understanding of 'plastic sexuality'. Further research is needed to analyse this parallel. The following **Table 1** represents a first attempt at doing so by compiling Bernstein's and Bauer's findings:

	Early Modern Capitalism	Modern-Industrial Capitalism	Late Capitalism
Paradigm of work	Domestic production	Wage labour	Service work; 'creative' and 'flexible' jobs
Paradigm of kinship	Extended kin networks	Nuclear	Recombinant families/isol- able individuals
Paradigm of sexual ethics ⁶²	Procreative	Companionate/promis- cuous (gendered double standard)	Bounded authenticity
What is sold	Companionship and sexual intercourse with unmarried men	Heterosexual intercourse or receptive oral sex	Diversified and specialized array of sexual products and services (images, performances, acts etc.)
What is bought ⁶³	Satisfaction of social and carnal urges	Quick sexual release (the emotionally void coun- terpart of private sphere romance and love)	Bounded authenticity (relational meaning resides in the market transaction)
Body metaphor/ body paradigm ⁶⁴	The beginning of the 'mechanical body of pleasure'	Industrial body of pleasure (modelled after the steam engine)	Cybernetic body of pleasure (modelled after a network/a computer)

Table 1: The convergence of work, kinship, and sexual paradigms with sexual commerce and body metaphors.

This compilation of the forms of the mutual influence of capitalist periods and body metaphors surrounding sexuality can be understood as a concrete manifestation of the materialist feminist assumption that economy, work and social relations heavily impact—albeit contradictorily—perceptions of sexuality and intimacy. One example of a phenomenon that illustrates this development is the 'girlfriend experience', a specific form of sexual encounter where a sex worker not only sells sex, but also a display of authentic romantic feelings. The girlfriend experience can be described as a "blurring of boundaries between purely transactional service encounters and those that entail a deeper

⁶² These three paradigms are cited from Bernstein, *Temporarily Yours*, 170.

⁶³ The aspects of what is sold and bought in the sexual commerce of the respective eras are cited from Bernstein, *Temporarily Yours*, 173.

⁶⁴ This aspect is cited from Bauer, "Lustkörper," 36, 44.

connection between provider and consumer":65 the client is sold a girlfriend "without a headache".⁶⁶ Authentic feelings (or the simulation thereof) can be bought and are part of the sexual experience sought with the purchase of sexual services. Bounded authenticity is, as such, a technique for securing and binding clients and can therefore be viewed as a characteristic of the increasing service work orientation of post-industrial sex work. The service economy being the predominant economic sector in the second half of the 20th century, has led to an increasing "insecurity, tentativeness, and transience of intimate life [which] have led many people to divest emotional meaning from their privatesphere relationships, reinvesting it instead in market relations, both as eager employees and consumers¹¹⁶⁷ on the one hand. On the other hand, this development has elevated the importance of affective aspects of work, what Arlie R. Hochschild describes as 'emotional labour': "the management of feeling to create a publicly observable facial and bodily display".⁶⁸ The authentic simulation of feelings has become a factor for employability and requires that the service worker constantly manage their feelings (keeping contrary emotions at bay, performing persuasive face motions): service work entails the service worker's ability to conceal and manage their 'real' feelings to the benefit of the customer. Nevertheless, Bernstein's concept of bounded authenticity goes deeper, since it refers to the type of emotional labour that sex workers perform for their customers and connects it to the recreational sexual ethic that characterises postmodern society.

While Bernstein localises the development of bounded authenticity and the commodification of intimacy in the context of emotional labour, she does not explicitly argue that bounded authenticity has a gendered component. To me, however, its contextualisation with emotional labour makes the gender aspect strikingly clear.

4. The Sexbot as Sexualised Care Worker: Emotional (Tech) Support—for Whom?

My findings up to this point suggest that post-industrial capitalism has shaped the commodification of intimacy to a point that sexuality and care become intermingled such that they are expected to be an always available commodity. A specific type of sexual service is expected to provide care as well, which I call *sexualised care*. The sexbot

⁶⁵ Aimee Huff, "Buying the Girlfriend Experience: An Exploration of the Consumption Experiences of Male Customers of Escorts," *Research in Consumer Behavior* 13 (2011): 447.

