

Robots, rape, and representation.

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Abstract:

Sex robots are likely to play an important role in shaping public understandings of sex and of relations between the sexes in the future. This paper contributes to the larger project of understanding how they will do so by examining the ethics of the “rape” of robots. I argue that the design of realistic female robots that could explicitly refuse consent to sex in order to facilitate rape fantasy would be unethical because sex with robots in these circumstances is a representation of the rape of a woman, which may increase the rate of rape, expresses disrespect for women, and demonstrates a significant character defect. Even when the intention is not to facilitate rape, the design of robots that can explicitly refuse consent is problematic due to the likelihood that some users will experiment with raping them. Designing robots that lack the capacity to explicitly refuse consent *may* be morally problematic depending on which of two accounts of the representational content of sex with realistic humanoid robots is correct.

Keywords:

Robots; sex robots; ethics; rape; representation; HRI.

INTRODUCTION

Sex robots are, inevitably, a hot topic. From its very inception, robotics has been haunted by dreams of developing an artificial woman [1]. Perhaps because of the overwhelmingly male character of the engineering profession, perhaps for other deeper reasons relating to anxieties about the boundaries between world and flesh, these dreams have often morphed into fantasies about having sex with an artificial woman. While latex “sex dolls” of the sort popularised in the film *Lars and the Real Girl* [2] have existed for several decades [3], recent advances in mechanics and animatronics hold out the prospect of manufacturing more-or-less lifelike humanoid robots with a wide range of behavioural responses designed to allow those who are so inclined the opportunity to indulge their sexual fantasies [4-6]. Correspondingly, there is now an emerging literature on the ethical and philosophical issues raised by the possibility of sex with robots [7-16].

In this paper I want to offer some reflections on a disconcerting possibility that will emerge once people start having sex with robots: the “rape” of robots.¹ I have placed rape in inverted commas here because the question of whether or not it is appropriate to describe the acts that are the object of my enquiry as rape or even simulated rape will itself prove central to my investigation. However, the sorts of acts that I wish to focus critical enquiry upon are acts that would constitute rape were they done to a real person rather than a robot. Most obviously, should sex robots be equipped with a sophisticated behavioural repertoire including vocal utterances then it is possible that a particular robot might — either as the result of an explicitly programmed script or as an unanticipated consequence of programmed responses to a series of stimuli — “refuse” sex by saying “no” when it is initiated, and even struggle and scream when sex continues beyond this point. Because any act of sexual intercourse without consent is rape, one might also include in this class any act of sexual intercourse with a robot where the robot fails to indicate consent — although, as we shall see, concern with the “consent” (or simulated consent) of the robot will require us to consider some difficult philosophical questions about the relationship between representation and reality. Finally, it is important to recognise that there are actually two different ethical issues here. Is it wrong to rape a robot? And, is it wrong to design a robot meant to be raped (or even simply that admits of being raped)? I am mainly concerned with the second of these questions, which is arguably prior because unless robots admit of being raped no one will be able to rape a robot. However, in so far as these two questions are closely and complexly related, inevitably I must also discuss the first.

¹ The only other paper written on this topic of which I am aware is Danaher [8]. This paper, which is excellent, concentrates on the case for the *legal* prohibition of the rape of robots rather than on the larger questions concerning the ethics of the rape of robots and the ethics of the design of robots that can be raped, which are my focus here. Moreover, Danaher's paper treats only a subset of the cases that I discuss here.

I will argue that the design of realistic “female” robots that could explicitly refuse consent to sex in order to facilitate rape fantasy would be unethical because sex with robots in these circumstances is a representation of the rape of a woman, which may increase the rate of real rape, expresses disrespect for women, and demonstrates a significant character defect. Indeed, even when the intention is not to facilitate rape, the design of robots that can explicitly refuse consent is problematic due to the likelihood that some users will experiment with raping them. Designing robots that lack the capacity to explicitly refuse consent *may* be morally problematic depending on which of two accounts of the representational content of sex with realistic humanoid robots is correct. If sex with a robot that fails to explicitly consent is a representation of rape then the design of such robots will most likely be morally wrong for the same reasons. If, on the other hand, sex with such robots is *never* a representation of rape – and especially if that’s because the robots have been designed so as *always* to consent to sex — then the design of sex robots may well be unethical for what it expresses about the sexuality of women.

The dialectic that follows is necessarily somewhat convoluted, so let me provide a brief outline here. In section 1 of the paper, I defend the idea that there is a sense in which we might legitimately speak of the “rape” of a robot even if the robot involved is not sentient. This sense, however, relies on the claim that acts with robots may represent or simulate acts that would more ordinarily be performed with people. The idea that an act with a robot might represent rape in turn requires an initial discussion of how we should interpret the “consent” or otherwise of robots to sex, as well as a brief discussion of the representational content of sex with sex dolls. In section 2 of the paper, I consider what is arguably the most common criticism made of the idea that people might enjoy raping a robot, which is that it will make it more likely that (some) men will rape real women. Similar claims have a long history in the debate about the social impacts of pornography or video game violence, which I briefly rehearse in this section, before concluding that, even though it has more plausibility than is often recognised, this argument is likely to leave many critics unmoved. In section 3 of the paper, I turn to consider the claim that the rape of robots — and the design of robots for the purpose of rape — would express (rather than cause) morally repugnant attitudes towards women. In order to evaluate this claim, however, it is necessary to return to the question of what sex acts with robots represent. In particular, it is necessary to develop an account of when a robot represents a person and when it represents a robot, which in turn requires us to consider the question of how the meaning of actions is to be settled more generally. I distinguish two different ways in which we might determine the meaning of actions and conclude that at least some sex acts conducted with realistically shaped “female” robots *will* represent rape on either account and therefore express morally repugnant attitudes towards women. However, in the absence of the claim about the impacts of enjoying such

representations on behaviour, the idea that enjoying them is wrong must rely on a virtue ethics. In Section 4, I provide a brief account of how a virtue ethics allows for the moral evaluation of pleasures and fantasies in the absence of a claim about their impact on behaviour and thus allows us to condemn the rape of robots. I also draw attention to some counterintuitive implications of my argument which suggest avenues for future research. Finally, in section 5, I turn to consider the ethics of the design of robots intended to facilitate rape fantasy (and/or that merely allow for the possibility that users will take pleasure in raping them) and reach the conclusions outlined in the previous paragraph.

