

Care Bots & The Issue of Deception

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The aging population in America is growing faster now than ever. However, we lack the proper infrastructure and resources to care for them adequately. Those involved in the field of elder care are experimenting with solutions to this problem. One of the most pressing solutions is the use of artificial intelligence, namely care bots. Care bots are a specific type of technology that aims at providing physical and emotional support for the vulnerable elderly population. While the practical benefits of care bots are evident, the ethical implications relating to social isolation, paternalism, and deception must also be considered before they can be implemented as caregivers. With a specific focus on the issue of deception, I will demonstrate that certain types of care bots, such as those that simulate a reciprocal relationship between the bot and the care receiver, are inherently deceptive and immoral. However, other types of care bots, such as nurse bots, may be ethical as they do not attempt to simulate a reciprocal relationship, and they act in a manner consistent with benevolence rather than care.

1. An Aging America

The aging population in America is greater now than ever, with the population of those 65 and older growing almost five times faster than the rest of the population over the past 100 years. To put this number in perspective, in 1920, less than 1 in 20 people were over the age of 65, now about 1 in 6 people are.⁷⁵ With the rise of modern medicine and the improvement of health outcomes, the elderly population is living longer than ever. However, it is important to

⁷⁵Bureau, U. C., *U.S. Older Population Grew From 2010 to 2020 at Fastest Rate Since 1880 to 1890*.

acknowledge that American infrastructure is not built to accommodate the influx of this demographic. Especially considering the extensive care and supervision many within this population may need, it is easy to see how nursing homes, medical personnel, and caregivers may become stressed and overwhelmed due to the increased population size. Many researchers have turned to the idea of artificial intelligence to combat this issue. Artificial intelligence, which is beginning to be more frequently used in healthcare contexts, specifically the robot technology coined “the care bot,” is one of the most promising options to revolutionize elder care.

2. Care Bot Technology

A general definition of a care bot is a robot that provides care and support for vulnerable people suffering from mental and physical ailments. Many different companies have attempted to develop their own versions of care bots, including the Care-O-bot, Robear, or Actron MentorBot™, which are all robots that can help the care-receiver with tasks such as those around the household, lifting a patient from their beds to wheelchairs, and reminding patients to take their medication.⁷⁶ Beyond the physical assistance, these robots can also provide companionship and comfort. One particular example that has garnered a lot of attention is PARO, the interactive robot made to look like a seal, due to its ability to interact and comfort dementia patients by making sounds and responding to touch.⁷⁷ While care bots are most commonly discussed in the context of the elderly and children, they also have the potential to be

⁷⁶ Yew, “Trust in and Ethical Design of Carebots: The Case for Ethics of Care,” 629–645.

⁷⁷ Ibid.

influential in the realm of mental health, addiction, and physical rehabilitation. For the purposes of this paper, however, I am going to focus specifically on the impact of these robots on elder care because I believe it yields interesting philosophical discussion about deception.

Furthermore, it is important to note that while these care bots may be used in conjunction with human caregivers as of right now, it seems the hope is that they will eventually be allowed to work autonomously in order to truly alleviate the strain on the elder care system. Therefore, the following arguments assume that care bots are working alone, not as a supplement to human caregivers.

Assuming that these care bots are deemed safe, both in the sense that they will not inflict violence upon the care-receiver, and they will not leak protected health information, they offer numerous practical benefits. For example, the care-receiver can avoid being displaced from their home into a nursing home, keeping their dignity intact. The receivers can also have 24/7 quality care, as the robots will not get fatigued or need any breaks as a human caregiver would. Furthermore, the likelihood for elder abuse is significantly decreased as the robots would be programmed to act in the best interest of the elder. However, while the practical benefits of the implementation of care bots are extremely enticing, it is also essential to discuss the ethical implications of applying this technology to the field of elder care.