⁶⁶ Bernstein, *Temporarily Yours*, 129. Similar findings exist for the strip club business, where regulars generally look for authentic performances in a 'good stripper'. See Katherine Frank, *G-Strings and Sympathy: Strip Club Regulars and Male Desire* (Durham: Duke University Press, 2002).

⁶⁷ Bernstein, *Temporarily Yours*, 173.

⁶⁸ Arlie Russell Hochschild, *The Managed Heart. Commercialization of Human Feeling* (Berkeley, Los Angeles, London: University of California Press), 7.

is situated at exactly this point of convergence of sexuality and care. This is, as the previous chapter on Bernstein has shown, most evident in the field of sexual commerce.

Sexualisation also affects other areas of service work. The term 'sexualised labour' has been introduced for the analysis of an embodied performance that relies on aesthetics, emotional mobilisation and sexualisation at the workplace.⁶⁹ The concept is not restricted to professions where sex is explicitly sold, but rather applies to those kinds of service work where a sexualised appearance and flirtatious behaviour is more or less part of the job description, where tips are expected, or which are meant to ensure 'smooth' interaction, e.g. hostesses, waitresses, communicators, sales clerks or secretaries.⁷⁰ In general, sexualised labour is understood as "work that becomes associated with sexuality, sexual desire and sexual pleasure".⁷¹ As such, it is part of everyday interactions between consumers and service providers and service work is thus increasingly sexualised.⁷² Of course, not every service work is a type of care work, but there are instances where care work is also being sexualised. I argue that this is the case when the promise of emotional support and affective care is combined with a sexual innuendo. Sexualised care has a subtle connotation of entitlement to receiving care. This confluence of sexuality and care is, as I have outlined above, the result of a historically determined connection between love, intimacy and sexuality that has taken up aspects of the romantic ideal of love and combined it with the distanced intimacy characteristic of advanced capitalism.

It appears somehow paradoxical that the romantically laden view of love and mutually intimate companionship in sexual relationships has emerged in modern societies, while at the same time, modern societies are seen to lack empathy, emotionality and companionship. This kind of rhetoric is not new—it has only been updated to blame these deficits on technology.⁷³ Several diagnoses contend that societies lacks empathy and emotionality (traits viewed traditionally as 'feminine' in Western thought):⁷⁴ Sherry Turkle states that more and more technological artefacts are built to create intimacy, a development symptomatic of modern society, which she considers individualistic up to

⁶⁹ Leslee Spiess and Peter Waring, "Aesthetic labour, cost minimisation and the labour process in the Asia Pacific airline industry," *Employee Relations* 27 (2005): 193–207; Chris Warhurst and Dennis Nickson, "Who's got the look?' Emotional, aesthetic and sexualized labour in interactive services," *Gender, Work & Organization*, 16, no. 3 (2009): 385–404.

⁷⁰ Warhurst and Nickson, "Who's got the look?", 385.

⁷¹ Jenna Drenten, Lauren Gurrieri, and Meagan Tyler, "Sexualized labour in digital culture: Instagram influencers, porn chic and the monetization", *Gender, Work & Organization* 27, no. 1 (2018), 43.

⁷² Rachel L. Cohen et al., "The Body/Sex/Work Nexus: A Critical Perspective on Body Work and Sex Work," in Body/Sex/ Work: Intimate, embodied and sexualised labour. Critical Perspectives on Work and Employment, ed. Carol Wolkowitz et al. (Basingstoke: Palgrave, 2013), 18.

⁷³ Sherry Turkle, Alone Together. Why We Expect More from Technology and Less from Each Other (New York: Basic Books, 2011); Elisabeth von Thadden, Die berührungslose Gesellschaft. (Munich: C.H. Beck, 2018).

⁷⁴ Weber, "Helpless Machines," 213.

isolating. Anxiety about intimacy leads to searching for 'safe options' in the technological sphere: relationships without the fear of being cheated on.⁷⁵ Contrary to Turkle's view, Realbotix's CEO Matt McMullen seems to have exactly those people in mind who cannot find a partner (for whatever reasons) as the target clientele for *Harmony* and her likes.⁷⁶ Thus, McMullen—same as David Levy—introduces sexbots as a technological fix (techno-fix) for what he perceives to be a problem in today's society: the loss of relationality, of belonging, of partnership. The idea of fixing (social) problems with technology has been criticised by posthumanist thinkers like Donna Haraway as a "comic faith"⁷⁷ in some superior saviour that does not take into account that technology is never neutral.