The topic of sex robots is often greeted with nervous laughter in philosophical circles and sometimes with a disturbing amount of prurient interest. Introducing the question of robots and rape adds an element of creepiness into the mix and undoubtedly involves some risk that the real evils of rape will be treated solely as grist for an academic argument and thereby trivialised. Nevertheless, I believe that a serious and (I hope) adequately sensitive discussion of this topic is justified for at least two reasons. First, social robots designed to sustain rich interactions with human beings — including sex robots — are likely to come into widespread use in homes and workplaces in the not-too-distant future [16-18]. The questions of the ethics of our relations with these systems and of the ethics of their design will therefore soon arise as urgent practical necessities [7]. Thinking about the limit case of the rape of a sex robot may help us better understand other relationships between robots and human beings and the ethical issues they might raise. Second — and perhaps more importantly given my worry about the ethics of embarking on the investigation itself — just as the Real Doll has come to have a cultural significance out of all proportion to the numbers produced, sex robots are likely to play an important role in shaping public understandings of sex and of relations between the sexes in the future [19]. The nature of robots as three-dimensional entities capable of complex behaviours distinguishes them from other media in ways that are arguably as yet under-theorised.² Asking what the rape of a robot would represent, and about the ethics of designing robots that allow such representations to enter the public sphere, provides an opportunity to consider how the nature of robots *as robots* conditions how they function as representations and therefore how they are likely to shape gender (and other social) relations in the future [21-22], as well as to discuss deeper philosophical questions about the ethics of the simulation and/or representation of acts that it would be immoral to actually perform. This investigation therefore requires us to draw upon feminist (and other) accounts of the philosophy of sex and representation, and the literature on social robotics, in a fashion that I believe might illuminate both.

² The essays collected in Wilks [20] represent a useful starting point for this larger project.

1. CAN ROBOTS BE RAPED?

Before I can proceed to the main body of my enquiry, I need to do a bit more to explain what I mean in writing of the rape of a robot. Although philosophers and journalists talk blithely about a future in which people will have sex with robots, such talk is arguably misguided. Sex is something that occurs between people, or animals, or perhaps between people and animals. It is a relation. Someone has sex with someone [23].³ However, because robots are not (yet) sentient, a robot is never “someone”.⁴ Strictly speaking, sex with robots is actually masturbation with robots [15, p 401]. Talk of sex with robots is therefore loose talk. People may do something with robots that looks — and perhaps feels — like sex with human beings but it is a representation or simulation of sex not the reality.

For the same reason, to write of raping robots may seem misplaced from the get go. Rape is — approximately speaking and glossing over a fair amount of controversy regarding a precise definition — sex without consent [25].⁵ Robots cannot give consent to sex or to anything at all. Nor is there any reason to be worried for their sake about whether they would have consented to sex if they could consent. As the question of consent does not arise, the concept of rape seems to have no application. Again, we can only really be discussing masturbation with robots, albeit — as I will discuss further below — masturbation that arguably has a disturbing representational content.

There is, perhaps, one scenario in which it *would* make sense to be concerned with the consent of a robot to sexual relations, which I mention only to set aside: when (hypothetical) artificially intelligent robots have become “moral persons” [30-31]. Should robots ever become capable of thinking and feeling — and not just simulations thereof — to the same degree as human beings then our relations with them will need to be constrained by the same moral principles that govern our relationships with other human beings [32]. To do anything to such a robot without its consent will be *prima facie* wrong and violate the robot’s right to personal autonomy. Even so, one might wonder whether intelligent robots will be so psychologically constituted that sexual intercourse with them without their consent would constitute the profound violation and especial harm characteristic of rape. Sex without consent with a person who has lots of casual sex and who doesn’t really care about sex is no less rape than sex with someone who believes that sex is the most profound and intimate act one human being can

³ For a discussion of just how much definitional work this minimal claim leaves to be done, see Christina [24].

⁴ I offer a brief discussion of the issues that might be raised by sentient robots, as well as an explanation as to why I do not consider them at more length in the current manuscript, below.

⁵ For an introduction to the large literature on this topic see: Cahill [26], Cowling and Reynolds [27], McGlynn and Munro [28], and Wertheimer [29].

engage in with another [25].⁶ However, that is because the nature of the act is determined by its social meaning and by facts about the role sex plays in a human life and in particular the profound psychological harms that the vast majority of people suffer if forced to engage in sexual activity against their will [26, 33-34]. Robots will not reproduce or bond sexually. There is no reason to think that they will care about sex at all. Consequently, rape of a sentient robot may be no worse than theft from a sentient robot or indeed any other violation of its right to personal autonomy. I guess it is possible that intelligent robots who were designed as sexual partners and companions might be heavily invested in sex and experience profound psychological harm if they are raped.⁷ Yet this is inevitably speculation given that we are a long way from knowing how to build a sentient machine. Indeed, it is unclear whether we will ever know how to build such machines.

In this paper I will therefore be concerned with sexual acts involving more sophisticated (but still non-sentient) versions of the robots that we can build today.⁸ Such robots experience nothing and the question of their consent to sex does not arise — or at least not in the same way as it arises for human beings. Nevertheless, it remains possible to imagine someone treating a robot in such a way in the course of a sexual act performed with it that the description “rape” would not seem inappropriate.⁹ Let us imagine that a purpose-built “sexbot”, manufactured so as to look like a real woman, is equipped with a sophisticated and wide-ranging behavioural repertory.¹⁰ This robot can approach its owner to request sex, can indicate sexual desire and pleasure, and can explicitly “consent” to sex: it can also refuse sex by saying “no. I don’t want to do that”. If a person persists in attempting to have sex with the robot after it has said “no”, it physically retreats. If they persist, it shouts “stop it, you are

⁶ There is some controversy in the literature regarding whether the *harm* of rape may be different in cases where the person raped has different attitudes about the significance of sex. For contrasting perspectives see Archard [25] and Wertheimer [29].

