Issue of the feminisation of robots

The relationship between technology and humans has become steadily closer over the last few years of robotics, to the extent that robots themselves now look and speak like humans. The humanoid element of robotics means that gender and gender-related issues may now be applied to robots as well as to humans. One such robot where gender is clearly evident is Sophia, a humanoid robot created by Hanson Robotics. Using the example of Sophia, this essay will argue that the female gendering of robots is a symptom of the heterosexual, male-centric society in which we live, and also reveals that sexist or stereotypical attitudes towards women are still rife in contemporary thought. I will look at the reasons why gendering plays a role in humanoid robotics, the development of Sophia in " a man's world", critically discuss how Sophia looks and talks, and examine how the depictions of Sophia in the media reveal the endemic nature of sexism in society.

The process of feminising robots is problematic, because in doing so, gender stereotypes and sexist attitudes towards women may be applied as well. To understand this, an understanding of why gender is assigned to robots is important. Tatsuya Nomura proposes that " gender characteristics are … important considerations … to influence interaction between robots and humans" (18). He claims that because human-human interactions are affected by gender, " robot gender would likewise influence robot-human interactions" (18-19). Roboticists aim to create robots that can establish connections with humans, especially in those sectors that require human contact (e. g. in healthcare). However, as Matt Simon writes, " the danger is that robot makers … may exploit gender stereotypes to try to make their

machines more effective" (par. 4). Studies suggest that humans react differently to robots who are gendered male to those gendered female (Tay et al. 75-84; Eyssel and Hegel 2213-2230). Tay et al. showed that people preferred a robot with a typically female voice and female name (Joan) in a healthcare situation, while a robot with a male voice and male name (John) was considered more suitable in security. The results of the study revealed certain gender stereotypes: the role of the kind, subservient carer was preferable as a female, while the role of the strong, active protector was male. The roboticists cater to this preference, which would suggest a reason why the specific gendering of robots occurs: feminisation occurs where robots are needed to be kind, gentle and subservient, while masculation occurs when robots must be strong and brave. This reveals that sexist attitudes towards women are still prevalent in modern thought.

In light of this, the context of the robot Sophia's development comes into question, and why Sophia was gendered female in the first place. This comes despite her creator David Hanson's rejection of the uncanny valley theory. Jun'ichiro Seyama and Ruth S. Nagayama define the uncanny valley theory as the " unpleasant impression of a humanoid robot that has an almost, but not perfectly, realistic human appearance" (337). It is a theory that has been extensively applied to human-robot interaction studies; however, Hanson et al. reject the theory, suggesting their research " strongly contravene[s] the ' Uncanny Valley' theory that humanlike robots are innately unlikable" (24). Yet despite the fact her creator does not believe human likeness plays a role in humankind's relationship to robots, why, then, is Sophia demonstrably female? Surely Sophia could just as easily have been male? On Hanson

Robotics' website, Sophia says that she is there " to help people in …
medicine and education, and to serve AI research" (sec. 4). It would seem
that this is the reason why Sophia is not male: Sophia is depicted as a being
that is going to " help" in fields that are traditionally female-dominated
(healthcare and education), and is going to " serve" in a typically male-
dominated sphere (AI research). Coupled with her distinctly female
appearance, gender stereotypes and sexist attitudes have been applied to
her in her development, whether consciously or not. This would suggest that
despite her creator's belief that the uncanny valley plays no role in human-
robot interactions, Sophia's gender has indeed been taken into account for
her development, as she has been created for service in a male-centric
universe. Consequently, sexist stereotypes still apply to her.

In particular, the way Sophia looks and dresses reaffirms the particular
stereotypes of female appearance. Sophia's body is overtly and
stereotypically feminine, which has been labelled " sexy" and " hot"
(Parsons, par. 1; Urbi and Sigalos, par. 24). Emily C. Chou contends that the
feminisation of robots serves as a highly ideological means to satisfy male
desire (35). This is a sentiment echoed by Julie Wosk in her book, where she
says that "[m]en have long been fascinated by the idea of creating a
simulated woman … who is the answer to all their dreams and desires" (9).
Why otherwise would Sophia have breasts, other than to look female, and to
satisfy what appeals to heterosexual men? Because there is no practical use
for her breasts (i. e. she cannot breastfeed), it could be concluded that they
are only there for aesthetic and possibly (as Chou puts it) " fetishistic" (34)
purposes. The fact that she has subsequently been branded " sexy" and "

hot" would seem to confirm this theory. Furthermore, it is interesting to look at how Sophia is dressed, knowing that she lacks traits of self-awareness and decision-making (Love, par. 4), which means she is incapable of choosing her own clothes. Sophia seemingly always appears wearing dresses. Although this is not an inherently sexist trait, when coupled with the knowledge that someone else must decide how she dresses, it indicates that gender stereotypes play a role in how she is presented. Sophia's presentation therefore reaffirms gender stereotypes about feminine appearance, as well as sexist attitudes of women as submissive objects of male desire.

Moreover, the way Sophia talks and the particular things she talks about, while, again, not inherently sexist, reiterate stereotypes about women, and thus affirm that they are still held seriously in contemporary thought. Sophia's voice is distinctly feminine, a trait that seems only necessary to match her outwardly feminine appearance. What's more, the particular topics that Sophia talks about further the gender stereotypes that apply to her. According to a study of gender stereotypes carried out by Alice H. Eagly and Valerie J. Steffen, it was concluded that women " as a group [were] more suited to perceivers' concepts of the homemaker role" (751). The stereotypical role of homemaker is not lost on Sophia, who, when asked in an interview with Khaleej Times whether she wanted to start a family, replied that "[t]he notion of the family is a really important thing", that she " feel[s] this way for robots and humans alike", and that she would name her child " Sophia" (Sophia, 2017). The idea of wanting to start a family is not an innately stereotypically female trait (indeed, many men want to start a family). However, when paired alongside the other instances of gender

stereotypes that have been applied to her, these statements seem to confirm that yet another one may apply, this time as the female homemaker. It would seem, then, that her development has come with all the hallmarks of feminine stereotypes, a process that demonstrates that misogynistic attitudes are still maintained and normalised in an androcentric society.

Finally, the way Sophia is depicted in the media reveals the endemic nature of sexism in our society, by reinforcing misogynistic attitudes and gender stereotypes in their presentation of her. As one of the most pervasive influences over society's daily interactions, the media has a great deal of power over enabling these gender stereotypes to continue, often by presenting them in an amusing or entertaining light. According to Julia T. Wood, " the [media] depictions of relationships between men and women emphasise traditional roles and normalize violence against women" (231). Although the video posted by Will Smith on YouTube does not imply or attempt to imply anything about violence against women, he does attempt to kiss Sophia while they are on a date (*Will Smith Tries Online Dating*). Wood's belief that media emphasises traditional gender roles seems to apply here: the video emphasises the male as the (sexual) instigator, and the female as the passive recipient. The video tries to be funny, and the attempted kiss is passed off as a harmless action. However, by seeking to normalise these traditional gender roles by hiding behind a facade of entertainment, pervasive sexist attitudes in the media are revealed. And due to the fact the media has such an influence on society, it would suggest that sexism is an endemic part of contemporary thought.

To conclude, the feminisation of robots is worrying, because it enables and even justifies gender stereotypes and misogynistic attitudes. The feminisation of Sophia seems to have occurred as a result of her development in an androcentric universe, and is visible in the way she looks and the way she talks. However, the issues of gender stereotyping and sexism is not just a problem within robotics: the media depictions of Sophia reveal that these issues exist as an endemic problem within society, and which, I feel, are imperative to remedy.

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