Harmony is designed to learn from her users, react to their needs, and above all, be friendly, and provide (sexual) comfort and entertainment—all classic 'feminine' traits. Most importantly, she is meant to learn from primarily or even exclusively one user, since she belongs to the private realm of her owner.⁷⁸ This makes *Harmony* an epitome of 'Woman': always available, all her abilities directed towards tending to the needs of the (in most cases male) user. Artificial intelligence is, together with the hyper-sexualised doll body, intrinsically linked with care work, and the latter is once again conceptualised as a stabilising infrastructure relegated to the private. Who is seen to be in need of care, and why?

Considering that the sexbot market primarily caters to (quite wealthy) heterosexual men,⁷⁹ the sexbot could be viewed as a symptom of masculinity reasserting its entitlement to female bodies and feminine emotional work. This sense of entitlement is inscribed into the argument of the social vent, which Levy subliminally uses. Although Levy does not endorse this masculinist ideology, I would say that it is not surprising that antifeminist and masculinist groups, e.g. 'Men Going Their Own Way' (MGTOW) and 'incels' ('involuntary celibates')⁸⁰ hail the technological development of sexbots

 $^{^{\}rm 75}\,$ Turkle, Alone Together, xi.

⁷⁶ Kleeman, "First Sex Robot."

⁷⁷ Donna Haraway, Staying with the Trouble (Durham: Duke University Press, 2016), 3.

⁷⁸ Mitchell Langcaster-James and Gillian R. Bentley, "Beyond the Sex Doll: Post-Human Companionship and the Rise of the 'Allodoll'," *Robotics* 7, no. 62 (2018): 1–20.

⁷⁹ The vast majority of sexbots represent a female body. To my knowledge, Realbotix has only one male sexbot model ('Henry'). The starting price for a sexbot is at around USD 6,000.

⁸⁰ 'MGTOW' and 'incels' are both deeply misogynist online communities of heterosexual men. The first group goes 'its own way' by refusing any contact with women (since women are by nature devious and cheating), and the second group adopts an ideology in which life is dictated by looks and sex, to the point that the adherents engage in self-hate for not having the looks to be attractive enough for women to date them. Both communities violently objectify and dehumanise women (Veronika Kracher, *Incels. Geschichte, Sprache und Ideologie eines Online-Kults* (Mainz: Ventil, 2020), 27; Nicola Döring, "Sexualbezogene Nutzung digitaler Medien. Chancen und Risiken für die sexuelle Gesundheit von Männern," *Ärztliche Psychotherapie* 15, no. 2 (2020): 98) and, in the case of incels, have committed terrorist attacks.

as the only (safe) way of having access to a woman. These militant groups are only the vanguard of a right-wing and masculinist ideology growing in popularity. Only a few days after the killing spree in Toronto in April 2018, when a self-proclaimed incel⁸¹ drove a van into pedestrians, killing 10 and injuring 16 people, conservative and libertarian commentators unquestioningly took up the incel claim of an unfair distribution of sex. Presenting sexuality as a mere zero sum game, Robin Hanson and Ross Douthat pondered whether this perceived imbalance should be taken seriously, and what leverage the state should have in redistributing sex.⁸² Such a monolithic concept of sexuality of something to have or not to have illustrates, in my view, the entitlement to sex and care that patriarchal society endows masculinities with.

In conclusion, I argue that sexbots are problematic, but for reasons different than Kathleen Richardson's. Sexbots will not necessarily and directly lead to an increase in sexual violence, but they do reinforce conventional masculinities. One might say that this could be combatted by diversifying sexbots' looks, so sexualised care work is not always provided by a hyperfeminine bot. Yet, I caution against such apparently easy solutions. As long as the gender divide in society exists and attributes sexualised care to feminine bodies and subjects, I would argue that it does not matter what the sexbot looks like—it is by default feminised.