3. Ethical Implications of Care Bot Technologies

Prior research has noted that the most fruitful ways care bots can positively aid in elder care consists of assisting them with their daily tasks, monitoring their behavior and health, and

providing companionship.⁷⁸ These three benefits, however, also have the potential to yield negative ethical implications. A care bot assisting with everyday tasks of the care-receiver may result in that elder having little to no human interaction, leading to social isolation; monitoring their behavior and health may lead to a paternalistic attitude with decreased freedom; and providing companionship may cause deception as it is not possible for a robot to truly care for a human being.

In this section, I will briefly discuss the implications of social isolation and paternalism associated with the use of care bot technology in healthcare, and then I will proceed to focus on the issue of deception with a focus on what it means to care and how moral favorability differs for different types of care bots.

The Issue of Social Isolation

Care bot technology has an immense potential to cater to the physical needs of elders, performing tasks they would normally outsource or need supervision for. The practical benefits of saving time, money, and physical labor are evident. However, the accompanying social isolation is overlooked.⁷⁹ Oftentimes, the only human-human social interaction some of these elders have is with caregivers who come to take care of them medically and help with their tasks, while intentionally or unintentionally also providing companionship. This added benefit of companionship has been shown to positively influence health outcomes. Notably, one study

⁷⁸ Sharkey, A., and Sharkey, N., “Granny and the robots: Ethical issues in robot care for the elderly,” 27–40.

⁷⁹ Sharkey, N., and Sharkey, A., “The Eldercare Factory,” 282–288.

found that the risk of developing Alzheimer's disease doubled in people who were lonely compared with people who were not lonely.⁸⁰ Thus, the issue of social isolation prompts the question of whether a robot-human relationship could ever provide the same companionship as a human-human care relationship. However, it is also important to note that opponents of this view argue that assuming the use of care bot technology leads to social isolation fails to credit the elderly for being able to advocate for their own needs, social or otherwise.⁸¹ This issue lends to a complex and interesting discussion; however, it will not be the focus of this paper.

The Issue of Paternalism

The next issue commonly discussed in the ethics of care bot literature is that of paternalism and the resultant restricted autonomy. Generally, paternalism is defined as the infringement of a person's freedom and autonomy, but more specifically, in the healthcare field, it refers to the confrontation of an individual's autonomy and the well-intentioned social overprotectiveness from others.⁸² While the extent of current care bot technology is limited to moving objects out of the way, helping around the house, and providing reminders, with simple extension, it can be easily conceived that they could learn to recognize danger signs and respond to them.⁸³ These responses include turning off a stove left on or an overflowing bath, which in theory is beneficial. However, acting on any and all danger signs can lead to acting in ways that infringe

⁸⁰Wilson et al., "Loneliness and risk of Alzheimer disease," 234–240.

⁸¹Coin and Dubljević, "Carebots for eldercare: Technology, ethics, and implications," 553–569.

⁸²Fernández-Ballesteros et al., "Paternalism vs. Autonomy: Are They Alternative Types of Formal Care?," 1460.

⁸³Sharkey, A., and Sharkey, N., "Granny and the robots: Ethical issues in robot care for the elderly," 27–40.

on the personal freedom of the elder. Furthermore, the care bot would be unable to account for situations where there is no actual danger, but merely a perceived danger.⁸⁴ As a result, the care bot would restrict the freedom of the elder and could cause feelings of infantilization. However, it is also important to note that in cases of dementia or cognitive decline, physical interventions may be morally permissible and practically advantageous due to the nature of the elder's illness and their altered mental status. Once again, while this issue yields a very interesting discussion, it will not be the focus of this paper.

The Issue of Deception

The last most commonly discussed ethical issue, which I will spend the rest of the paper discussing, is that of deception associated with the concern that the companionship care bots provide may be mistaken for a genuine, caring relationship. While some care bots have both physical assistive benefits and also provide companionship, others are solely meant to provide companionship, which is an important distinction when thinking about the issue of deception.