⁷ Such robots might also be vulnerable to forms of sexual abuse other than rape, including psychological abuse.

⁸ Russell [12] offers some speculations about the issues that may arise should sentient humanoid robots ever be created.

⁹ It is also possible to imagine people treating such robots in ways that we might consider to be psychologically abusive were such treatment to be directed to a real human being. This behaviour might also be thought to be morally problematic for reasons akin to those I provide below. However, given that my topic is the ethics of the rape of robots, rather than the ethics of our treatment of robots more generally, I have chosen not to discuss this possibility further here.

¹⁰ No doubt “male” sexbots will also exist in the future and might be (ab)used by men or women: the company, True Companion, that purports to produce the world’s only commercially available sexbots, also advertises a male robot “Rocky” as well as the more famous female robot Roxxy. However, the vast majority of Real Dolls produced are shaped like women and purchased by men: Gurley [3] reports that women constitute “less than 10%” of the purchasers of Real Dolls. There is no reason to believe that this will not also be the case with sexbots. Scheutz and Arnold [13] offer some early results on gendered differences in attitudes towards sex robots and report that more than two thirds of their male respondents said that they would use a sex robot while almost two thirds of their female respondents indicated that they would not. For the purposes of this paper I will therefore follow Danaher [8] and assume that the sexbots under discussion are modelled on women and that the “users” of these devices will overwhelmingly be male.

raping me. Stop raping me. He's raping me", and struggles to interrupt the sex act.¹¹ If a man has sex with the robot while it is displaying this latter set of behaviours, it seems fair to describe this as any or all of: *simulated rape*; "rape"; and — if we keep in mind that the appropriateness of dropping the inverted commas is itself up for grabs in the argument that follows — rape.¹² Moreover, it seems clear that there is an ethical question here, about whether it is morally permissible to engage in such behaviour or not. Importantly, however, this behaviour is "rape" because it is a representation of rape. In what follows then, we are essentially concerned with the ethics of the representation of actions (or — to put it another way — the ethics of simulated actions) using robots.

As I intimated above, if we accept that sex with a robot when it is explicitly refusing consent to sex is (a representation of) rape, a further question arises about what we should say about sex with a robot that does not explicitly indicate consent or, indeed, sex with a realistic sex doll that does not explicitly indicate consent.

There is, I think, a strong case that can be made for the claim that sex with a robot — and perhaps even with a sex doll like a Real Doll — that fails to explicitly indicate consent is as much rape as the scenario described above. That is to say, it too represents rape. Sex without consent is rape and *ex hypothesi* these robots (or sex dolls) do not consent. Following this line of thought, then, one might argue that sex with sex dolls and sexbots simulates or represents sex with women who are unconscious or drugged.

It might be objected that given that robots *can't* consent it makes equal sense to assume that they do consent to sex as that they don't. That is to say, sex with a robot (or sex doll) might represent sex with a woman who consents to sex even though she does not express this consent through a spoken utterance. Notice, however, that if we deny the need to secure explicit consent we risk implying that robots (and/or sex dolls) and (perhaps) therefore the women that they represent are always available for sex [35]. The assumption that women are always desirous of, and available for, sex is itself a key trope of "rape culture" [36-37].

However, there are also some rather counter-intuitive implications that would follow from the claim that sex acts without the explicit consent of the sexbot or sex doll are rape. We don't typically say that

¹¹ As I will discuss further below, this set of behaviours might have been consciously scripted by the robots designer who wanted it to be able to cater to those who enjoy rape fantasies. Alternatively, it may emerge as the consequence of other design choices that were not intended to facilitate rape.

¹² In adopting this culturally stereotypical account of rape as my paradigmatic case of rape of a robot, I by no means intend to imply that the majority of real rapes fit this model or that rapes that do not are any less rapes by virtue of that fact. Rather, my intention here is to mobilise the strongest possible set of intuitions that this particular scenario would be a case of rape. I consider cases of the rape of a robot that would in fact look more like the majority of real rapes in the following paragraph.

someone rapes a dildo or an artificial vagina if they engage in sex with it, for instance, even though these items don't consent.¹³ A Real Doll or a sexbot differs only in shape from these items: it is just another aid to masturbation. Moreover, on this account we might wonder about the ethics of *any* sexual fantasy that does not involve our fantasised sexual partner(s) explicitly indicating consent in the course of the fantasy.

One suggestion that has been made to me is that whether or not sex with a robot that fails to indicate consent is rape depends on whether the robot has the *capacity* to simulate consent: if it does, we should interpret silence as refusal.¹⁴ This argument tries to drive a wedge between the ethics of our treatment of sophisticated sexbots and the ethics of our treatment of sex dolls and other more-or-less inert sexual aids.¹⁵

This attempt seems to me unlikely to succeed, for a number of reasons. First, it seems to confuse the question of the significance of actual consent for the ethics of sexual intercourse and the question of the content of the representation of (the lack of) consent in ersatz sexual acts: a lack of explicit consent may *represent* the absence of consent even where actual (or simulated) consent is not possible, especially given that the women that female sex robots arguably represent *can* give consent. Second, insofar as we are concerned with what the sexual act with a robot represents it seems strange to hold that this depends on the capacities of the robot given that third parties are unlikely to know the relevant details. As I will discuss further below, what a symbol or action represents depends on how members of relevant community will understand and interpret the action rather than on the intentions of the author or actor. If relevant third parties could not determine whether or not a particular sex act with a robot constituted rape without first examining the robot's CPU to see what behaviours it was capable of, this would render the representative content of the act indeterminate in the vast majority of cases. Third, it is unclear why the ethics of the rape of a robot (or doll) should depend on the capacities of that particular robot (or doll) rather than on such sexual substitutes in general today or even in the future. We could, after all, refuse to have sex with, or build, sexbots until they could "consent". If it's unethical to have sexual intercourse with a sophisticated robot without its explicit consent, surely the inability of less sophisticated robots to provide this consent should also

¹³ Notice also that there is a clear sense in which, it might be argued, a penis shaped dildo represents a man — and an artificial vagina represents a woman — by synecdoche. This is not to deny that many people may make use of dildos without any thought of, or interest in, having sex with men. As I will suggest further below what the object represents is arguably a function of how a relevant community perceives it rather than the intentions of individual users.