5. Converging Fields—Posthumanist Conclusions?

As I have shown above, the sexbot is a symptom of the convergence of sexuality and care, which I find both intriguing and troubling. While I would grant that Richardson is right in arguing that intimacy is commodified in sex work (and with the sexbot), I have explained why her naturalising view of sexuality is an unfit foil for criticising sexbots. Instead, I offer a historically situated analysis, based on Bernstein's research, of the specific confluence of sexuality and care prevalent in the 21st century. Bernstein's findings on bounded authenticity in sex work place this development in the broader context of the transformations of capitalism: the shift from industrial to post-industrial capitalism and a service economy has entailed a shift from a mechanical concept of sexuality and authenticity. Against this background I have introduced the concept of *sexualised care* to describe the combination of sexuality and caring intimacy that sexbots provide.

⁸¹ The perpetrator of the attack posted online, right before his actions, that he acted out of revenge for his sexlessness, for which he blamed women, who had denied him sex (Kracher, *Incels*, 13).

⁸² Robin Hanson, "Two Types of Envy," Overcoming Bias (blog), April 26, 2018, https://www.overcomingbias.com/2018/04/ two-types-of-envy.html; Ross Douthat, "The Redistribution of Sex," New York Times, May 2, 2018, accessed March 7, 2021, https://www.nytimes.com/2018/05/02/opinion/incels-sex-robots-redistribution.html.

They serve to enforce masculinities by exploiting the supposedly inexhaustible feminine resource of 'care' and reproducing a metaphysical imaginary of 'Woman' as the female Other-but-same who reflects—like a mirror—the unchanging images of phallic masculinity.⁸³ I contend that it is vital to ask who is being defined to be in need of sexualised care, and why? Sexbot companies, here exemplified by Realbotix, focus (knowingly or unknowingly) on the subjectivity of the white heterosexual male who needs an 'ideal companion'. As a result, it is highly questionable whether *Harmony* is a real symptom of a posthuman era: she reinforces a certain view of the human as needing and being entitled to (unpaid) sexualised care work, for whom she provides emotional support in the private realm to cope with the restless postmodern era. The supposed merit of this kind of companion lies in its capacity for unconditional emotional work. The assumption that robots with gendered AI could take over care work reveals a deeply ingrained sexism.

In a way, this is nothing out of the ordinary. As Krizia Puig laconically asks: "What is the scandal—the astonishment—when building a 'perfect woman' seems to be an ever-present longing of cis-heteropatriarchy?"⁸⁴ Sexbots are indeed not the only artefact to blame for such sexism, and numerous cinematic or literary works in science fiction draw on the "artificial or mechanical other"⁸⁵ as highly sexualised ideas about female bodies. These "technobodies"⁸⁶ are technologically perfected representations of organic bodies, since all 'disagreeable' aspects of corporeality (body fluids, weight changes, stretch marks, scars, ageing,⁸⁷ pregnancy, among others) are removed. This works as a re-inscription of the traditional devaluation of all traits perceived as 'feminine'.88 A relatively easy solution for this would be the diversification of represented body types, although this would not make the commodification of these bodies disappear. However, my point is that the problematic aspect of the sexbot is not only its reproduction of a bodily 'perfect woman', but also the way this illusion of a 'perfect woman' is produced—more subtly—with AI. The feminist debate needs to direct its attention to this, as programmed, artificially intelligent robots re-produce problematic, male imaginaries of entitlement—by design.

⁸³ Rosi Braidotti, Metamorphoses. Towards a Materialist Theory of Becoming (Cambridge, Malden: Blackwell, 2002), 24.

⁸⁴ Krizia Puig, "Research Notes | Future(s) of Love/Sex," *The Queer Futures Collective*, January 26, 2019, accessed March 14, 2021, https://www.queerfutures.com/sundaysentiments/2019/1/20/research-notes-1futures-of-lovesex-thought-feelings-about-the-disruptive-potential-of-sex-robots.

⁸⁵ Braidotti, Metamorphoses, 231.

⁸⁶ Braidotti, Metamorphoses, 232.

⁸⁷ It should be noted that the materials of which *Harmony* and other sexbots or dolls are made requires some kind of care as well, since it is subject to ageing (the silicone skin can chip or peel off).

⁸⁸ Braidotti *Metamorphoses*, 231–232.