The former type of care bot is often referred to as a nurse bot, which is a type of robot meant to emulate some of the functions of live-in nurses as they are able to take vital signs, provide medication reminders, and help with lifting and moving patients. Generally, a nurse bot's main function is to help their elder with assistive tasks, much like the robot in the film *Robot & Frank*. In the film, the Robot helps Frank, who is suffering from dementia, boost his memory via reminders and monitoring his behavior. While the two seem to develop a friendship of sorts

⁸⁴ Sharkey, N., and Sharkey, A., "The Eldercare Factory," 282–288.

throughout the film, Robot eventually decommissions himself to help Frank avoid legal ramifications, demonstrating above all, his function was to assist Frank despite also providing companionship.⁸⁵ In contrast, consider the aforementioned example of PARO, the fur-covered robotic seal, who can react to being pet and make noises, which is designed in an attempt to act as a companion.⁸⁶ By simulating the behaviors of a real animal, there is potential for a bond to be formed between the elder and this care bot, where the nature of the bond is ambiguous since it is very possible that the elder, despite perceiving PARO as an object, may develop feelings of care akin to how one may care for an animal or another person. While certain elders, specifically those with severe dementia, may not understand that PARO is an object, which is a significant moral issue, the more pressing and likely issue is the ability of PARO to invoke feelings of care within the care-receiver based on PARO's behaviors. Overall, these two contrasting examples illustrate the potential confusion when distinguishing human-robot assistance relationships from actual caring relationships.

In the following section, I will argue that care bots such as PARO are guilty of deception because their primary function inherently invokes feelings of care, inevitably resulting in deceit, but other types of care bots like nurse bots are not deceptive because their primary function does not involve caring but rather their actions fall in line with benevolence, the desire to do good to others, not care.

⁸⁵ Koistinen, "The (care) robot in science fiction: A monster or a tool for the future?," Article 2.

⁸⁶ Sharkey, N., and Sharkey, A., "The Eldercare Factory," 282–88.

In order to care for someone, one must (a) do the right actions to exhibit care for another, and (b) they must do the right actions for the right reasons. The right reasons clause ensures that one is doing something not for their own benefit, but rather for the benefit of whom they are caring for. The first issue that immediately arises when thinking about care bots is that they lack minds, and thus cannot have motivations behind their actions as they are simply programmed to act in a certain manner. Therefore, care bots are unable to truly care, but instead they mimic caring acts involving protecting and helping the care-receiver. However, doing so may be said to be acting in a deceiving manner, as deception is defined as persuading someone that something false is true.⁸⁷ Essentially, it can be claimed that by mimicking caring, care bots are deceiving their care receivers by persuading them, through their actions, that they are receiving genuine care. Opponents to this claim can argue that it is pointless to distinguish whether or not the care being received is genuine because either way, the care-receiver is receiving care. However, it is interesting, and perhaps even relevant, to consider the moral implications of mimicking an act.

Those who subscribe to this view believe that mimicking acts of caring is harmful because caring is an inherently valuable virtue. When drawing a comparison to other Aristotelian virtues, the virtue of care is closely tied to that of friendship because care is undoubtedly heavily involved in friendship. Aristotle argues that friendship is inherently valuable as an end itself due to its reciprocal nature where social needs are met through mutual care.⁸⁸ Thus, even if robots are

⁸⁷ *Deceive*, <https://dictionary.cambridge.org/us/dictionary/english/deceive>

⁸⁸ Elder, "False friends and false coinage: A tool for navigating the ethics of sociable robots," 248–254.

able to simulate genuine friendships, the care-receiver would not experience the full goods of friendship, and it seems that most people would prefer genuine friendship or care over the appearance of them. While the appearance of a friendship may be better than a care-receiver not having care at all, it is evident that a genuine friendship as with a human caretaker is preferable over a care bot's simulation of one. Considering this issue through an Aristotelian lens is beneficial in understanding the significance of why genuine caring is important.

Care bot types such as PARO can be guilty of deceiving the care-receiver because by simulating behaviors such as reacting when being pet and making affective noises, PARO is intentionally simulating a caring relationship by invoking feelings of care in the elders. Since PARO is programmed to act in this manner, the deception is quite literally coded into its function. However, without the deception, it would fail to fulfill its function because it could not provide companionship. Thus, I argue that care bots like PARO are inherently deceptive and thus are morally unfavorable.