¹⁴ I believe that this suggestion was made to me independently by both Michael Flood and Catherine Mills in conversation about the topic of this paper.

¹⁵ Similarly, Danaher explicitly attempts to distinguish sex robots from sex dolls by insisting that the former must have "some degree of artificial intelligence (i.e. some ability to sense, process and respond to signals in its surrounding environment)" [8].

speak against — rather than in favour of — the moral permissibility of having sex with them? Finally, emphasising the importance of the capacity of a robot to provide explicit consent establishes a perverse incentive for the designers of sexbots to leave the phrases required for consent out of the vocabulary of the machines they design so as to make it impossible for the user to rape the robot. I am therefore inclined to hold that the ethics of sex with sophisticated robots without explicit consent and the ethics of sex with dolls such as Real Dolls go hand-in-hand. Whether we should consider these both to be (simulated) rape or not will depend upon our answer to a larger question about what sex with robots represents, which is discussed below.

In what follows, then, I will be concerned with both sex acts with robots where the robot explicitly refuses consent to sex and cases where the robot fails to explicitly consent to sex.¹⁶ Given that robots themselves do not suffer from being raped and especially if we think of the rape of robots as a type of masturbation using robots, it's actually quite difficult to explain what, if anything, would be wrong with it without calling into question the morality of a much wider variety of sex acts, sex aids, and sexual fantasies.

2. WILL THE RAPE OF ROBOTS LEAD TO RAPE OF WOMEN?

In my experience, the first argument usually reached for by those who find the prospect of a world in which robots are used, or even manufactured, for rape disturbing is that the rape of robots will *cause* the rape of women [35].¹⁷ Not every man who rapes a robot need rape a woman in order for this to be true. Rather, as long as the practice of the rape of robots makes some people more likely to rape women, it will elevate the number of women who are raped and thus cause some women to be raped.

Let me state clearly at the outset that I believe this argument has a great deal of force. Sexual fantasy associates the imagining of behaviour with pleasure, which in turn associates the imagined behaviour with pleasure. Associating a fantasy of rape with *sexual* pleasure seems perilously close to a mechanism for Pavlovian conditioning for rape. At the very least, it might be expected to lower the barriers to rape by increasing the attractiveness of rape in the mind of the person who enjoys the fantasy. Moreover, the billions of dollars spent on advertising by people whose livelihood depends upon increasing the sales of their products suggest that advertising works. If it is possible to get people to buy Coca-Cola by associating the product with pleasure by means of pictures, sound bites, and films then it is difficult to see why associating the rape of a female robot with pleasure would not also cause

¹⁶ Danaher [8] discusses only the first class of cases.

¹⁷ Danaher [8] also treats this claim about causation as one of the main arguments about the topic but is reluctant to endorse it because of the lack of evidence for the claim at the current point. Relatedly, Richardson [38] argues that the sale of robots for sex promotes the sex trade.

people to be more likely to pursue the activity that it represents. Designing female sexbots for the purposes of rape looks remarkably like an advertisement for the “pleasures” of the rape of real women and seems just as likely as other advertising to produce results.

Nevertheless, while this argument seems convincing to me it must be admitted that many other people have found it much less so. In particular, the claim that exposure to or enjoyment of representations of an activity makes people more likely to engage in that activity is heavily contested in the media effects literature [39-40].¹⁸ The relationship between film and television violence and real violence, and the relationship between videogame violence and real violence, have been debated ever since the relevant technologies came into widespread use. Similarly, there is a long history of controversy about the relationship between pornography and sexual violence and/or sexism [41, p 183]. Despite decades of argument and thousands of academic studies, consensus on these questions remains elusive. Many participants in these controversies insist that there is little evidence to show that the enjoyment of representations of violence [42-43] or sex [44-45] makes individuals more likely to carry out the acts represented in the real world.

It’s also worth observing that precisely the *opposite* claim is often made in the context of discussions of pornography and (also) sex robots. Some people argue that providing individuals with a means by which they can entertain or act out their fantasies will make them *less* likely to try to act their fantasies out with real people.¹⁹ That is, these critics offer a “catharsis” theory of sexual fantasy and simulated acts. Were such a theory correct then presumably the presence of rape-able robots in the community would actually work to lower the incidence of real rape.

Notice also that postulating that the enjoyment of representations of an act makes people more likely to carry out the act itself would call into question the ethics of a much wider range of representations and fantasies — including depictions of rape and murder in books, magazines, films and video games as well as “ordinary” pornography. That it would capture and condemn films, videogames, and stories depicting rape for the purposes of the pleasure of the viewer, player, or reader may be a consequence that is amenable to those inclined to buy the argument in the first place. However, this line of criticism also has implications for our attitudes towards pornography that does not feature rape. Representations of sex and sexual relationships in pornography are — for the most part — not realistic.

¹⁸ This literature is so divided that participants in the debate tend to be formed into two mutually opposing camps, each convinced that their views have been thoroughly proven. Consequently, even the claim that the question is contested tends to generate controversy depending on the audience. If my reader is amongst those who believes this question to be settled either way, I would ask him or her to at least acknowledge that the opposing perspective also has a significant number of adherents regardless of the plausibility of their claims.

¹⁹ See, for instance, the remarks attributed to Shin Takagi, founder of the Japanese company Trottla, which manufactures lifelike child sized sex dolls, in Morin [46] and to Ron Arkin in Hill [47].

In particular, they are not realistic when it comes to the sexual desires of most women and the bodies of most people. If users of pornography are more likely to behave in the ways represented in pornography this will generate a predictable and pernicious set of harms to women [48]. Because pornography often represents women as sexually available at all times and/or as enjoying sex after they have initially refused it, such representations arguably also make rape more likely by making men less likely to take women's refusal of consent to sex seriously [49-51].