For assessing the sexbot as a symptom of a broader convergence, I agree with the call for a 'sound approach' to technology in the critical posthumanist debate.⁸⁹ The soundness of such an approach lies in its accounting for the fact that technologies are never neutral, but rather products of power relations. This approach neither falls prey to messianic narratives that perpetuate the unconditional welcoming of technology (e.g. Levy), nor alarmist messages that demonise all things technological (e.g. Richardson). Feminist philosopher Rosi Braidotti's comment that "[b]eing a posthumanist is a non-nostalgic way of acknowledging the pain of this [posthumanist] transition, of extracting knowledge from it, and reworking it affirmatively"⁹⁰ speaks to the purpose of this paper, since my aim is to provide insight into what needs to be reworked. I reason that the sexbot is situated at what Braidotti termed the "posthuman convergence":91 the convergence of posthumanism and post-anthropocentrism "within an economy of advanced capitalism".92 With this, Braidotti criticises Humanist understandings of the ideal human (or 'Man') as well as human exceptionalism and hierarchical differences between species. To this, I further add the convergence of sexuality, care, and technology manifested in the phenomenon of the sexbot: "the consumer-minded techno-hype [...] confirms the traditional entitlements of a subject position that is made to coincide with a masculine, white, heterosexual, European identity".93

While this does not mean that care, relationality, affect, and vulnerability are no longer viable figurations for feminist futures, my article aims to raise awareness that the road towards those feminist futures is still long and bumpy. It also means that gender as a structural category is, for now, here to stay. Although its locus is changing, there are deeply inscribed gender dimensions in the creation of social robots. A few productive displacements of subjectivity may happen at the micro-level in the humansexbot interaction, but the current structural position of the sexbot precludes premature euphoria. Rather, the sexbot industry in its current form is working to reinforce a 'bruised masculinity', a stronghold of advanced capitalism.

⁸⁹ Braidotti, Posthuman Knowledge, 9.

⁹⁰ Braidotti, Posthuman Knowledge, 15.

⁹¹ Braidotti, Posthuman Knowledge, 13.

⁹² Braidotti, Posthuman Knowledge, 2.

⁹³ Rosi Braidotti, Nomadic Subjects. Embodiment and Sexual Difference in Contemporary Feminist Thought (New York: Columbia University Press, 2011), 78.

Acknowledgements

I wish to thank Carolin Mezes, Franziska von Verschuer and Leon Wolff for their thorough discussion of an earlier version of this paper, as well as the organisers and participants of the conference "Gender Revisited. Negotiating Gender in the Age of Posthumanism" in December 2020 at the University of Graz, Austria. Many thanks also to Maike Melles and Michael Pollok, among others, for proof-reading the paper.

Bibliography

Balistreri, Maurizio. Sex robot. L'amore al tempo delle macchine. Turin: Fandango Libri, 2018.

Bauer, Yvonne. "Vom industriellen zum kybernetischen Lustkörper. Zur Bedeutung erkenntnisleitender Körperkonzepte in der Sexualforschung." In *Materialität denken. Studien zur technologischen Verkörperung–Hybride Artefakte, posthumane Körper*, edited by Corinna Bath, Yvonne Bauer, Bettina Bock von Wülfingen, Angelika Saupe, and Jutta Weber, 31–58. Bielefeld: transcript, 2005. DOI: https://doi.org/10.1515/9783839403365-002

Beck, Ulrich, and Elisabeth Beck-Gernsheim. The Normal Chaos of Love. Cambridge: Polity Press, 1995.

Bernstein, Elizabeth. *Temporarily Yours. Intimacy, Authenticity, and the Commerce of Sex.* Chicago, London: The University of Chicago Press, 2007. DOI: https://doi.org/10.7208/chicago/978022 6044620.001.0001

Braidotti, Rosi. Metamorphoses. Towards a Materialist Theory of Becoming. Cambridge, Malden: Blackwell Publishers, 2002.

Braidotti, Rosi. Nomadic Subjects. Embodiment and Sexual Difference in Contemporary Feminist Thought. New York: Columbia University Press, 2011.

Braidotti, Rosi. Posthuman Knowledge. Cambridge, Medford: Polity Press, 2019.