The case is quite different for nurse bots, however, whose encoded function is primarily to aid care-receivers with tasks and reminders, and companionship or emotional support is a positive benefit served merely by their physical presence. The distinguishing feature between nurse bots and care bots lies in the fact that nurse bots function to assist the care receivers in practical and physical situations, whereas care bots such as PARO serve to assist the care receivers in emotional situations. As such, nurse bots are not guilty of deception. There are two major ways to circumvent the claim from opponents of this view that nurse bots engage in

deceptive practices. The first, which is rather straightforward, draws on the Aristotelian argument that states if one mistakenly believes that a nurse bot is providing genuine care and friendship when it never has, they have not been deceived, but they simply misunderstood the function of the robot in the first place.⁸⁹ Thus, nurse bots can be protected from this claim by arguing that their purpose was never to invoke feelings of care in the receiver, but rather simply to assist them.

Further support for the protection of nurse bots against deception is that they, much like actual nurses, simulate behaviors of benevolence, rather than care, and as such, their accompanying companionship cannot be considered deceptive. (T) This argument is supported by drawing a parallel between nurse bots and healthcare professionals (HCPs) such as doctors or nurses. One prominent point of conversation within the medical field regarding HCPs is how invested they should be in the care and lives of their patients. Generally, when considering the high-stress job of HCPs, it is often encouraged for them to not get emotionally involved with their patients for the sake of their own mental health as well as to preserve the objectivity that should be applied to patient treatments. However, when applying the definition of care to HCPs where care calls for the protection of someone and providing what they need, there seems to be an inevitable emotional connotation associated with it. For this reason, prominent philosopher HJ Curzer argues that HCPs should not care for their patients, but rather should have benevolence towards them, meaning they should have a positive emotional attachment to their patients, but

⁸⁹ Ibid.

that attachment should be much less than the emotional attachment associated with caring.⁹⁰ His argument's support is rooted in prioritizing what is best for the patient, reducing burn-out in HCPs, and increasing equal and fair outcomes. Deep emotional attachment to a patient as seen when genuine care is involved, negatively impacts the patient care delivered because doctors may be more wary to prescribe an appropriate medical treatment that will cause pain or assume a paternalistic attitude towards the patient when they attempt to make decisions for the patient out of their emotional investment.⁹¹ Furthermore, having this emotional attachment has the potential to cause health inequalities because not all patients would receive the same treatment, and perhaps in extreme situations, certain patients would be favored for better treatments. Overall, having an emotional attachment to persons in general over individuals, as seen with benevolence, is essential to providing proper medical care and preserving the emotional health of HCPs, thus, not providing care but benevolence is morally acceptable and ideal. Applying this reasoning to nurse bots, which perhaps are their own form of HCPs, acting with benevolence, not care, is also ideal to ensure the receiver receives the best, unbiased care, ensuring healthcare opportunities stay equal and in the best interest of the patients. Within this perspective, the actions of the nurse bot are not deceptive but rather fall in line with what it means to be benevolent. For these two reasons, care bots such as nurse bots are able to circumnavigate the claim of deception well, demonstrating how their use is ethically acceptable and practically very beneficial.

⁹⁰ Curzer, "Is Care a Virtue for Health Care Professionals?," 51–69.

⁹¹ Ibid.

4. Looking to the Future

In conclusion, this paper has demonstrated that while care bots have the ability to revolutionize elder care, there are also accompanying ethical considerations that must be taken into consideration, especially regarding the issues of social isolation, paternalism, and deception. I have attempted to show that certain care bot technologies, such as nurse bots, are morally permissible as the claim of deception does not apply to them; however, deception is quite obvious in other care bot technologies like that of PARO. The importance of parsing out these ethical issues, as I have done above, with deception is essential before care bots can be implemented as a household staple in response to the booming aging population. Care bots surely have a place in the future of healthcare; however, significant ethical work must be done first in order to ensure that human dignity and principles are upheld.

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