One way to resist this implication would be to insist that the embodied nature of robots makes the rape of a robot especially "realistic" for the participant and that realistic representations are more likely to encourage people to carry out the represented act in reality [18]. According to this way of thinking, films are worse than stories, videogames — being interactive — are worse than films, and robots — being interactive and embodied — are worst of all. If it worked, this line of argument would distinguish the rape of robots from the representations of rape, sex, and murder in other media and thus allow for the possibility that it is uniquely dangerous. However, note that it would *not* justify us being less concerned about the "murder" of robots than the rape of robots. It is not implausible to think that in the future inexpensive humanoid robots manufactured for the purpose will be used as realistic targets in training exercises for the police and the military. Imagine that a passerby sneaks up on one of these robots while it is off duty and shoots it in order to experience what it is like to kill somebody. We might describe this as "murdering" a robot. If the rape of robots causes rape then presumably the murder of robots should cause murder. Given the likelihood that robots will be killed for entertainment, not to mention the near certainty that they will be dismembered and demolished for recycling, this is a worrying conclusion.

Of course, it might also be argued that realistic representations are *less* likely to encourage the behaviour fantasised about than more schematic representations that portray it as more pleasurable and less fraught. In the debate about videogame violence, for instance, critics often highlight the cartoonish nature of this violence and the unrealistic portrayal of its effects [52, pp 112-13].²⁰ If robots would offer a more realistic experience of rape than other representations thereof this might actually render them less problematic than other forms of rape fantasy in the eyes of some critics.²¹

Finally, the claim that the rape of (female) robots will make it more likely that individuals will rape real women relies on the idea that the rape of a female robot always — or perhaps only mostly — represents the rape of a woman. The rape of a robot can only function as an advertisement for real rape if it refers to it. As I will discuss further below, this claim might also be disputed.

²⁰ My thanks to Brendan Keogh for drawing my attention to this passage.

²¹ Although it is unlikely that it would render them entirely unproblematic.

For all these reasons, an argument that relies on the claim that the rape of robots will lead to the rape of women seems unlikely to convince large sections of the community [8]. This does not mean that the claim is untrue, of course, but it does suggest that if one is looking to win support for a policy proposal in public debate one may need to look further afield.

3. RESPECT FOR WOMEN AND THE RAPE OF ROBOTS

A second line of criticism also focuses on the implications of the rape of robots — and the design of robots for rape — for social relations but criticises these practices for what they express rather than for what they cause [8].²² What does that say about a society that it tolerates these activities? Variations of this argument might further argue that the representation of rape by means of the rape of robots modelled on women objectifies and/or silences women.²³

Again, I must confess that I find this line of argument compelling. If the rape of a robot represents and simulates the rape of a real woman then performing the first act implicates the agent in a relationship with the second. The precise nature of this relationship may be difficult to capture but it's hard not to think that it is something akin to complicity. To return to the analogy with advertising: even if the rape of robots does not succeed in promoting — in the sense of increasing — the rape of women, it exhorts and endorses it.

At this point, however, we must directly confront the question of what it is that (what I have been describing as) the rape of robots represents. Thus far I have, for the most part, assumed a naive “correspondence” account of representation, wherein a sex act with a robot is rape because — and in so far as — it looks like, or resembles, the rape of a person.²⁴ However, representation is a complex

²² Richardson [38, p 192] and Kaye [19] also criticise the use and manufacture of sex robots more generally on this basis.

²³ The strongest versions of these arguments, which have been developed in the literature about the ethics of pornography, blur the line between the effects and the content of pornography. According to Catherine MacKinnon [51] and also Rae Langton [50], for instance, pornography just *is* the subordination and silencing of women. For my purpose here what matters is that these arguments rely on a philosophical claim about the relations between various speech acts rather than on an empirical claim about the social consequences of pornography. For a recent critical discussion of the philosophical claim, see Bauer [53].

²⁴ The discussion that follows assumes that resemblance is primarily a matter of physical resemblance. However, as was pointed out to me by an anonymous reviewer, robots may also represent or resemble things, including individuals, by virtue of their behaviour (for instance, vocal utterances or characteristic movements) or by virtue of the role that they play in the user's life (for instance, the user's own psychic identification of them with a particular thing or person). These alternative means by which robots may have representational content complexity but do not fundamentally alter the discussion that follows. In particular, as per the argument below, the ultimate authority as to what a particular robot represents remains society rather than the individual user. For reasons of space, I have chosen not to discuss these alternative mechanisms for representation further in the current context.

mechanism and the appropriateness here of this naive account might be challenged at a number of levels [40].

To begin with, notice that even on this account some acts of sex with robots that explicitly deny consent may not represent rape. Some robots designed for sex might be shaped like (non-human) animals or even aliens [8]. Some might be shaped like robots. If the robot resembles something other than a human being then the act will not represent the rape of a human being. If it resembles something to which the concept of rape would not apply then it will not represent rape.

Once we acknowledge this, though, it may seem that all talk of “raping” — *with* the inverted commas — robots is misplaced because it is not possible to *really* rape robots. If a man has sex with a robot, he is having sex with something that has no feelings and is incapable of consent. Robots can’t consent, so it’s not an act of rape. Therefore it is not an act of simulated rape or a representation of rape. Sex with a robot may simply represent sex with a robot.

According to this line of thinking, it is the critic and not the robot fetishist who is confusing robots and women. However, if the robot is shaped like a woman and has been designed to cry out “stop it, you are raping me. Stop raping me. He’s raping me”, as in the scenario I described above, or something similar, this claim seems more than a little disingenuous. What would be the point in designing a robot with those responses or in seeking out sex with such a robot unless the scenario was supposed to refer to rape in some way? Given that it is impossible to rape a robot, the reference can only be to raping a woman.²⁵

The claim is, perhaps, more plausible with regards to the case of sex with a robot that fails to explicitly indicate consent. In this case we might wonder both whether the act represents sex with a woman and also whether it represents the rape of a woman.