Braksmajer, Amy. "'That's Kind of One of Our Jobs': Sexual Activity as a Form of Care Work Among Women with Sexual Difficulties." *Archives of Sexual Behavior* 46, no. 7 (2017): 2085–2095. DOI: https://doi.org/10.1007/s10508-017-0945-1

Cohen, Rachel Lara, Kate Hardy, Teela Sanders, and Carol Wolkowitz. "The Body/Sex/Work Nexus: A Critical Perspective on Body Work and Sex Work." In *Body/Sex/Work: Intimate, embodied and sexualised labour. Critical Perspectives on Work and Employment*, edited by Carol Wolkowitz, Rachel Lara Cohen, Teela Sanders, and Kate Hardy, 3–27. Basingstoke: Palgrave, 2013. DOI: https://doi.org/10.1007/978-1-137-02191-5_1

Coursey, Kino. "Speaking with Harmony. Finding the Right Way to Do or Say ... While in Bed (Or Anywhere Else)." In *Maschinenliebe*, edited by Oliver Bendel, 35–51. Wiesbaden: Springer, 2020. DOI: https://doi.org/10.1007/978-3-658-29864-7_3

Coursey, Kino, Susan Pirzchalski, Matt McMullen, Guile Lindroth, and Yuri Furuushi. "Living with Harmony: A Personal Companion System by Realbotix[™]." In *Al love you*, edited by Yuefang Zhou and Martin H. Fischer, 77–95. Cham: Springer, 2019. DOI: https://doi.org/10.1007/978-3-030-19734-6_4

Davis, Kingsley. "The Sociology of Prostitution." *American Sociological Review* 2, no. 5 (1937): 744–55. DOI: https://doi.org/10.2307/2083827

Devlin, Kate. *Turned On. Science, Sex and Robots*. London, New York: Bloomsbury Sigma, 2018. DOI: https://doi.org/10.5040/9781472950888

Döring, Nicola. "Sexualbezogene Nutzung digitaler Medien. Chancen und Risiken für die sexuelle Gesundheit von Männern." Ärztliche Psychotherapie 15, no. 2 (2020): 95–100. DOI: https://doi.org/10.21706/aep-15-2-95

Döring, Nicola, and Sandra Pöschl. "Sex toys, sex dolls, sex robots: our under-researched bed fellows." *Sexologies* 27 (2018): 51–55. DOI: https://doi.org/10.1016/j.sexol.2018.05.009

Drenten, Jenna, Lauren Gurrieri, and Meagan Tyler. "Sexualized labour in digital culture: Instagram influencers, porn chic and the monetization." *Gender, Work & Organization* 27, no. 1 (2020): 41–66. DOI: https://doi.org/10.1111/gwao.12354

Douthat, Ross. "The Redistribution of Sex." *New York Times*, May 2, 2018. Accessed March 7, 2021. https://www.nytimes.com/2018/05/02/opinion/incels-sex-robots-redistribution.html.

Ellis, Havelock. *Studies in the Psychology of Sex*. Vol. 6, *Sex in Relation to Society*. Frankfurt: Outlook, 2018 [1910].

Erhard, Constanze. "Harmony's Future | No Future w/o Harmony." In Wenn KI, dann feministisch. Impulse aus Wissenschaft und Aktivismus, edited by netzforma* e.V., 107–17. Berlin, 2020.

Federici, Silvia. "Why Sex is Work." In Revolution at Point Zero. Housework, Reproduction, and Feminist Struggle, 23–27. Oakland: PM Press, 2012.

Foucault, Michel. *Histoire de la sexualité*. 4 vols. Paris: Gallimard, 1976–2018. DOI: https://doi.org/10.14375/NP.9782072700378

Fox Keller, Evelyn. *Refiguring Life: Metaphors of Twentieth-century Biology*. New York: Columbia University Press, 1995. DOI: https://doi.org/10.7312/kell92562

Frank, Katherine. G-Strings and Sympathy: Strip Club Regulars and Male Desire. Durham: Duke University Press, 2002. DOI: https://doi.org/10.1515/9780822383994

Giddens, Anthony. The Transformation of Intimacy. Sexuality, Love & Eroticism in Modern Societies. Cambridge: Polity Press, 1992.

Gildea, Florence, and Kathleen Richardson. "Sex Robots—Why We Should Be Concerned." *Campaign Against Sex Robots*, May 12, 2017. Accessed March 15, 2021. https://campaignagainstsexrobots.org/2017/05/12/sex-robots-why-we-should-be-concerned-by-florence-gildea-and-kathleen-richardson.

Hanson, Robin. "Two Types of Envy." *Overcoming Bias* (blog), April 26, 2018. https://www.overcomingbias.com/2018/04/two-types-of-envy.html.