Once more, the fact that — *ex hypothesi* — such sex robots are modelled on women provides strong *prima facie* evidence that the robot represents a woman and therefore that sex with the robot represents sex with a woman [38].²⁶ Yet it might be argued that this conclusion is premature. In some cases the motivation of individuals having sex with a robot (or doll) shaped like a woman might be the desire to have sex with a woman-shaped *robot* (or doll) [3]. For such individuals, the robot is not a

²⁵ Moreover, I believe the vast majority of those who witnessed, or learned of, it would identify it as such. The significance of this observation will become clear below.

²⁶ Further — disturbing — evidence in favour of this claim is provided by the fact that at least one sex doll manufacturer offers a “hymen” along with the choice of latex genitals that may be fitted to its dolls. It's difficult to understand how the concept of virginity in a doll could refer to anything other than virginity in a woman.

substitute for — or a representation of — a real woman. Rather its nature as a robot — *and* as a robot shaped like a woman — is what makes it an object of sexual desire.²⁷

This is all well enough as far as it goes. However, the question of what sex with a robot represents is not settled by establishing that some people may desire the robot as a (woman-shaped) robot. Masturbation with robots has a semantic content that ordinary masturbation lacks. Because meaning is social, the representational content of symbols or actions is determined by reference to the understandings of a relevant community. For sentences or utterances in a language, the relevant community is the set of speakers fluent in that language. For actions or social practices the relevant group is less clearly defined but “the community” or “society” are the most plausible reference points. When it comes to what this group understands an action to represent, we might look to what the majority of members actually conclude upon encountering it or to what a representative member of the community *would* conclude in circumstances that were appropriately idealised (for instance, were they to be a fully informed and scrupulous follower of the relevant semantic codes).

What sex with a robot represents, then, will depend upon what other members of the community are inclined to infer when they witness or learn about it. For this reason, even in the case where a robot fetishist is sexually attracted to a woman-shaped robot *qua* woman-shaped *robot*, sex with the robot will represent and refer to sex with a woman. This conclusion follows straightforwardly if we defer to the actual evaluations of the majority of members of society, who are unlikely to be swayed by — even if they were aware of — the precise structure of the desires of the particular individual involved. It also follows — albeit less straightforwardly — even if we refer to what people would understand under appropriately idealised conditions. Although a fully informed observer would be aware that this particular individual desires the robot as robot, the social nature of meaning means that there is a limit on how idiosyncratic claims about the representational contents of particular actions can be.²⁸ As a result, at least while the community of robot fetishists remains a very small minority, the meaning of the action will still be determined by what it would mean were a representative member of the larger community to perform the act.

What should we say, finally, about the question of whether or not sex with a female sexbot (or sex doll) that fails to explicitly indicate consent is rape? Insofar, as the sexbot (or doll) represents a woman and sex with a woman without consent is rape, it represents rape. If we refer to the conclusions that would be drawn by a suitably idealised member of the appropriate community, I think this argument

²⁷ The existence of the websites <http://dollforum.com/> and <http://dollbase.org/> suggest that there may be a sizable community of people who fetishize realistic *dolls* in just this way.

²⁸ Similarly, Stephanie Patridge [54] has argued that representations of activities in virtual worlds have a social meaning that resists the efforts of individuals to alter it through entertaining alternative accounts thereof.

goes through by virtue of the definition of rape as sex without consent. However, the matter is much less clear if we hold that what actions represent is determined by the actual responses of the majority of members of the community. This is, of course, an empirical matter and may differ from society to society. My suspicion, though, is that the majority of people in Australia, North America, and the UK, would not describe sex with a robot that did not explicitly “consent” to sex as representing rape — let alone sex with a sex doll as representing rape — because they will not infer a lack of consent from the absence of explicit consent when it comes to representations of sex more generally.²⁹ It remains open to members of these communities to argue that these acts *should* be understood to represent rape or “really” represent rape but these assertions should be seen as attempts to make that the case rather than as accurate statements of the representational content of the acts at the current moment.

Sex with a robot that explicitly refuses consent represents rape, then, and sex with a robot or sex doll that fails to explicitly consent to sex *may* represent rape depending upon our answers to larger philosophical questions about how best to determine what an act represents *and* on an empirical claim about social understandings regarding the nature of rape. Such representations of rape express derogatory attitudes towards women, which are morally problematic. Following feminist critics of pornographic representations more generally [50-51, 55], it might further be argued that the rape of robots functions to subordinate, objectify, and/or silence women.³⁰ As I will discuss further below, the more we think of the rape of robots as a social practice, made possible by designers, corporations, and governments rather than as a series of individual sex acts, the more force these arguments will have.

Defenders of sexual freedom with robots might, in response, argue that it is wrong to see the rape of robots as endorsing rape or, indeed, as implying any positive attitude towards it. Representation is not reality and the person who enjoys the representation of rape is not thereby a rapist. Absent the claim that enjoying the representation makes them more likely to rape in reality it is not clear why it should imply anything at all about their attitude towards real rape.

Intuitions on this matter seem to differ widely. In the eyes of a significant percentage of critics, such representations are protected from moral criticism by the “magic circle” [56-57]. It is simply a mistake to treat fantasy as if it were reality [58]. Rather, we should preserve the realm of representation for

²⁹ As I shall discuss further below, the conclusion that sex with a robot that does not explicitly consent is not rape seems to imply that many sex robots (and also sex dolls), which can’t explicitly refuse consent, *cannot* be raped — a result that itself has further implications for the ethics of the design of sex robots and sex dolls.

³⁰ Note that, as was already emphasised above, the line of argument developed by MacKinnon and Langton (and others) in debates about pornography does *not* rely on a claim about the causal power of pornographic representations. Rather, these authors argue that pornography itself *constitutes* or *enacts* the subordination, objectification, and/or silencing of woman.

the development and entertaining of the most radical ideas and for the free play of libidinous energies. I have some sympathy for this perspective. Art and literature would be very fraught activities indeed if every thought or desire they invoked needed to be subjected to scrutiny as though it involved a commitment to a real-world belief or action. Moreover, once we start subjecting representation to moral evaluation, representation itself may turn out to be pernicious — a form of deception — because representation always falls short of reality [59, Part X]. On the other hand, it's hard not to think that enjoying particular sorts of representations and even just being prepared to entertain them is at least sometimes morally problematic.³¹ We typically condemn racist representations, for instance, and there seems to be no good reason not to extend this criticism to sexist representations, including representations of rape.