Haraway, Donna. Simians, Cyborgs, and Women. The Reinvention of Nature. New York: Routledge, 1991.

Haraway, Donna. *Staying with the Trouble*. Durham: Duke University Press, 2016. DOI: https://doi.org/10.2307/j.ctv11cw25q

Hawkes, Rebecca, and Cherie Lacey. "'The Future of Sex': Intermedial Desire between Fembot Fantasies and Sexbot Technologies." *Popular Culture* 52, no. 1 (2019), 98–116. DOI: https://doi.org/10.1111/jpcu.12748

Hochschild, Arlie Russell. *The Managed Heart. Commercialization of Human Feeling.* Berkeley; Los Angeles; London: University of California Press, 2012. DOI: https://doi.org/10.1525/9780 520951853

Huff, Aimee. "Buying the Girlfriend Experience: An Exploration of the Comsumption Experiences of Male Customers of Escorts." *Research in Consumer Behavior* 13 (2011): 111–26. DOI: https://doi.org/10.1108/S0885-2111(2011)0000013010

Illouz, Eva. The End of Love: A Sociology of Negative Relations. Oxford: Oxford University Press, 2020.

Kasper, Katrin. "Debatte über Sex mit Robotern." ORF.at, December 20, 2016. https://science.orf. at/v2/stories/2815679.

Kleeman, Jenny. "The race to build the world's first sex robot." *The Guardian*, April 27, 2017. https://www.theguardian.com/technology/2017/apr/27/race-to-build-world-first-sex-robot.

Kracher, Veronika. Incels. Geschichte, Sprache und Ideologie eines Online-Kults. Mainz: Ventil, 2020.

Kubes, Tanja. "New Materialist Perspectives on Sex Robots. A Feminist Dystopia/Utopia?" *Social Sciences* 8, no. 224 (2019): 1–14. DOI: https://doi.org/10.3390/socsci8080224

Kubes, Tanja. "Queere Sexroboter. Eine neue Form des Begehrens?" In *Maschinenliebe*, edited by Oliver Bendel, 163–84. Wiesbaden: Springer, 2020. DOI: https://doi.org/10.1007/978-3-658-29864-7_10

Langcaster-James, Mitchell, and Gillian R. Bentley. "Beyond the Sex Doll: Post-Human Companionship and the Rise of the 'Allodoll'." *Robotics* 7, no. 62 (2018): 1–20. DOI: https://doi.org/10.3390/ robotics7040062

Laqueur, Thomas. *Making Sex: Body and Gender From the Greeks to Freud*. Cambridge: Harvard University Press, 1990.

Lettow, Susanne. Biophilosophien. Wissenschaft, Technologie und Geschlecht im philosophischen Diskurs der Gegenwart. Frankfurt: Campus, 2011.

Levy, David. Love and Sex with Robots: The Evolution of Human-Robot Relationships. New York: Harper Collins, 2009.

Levy, David. "Robot Prostitutes as Alternatives to Human Sex Workers." In *Homo Artificialis*, March 2012. Accessed March 12, 2021. https://homoartificialis.files.wordpress.com/2012/03/robot-prostitutes-as-alternatives-to-human-sex-workers1.pdf.

Moran, Jenny Carla. "Programming Power and the Power of Programming: An Analysis of Racialised and Gendered Sex Robots." In *Feminist Philosophy of Technology*, edited by Janina Loh and Mark Coeckelbergh, 39–57. Vol. 2 of *Techno:Phil – Aktuelle Herausforderungen der Technikphilosophie*. Berlin: J. B. Metzler, Springer, 2019. DOI: https://doi.org/10.1007/978-3-476-04967-4_3

Moran, Jenny Carla. "My Interview with a Sex Robot," Interview with a Sex Robot (blog), March, 2019. https://sexrobotics.wordpress.com.

Penz, Otto. "Strukturwandel der Arbeit. Vom Fordismus zum Postfordismus." In Sozioökonomische Perspektiven. Texte zum Verhältnis von Gesellschaft und Ökonomie, edited by Gerda Bohmann, Johanna Hofbauer, and Johann August Schülein, 235–59. Vienna: Facultas, 2014.