4. VICIOUS ACTS AND WICKED PEOPLE

There is one class of moral judgements in particular where it *is* appropriate to subject our relation with representations to moral evaluation. Our thoughts and desires are relevant to the assessment of our *character*. That is, to what sort of person we are. While concerns about the consequences of cruelty to robots might naturally be described as utilitarian and concerns about respect for persons might reasonably be described as Kantian, my focus now is on what is called “virtue ethics”.

When it comes to the morality of actions — and also, I will suggest, of thoughts and desires — virtue ethics asks “what sort of person would do that?” According to virtue ethics our fundamental ethical concepts relate to our character and, in particular, to the extent to which we possess various sorts of virtues or vices [61-63]. For example, are we kind? Are we brave? Do we possess good judgement? Because character traits are only revealed over extended periods, answers to these questions must refer to our dispositions rather than to isolated incidents: what do we *tend* to do? Moreover, the relevant dispositions include dispositions to feel certain emotions, understand the world in a certain way, and have certain responses to particular sorts of situations. Our thoughts and desires, then, form part of our character. Importantly, this means that our thoughts and desires are relevant to evaluations of our character regardless of whether or not we are likely to act on them. Our disposition to think and feel in a particular way may itself be admirable or reprehensible.

Virtue ethics therefore gives us a compelling explanation of what might be wrong with raping robots shaped like women, particularly if it is something that a person enjoys and engages in over an extended period. Even though such rape is really just the representation of rape, taking pleasure in it

³¹ It is worth observing that most societies currently maintain a striking double standard when it comes to this question and are much more reluctant to criticise representations of (non-sexual) violence than they are of sexual violence and perhaps sex more generally [60].

reflects badly on a person [64].³² It reveals them to have a vicious disposition [8]. It reveals them to be sexist, intemperate, and cruel. Indeed, I believe that similar virtue ethical intuition rests at the heart of our attitudes towards many of the ways people relate to — and treat — robots. This virtue ethical critique of the rape of robots does not rely upon a claim about the extent to which the enjoyment of the representation of rape is likely to cause people to commit real acts of rape.

The idea that our relations with robots offer an opportunity to demonstrate virtues and vices is not without its counterintuitive implications though. First, while I hope it is plausible to hold that enjoying the rape of robots can contribute to our being vicious, I find it much less plausible that sustaining kind and loving relationships with robots can be sufficient to make us virtuous: patting a robot dog does not itself make us a kind person.³³ While taking pleasure in representations of unethical behaviour may be unethical, it is far from obvious that taking pleasure in representations of ethical behaviour is itself ethical. Perhaps a virtuous person will feel pleasure when they read about a fictional character doing something good and perhaps a failure to feel some pleasure when one imagines a virtuous action is a sign of lack of virtue. However, I still struggle to believe that enjoying fantasising about good deeds in-and-of-itself makes us good. Second, if our treatment of robots is relevant to our possession of the vices and (perhaps) the virtues, then our relationships with robots can contribute to our well-being in ways that I have denied elsewhere. In a series of papers on the ethics of the design and use of ersatz companions for aged care, I have argued that paying proper attention to the objective components of welfare reveals that companion robots may contribute less to well-being than advocates typically suggest [69-71]. Subjective experiences based on false beliefs don't necessarily make us better off; moreover, the deception involved in designing robots to encourage users to falsely attribute thoughts and emotions to them is morally problematic [70-71]. Yet my discussion here suggests that our relations with robots can at least harm us by making us more vicious. It is possible that both these perplexities can be resolved by insisting that the demands of virtue are more exacting than the criteria for vices, such that virtue is more closely associated with action than is vice, which may sometimes be at least partially determined by patterns of emotional responses. However, in the current context, this must remain a question for further research.

³² Similarly, a number of authors have turned to virtue ethics in order to explain what is wrong with playing video and computer games that involve computer-generated representations of violence, rape, and/or paedophilia. See, for instance: Coeckelbergh [65]; McCormick [66]; Patridge [54]; and, Sicart [67]. My argument here lends weight to these criticisms. By contrast, Kershnar [68] argues that our enjoyment of fantasies of immoral acts need *not* reflect poorly on our character.

³³ It is, of course, possible that modelling good behaviour with robots might cause us to behave better with real animals (and people). However, my worry here is about the claim that treating robots well could render us virtuous *regardless of whether or not it meant that we were more likely to treat people (and animals) well*.

5. DESIGNING ROBOTS AND RAPE

As I observed at the outset, it will not be possible to rape robots unless the designers of robots make certain design choices. Most obviously, unless the designers of sex robots make it possible for the machine to refuse consent to sex and/or to struggle to avoid sex, the scenario I described above will not be possible. If engineers chose not to build sexbots or sex dolls at all or to only build sexbots that would always explicitly consent to sex then the question of the ethics of sex with a robot that failed to explicitly consent to sex would not arise. The ethics of these design choices is shaped — but not entirely determined by — our answers to the questions discussed above. While the conclusion that the rape of robots is unethical makes it easier to argue that it is unethical to design robots for this purpose, if one held that designers had no responsibility for the uses to which their products were put then this conclusion might not follow. Conversely, it is possible that the design of robots for rape might be unethical even if the rape of robots were not, because (for instance) the former project expressed morally reprehensible attitudes towards women that the latter did not. Fortunately, however, my investigation thus far does generate a number of plausible conclusions about the ethics of the design of robots and rape.

First, the design of robots closely modelled on women, which were *intended* to allow a user to enjoy raping them as per the scenario I discussed above, would be unethical. If one believes, as I am inclined to, that enjoying the rape of robots is likely to increase the probability that the user eventually commits an actual rape, then these products would pose a danger to women in general and their design would be morally impermissible on that basis. Even if one thinks that engineers are not responsible for the decisions of users to use their products, they are under an obligation not to design a product that imposes an elevated risk of rape on 50% of society when used for its intended purpose. Moreover, regardless of whether or not the rape of robots would elevate the rate of rape, the design of robots intended to allow the user to enjoy rape is unethical as a result of the sexist and morally repugnant attitudes that it expresses. Importantly, because the design of such robots would require a motivated intellectual engagement from the designer, the cooperation of a team of engineers, and funding for the project, all over an extended period, it expresses such attitudes to a much higher degree than the act of enjoying (by raping) the end product. Indeed, the design of robots for the purpose of rape would express sexist and morally repugnant attitudes even if no one actually ended up making use of this functionality. Finally, robots designed for the purpose of rape would represent

a moral hazard to the character of the user – they would be ethically dangerous to the person themselves — and their design and production would be unethical for this reason.³⁴

Second, the design of robots that allow people to rape them, itself involves moral risks and is likely to be morally problematic. These risks are most acute when the robot is capable of explicitly refusing consent but where this is not the result of a conscious design choice to accommodate the desires of potential users who wish to simulate rape but is rather the result of other choices made during the design process. If users rape these robots, it may elevate the rate of rape in the community, will express sexist and derogatory attitudes towards women, and will negatively impact on the character of the user. In this case it is, perhaps, more plausible to hold that the engineer who designed the robot is not responsible for the uses to which it is and the consequences thereof. Nevertheless, it has to be said that, given the nature of the market for sex robots and the nature of pornography more generally, that some users will wish to experiment with raping robots should hardly be a surprise. Engineers have a responsibility not to design a product that would have these negative impacts if used “incorrectly”, where such use is entirely predictable.

What about the design of robots that cannot explicitly refuse consent? What about the design of sex dolls? As we saw above, the representational content of sex with these items is contestable. On some accounts, it will represent rape, in which case the ethics of the design of such robots or sex dolls will be morally problematic for the same reasons as the design of robots that can explicitly refuse consent. On the other hand, if we hold that sex with such robots or sex dolls is a representation of consensual sex, then it will not be problematic for *these* reasons.³⁵ However, it may still be morally problematic for another reason, which may be seen most clearly if we imagine a realistic looking female sex robot that was designed so as *always* to “consent” to sex. All sex with such a robot would represent consensual sex *but now the robot itself would represent a woman who never refused sex*.³⁶ As I observed above, the idea that women are always available for sex is itself a central tenet of rape culture. For this reason, the design of such robots itself seems likely to express sexist and disrespectful attitudes toward women and be unethical on that basis [35]. It might further be argued that

³⁴ The design of such a robot would arguably also damage the character of the designer by demonstrating them to have sexist and morally reprehensible attitudes towards women sufficient to constitute a vice.

³⁵ Richardson [38] argues that sex dolls are problematic because they promote the sex trade, while Sullins [15] argues that the design of robots to encourage intimacy is unethical because it involves deception (see also Sparrow [70]). As my own project is to investigate how thinking about the hypothetical rape of robots can illuminate the ethics of their design, I will not attempt to evaluate these other lines of criticism of sexbots here.

³⁶ While other forms of pornography also often represent women as essentially desiring of, and available for, intercourse at all times, this representation takes place only while the viewer or reader of the pornography is viewing or reading it. However, if it is impossible to rape a particular sex robot then for each-and-every moment of its existence this robot represents a woman who cannot be raped.

representations of women as un-rapeable by virtue of always wanting sex are themselves likely to increase the rate of rape in the community.

The design of realistic female sex robots therefore requires confronting an ethical dilemma. If it is possible for them to be raped, building them is ethically problematic for all reasons I have discussed here. If it is not possible for them to be raped — and especially if this is because they explicitly consent to sex in each and every sexual encounter — then building them is ethically problematic for what it communicates to the broader public about women’s sexuality. If there are other morally weighty reasons to build sex robots (for instance to provide sexual pleasure to persons who are unable or unwilling to have sex with a real human partner [4, 72] or to reduce demand for human prostitutes [73]), these considerations will need to be weighed against each other. Given the importance of the goal of gender equality and of a rape-free society, though, it may well turn out to be the case that there is no ethical way to design sexbots modelled on women.

Finally, my investigation suggests that engineers who wanted to design sex robots might avoid many of the ethical pitfalls I have discussed here by ensuring that these robots looked sufficiently machine-like that sex acts with them would represent sex with a robot rather than sex with a person. That way, people who wanted to have sex with robots or perhaps who just wanted sexual pleasure without recourse to a human being (and without recourse to masturbation by more traditional means) could achieve these goals without implicating the user at all in the debate about the ethics of the representation of rape. When sex with a robot represents sex with a robot, it will not represent rape because robots cannot consent.³⁷ That will be bad news for those who wish to rape robots but may be very good news for those who wish to enjoy sex with robots or to design robots for those who do.

CONCLUSION

The nature of robots as embodied computers allows humans to enter into a wide range of relations with them. The fact that robots enter into these relations with human beings in turn means that our treatment of them has a semantic content: third parties will conclude something — about us, about them, or about our relationship — from it. Roboticists are keen to use our relations with robots — and especially their ability to convey meaning — to educate [74], to entertain [75], and to care for [76] human beings. However, my discussion here suggest that should — as seems inevitable — people enter into *sexual* relationships with robots, the meanings of these relationships will be highly contested. I have argued that there is at least one circumstance in which it is appropriate to describe

³⁷ Consequently, unlike in the case where the robot represents a person, there seems to be nothing problematic implying that such robots are always available for sex.

a sex act with a robot as the “rape” of the robot – where such an act would function as a representation of the rape of a woman. Thinking about this scenario – and variations thereof – suggests that both the rape of realistic female robots and the design of robots that may be raped will be morally problematic for what it expresses about women and about the character of the user. It has also revealed that the design of realistic female sex robots more generally may be problematic, again for what it expresses about women. Finally, I hope my discussion has shown both that feminist critics of pornography have much to teach engineers and that thinking about robots can usefully illustrate – and perhaps even illuminate – key arguments in the philosophy of sex and the ethics of representation.

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