Puig, Krizia. "Research Notes | Future(s) of Love/Sex." *The Queer Futures Collective*, January 26, 2019. Accessed March 14, 2021. https://www.queerfutures.com/sundaysentiments/2019/1/20/ research-notes-1futures-of-lovesex-thoughtfeelings-about-the-disruptive-potential-of-sex-robots.

Puig, Krizia. "The Synthetic Hyper Femme: On Sexdolls, Fembots, and the Futures of Sex." M.A. thesis, San Diego State University, 2017.

Realbotix. "Get Your Virtual Companion Now." Accessed June 4, 2021. https://realbotix.com/ Harmony.

RealDoll. "The perfect companion in the palm of your hands." Accessed June 4, 2021. https://www. realdollx.ai.

RealDoll. "RealDollX." Accessed June 4, 2021. https://www.realdoll.com/realdoll-x.

Richardson, Kathleen. "Sex Robot Matters. Slavery, the Prostituted, and the Rights of Machines." *IEEE Technology and Society* 35, no. 2 (2016): 46–53. DOI: https://doi.org/10.1109/MTS.2016.2554421

Richardson, Kathleen. "The Asymmetrical 'Relationship': Parallels Between Prostitution and the Development of Sex Robots." *SIGCAS Computers & Society* 45, no. 3 (2015): 290–93. DOI: https://doi.org/10.1145/2874239.2874281

Richardson, Kathleen. An anthropology of robots and AI: Annihilation anxiety and machines. London; New York: Routledge, 2017.

Ross, Ellie. "No Sexbots Please—We're British." *The Sun*, September 15, 2015. https://www.thesun. co.uk/archives/news/105811/no-sexbots-please-were-british.

Schelsky, Helmut. Soziologie der Sexualität. Über die Beziehungen zwischen Geschlecht, Moral und Gesellschaft. Reinbek: Rowohlt, 1962.

Spiess, Leslee, and Peter Waring. "Aesthetic labour, cost minimisation and the labour process in the Asia Pacific airline industry." *Employee Relations*, 27 (2005): 193–207. DOI: https://doi.org/10.1108/01425450510572702

Taylor, Lin. "Sex Robots: Perverted or Practical in Fight Against Sex Trafficking?" *Reuters online*, July 20, 2017. https://www.reuters.com/article/science-robots-sextrafficking-idUSL1N1KB0M0.

Thadden, Elisabeth von. Die berührungslose Gesellschaft. Munich: C. H. Beck, 2018. DOI: https://doi.org/10.17104/9783406727832

Turkle, Sherry. Alone Together. Why We Expect More from Technology and Less from Each Other. New York: Basic Books, 2011.

Viceland. "Harmony the Sex Robot." Vice on TV, *Slutever*, clip from episode "Robot Sex," 4:33, March 14, 2018. Accessed March 12, 2021. https://video.vice.com/en_us/video/slutever-harmony-the-sex-robot/5aa6edcbf1cdb36f616c77a2?jwsource=cl.

Vierkandt, Alfred. "Sittlichkeit." In *Handwörterbuch der Soziologie*, edited by Alfred Vierkandt, 533–45. Stuttgart: Ferdinand Enke, 1959 [1931].

Warhurst, Chris, and Dennis Nickson. "Who's got the look?' Emotional, aesthetic and sexualized labour in interactive services." *Gender, Work and Organization*, 16 (2009): 385–404. DOI: https://doi.org/10.1111/j.1468-0432.2009.00450.x

Weber, Jutta. "Helpless machines and true loving care givers: a feminist critique of recent trends in human-robot interaction." *Information, Communication & Ethics in Society* 3, no. 4 (2005): 209–18. DOI: https://doi.org/10.1108/14779960580000274

Wennerscheid, Sophie. "Posthuman Desire in Robotics and Science Fiction." In *Love and Sex with Robots*, edited by Adrian Cheok and David Levy, 37–50. Cham: Springer International Publishing, 2018. DOI: https://doi.org/10.1007/978-3-319-76369-9_4

Winker, Gabriele. Care Revolution. Schritte in eine solidarische Gesellschaft. Bielefeld: transcript, 2015. DOI: https://doi.org/10.1515/transcript.9783839430408

Wiseman, Eva. "Sex, love and robots: is this the end of intimacy?" *The Guardian*, December 13, 2015. https://www.theguardian.com/technology/2015/dec/13/sex-love-and-robots-the-end-of-intimacy.