

Empathy, Compassion and Social Robots: an Approach from Buddhist Philosophy

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Abstract. In Buddhism, a key aspect of interaction between humans mutually and between humans and other social beings, is empathy. In this paper this concept is defined and applied to different aspects of human-robot relations as a first step towards Buddhist approach of this field.

Keywords: Empathy, compassion, Buddhism, five skandhas, social robots

INTRODUCTION

In our present society, we experience what Wiener (1) called *a second industrial revolution*, which addresses not only mechanical developments, but also intellectual developments, resulting in intelligent machines that are physically embodied. These, we usually refer to as robots and if they use any form of social interaction, we call them social robots. These mechanical systems can be experienced as social entities, and even more so if they are social robots. This raises the question if it is possible to develop empathy in human-robot interaction, even if it would in fact not be much more than a computer with a physical embodiment. In a Buddhist society, it would raise questions on how to morally deal with empathy in human-robot relationships. In fact, the answers to these questions may impact acceptance of social robots.

MEANING OF EMPATHY

Empathy means ‘trying on someone else’s shoes’, putting oneself in the position of the other, to suffer as the other suffers (2). From a Buddhist point of view, we must develop our empathy with compassion and closeness to others and recognize the gravity of their misery. The closer we are to a person, the more unbearable we find that person’s suffering. This closeness is not a physical proximity, nor does it need to be an emotional one. It is a feeling of responsibility, of concern for a person or another social being. In order to develop such closeness, we must reflect upon the virtues of cherishing the well-being of others. We must come to see how this brings one an inner happiness and peace. We must come to recognize how others respect and like us as a result if such attitude toward them (9).

The whole Buddhist philosophy and practices which is all about liberation and nirvana and this is the greatest act of empathy towards the world: empathy and compassion are - although also often embedded in

Western philosophy - core concepts Buddhist philosophy (3,4).

BUDDHIST PHILOSOPHY AND HUMAN-ROBOT RELATIONSHIPS

The practical benefits of robots that are productive or assistive are obvious. However, social robots can actually (also) be socially assistive to people, by expressing or receiving empathy, as in dementia therapy, with hospitalized children and with children with autism (5,6,7).

Addressing this, we have to take into account that Buddhist philosophy is based on self-investigation of human minds rather than on scientific models, scans, and experimental research (8,9,10). It is as much a moral philosophy as a descriptive one, and proposes unusual states of mind that have only begun to be explored in laboratories, there are convincing arguments both for in and against the role of robots in our future would(11-13).

Empathy is a mental process that includes the ability to not only detect what others feel but also to experience that emotion yourself. To empathize with other person, the element of wisdom is not required. It is just a good quality which can fluctuate because it is not stable. And it is conditional (8).

In Buddhism, mental processes are broken out in many ways, but most basically, as the five skandhas (9): (1) the body and sense organs (rūpa), (2) sensation (vedanā), (3) perception (samjñā) (4) volition (samskāra) and (5) consciousness (vijñāna).

If we parallel this to a robot and require its mental processes to include these skandhas in order to truly speak of empathy, we see that the first is depending on the exact definition. If it requires a biological system, it would require the robot to be just that. If we realize that presently many internal and external human body parts can be non-biological, the extent to which a biological nature is required could be open to reconsideration. Nevertheless, empathy is a response to suffering, which is inherently linked to a biological process, leading to an action of compassion in which consciousness is essential. For example, when an animal is being abused physically by a person and people will feel sad to see such cruelty happen, that feeling is empathy. If someone will step up and do something about it, it is in fact empathy with action. Meaning the person has compassion.

Empathy and compassion can however also respond to mental suffering, which does not require a biological system. In that sense, only consciousness is a requirement that is still a challenge.

ROBOTS AS MEDIATORS AND REPRESENTATIONS

If there would still be too many obstacles to state that robots can truly be empathic, this does not mean that empathy cannot be perceived by a human interacting with it. If we view a robot as a medium that expresses the empathy that is developed by a human programmer or operator. If this robot would be created or programmed out of empathy, his existence would be an act of compassion and if its actions would be motivated by the empathy felt by the programmer or operator, these actions can also be taken as acts of compassion. Actually there are no teachings that would object to this, even if the human that perceives this empathy is not conscious of the mediation. Moreover, it would not matter whether the empathy is perceived as such or not.

If a human feels empathy for a robot, as in robot assisted dementia therapy, there can be objections stating that it is not a biological entity. However, it can be viewed as equal to a fictional character in a movie or a book that we feel empathy for, with the addition that empathy for a robot can be translated in acts of compassion. We can state that a robot, just like a fictional character, is a representation of life, which is sufficient to evoke empathy. And since Buddhism teaches to focus on the development of empathy rather than on receiving and perceiving it (3), there is no objection to a robot being a non-biological or non-conscious entity, whether the human is conscious or not.

At this point, we can take into account that in Buddhist philosophy, there are three important principles which are called as Anicca (impermanence), Dukkha (suffering), and Anatta (Non-self)(3). The latter enforces both mediation and representation, since the non-self can be realized by both.

CONCLUSIONS AND FINAL THOUGHTS

There are some issues concerning embodiment and consciousness that challenge a view on social robots as entities that are capable of empathy. However, if robots are viewed as mediators and representations, there are no objections to introduce them in a way that it ensures social and therapeutic benefits. This is especially so if human-robot interaction is set up from an empathic intention. This means that further explorations could focus on those aspects that might affect empathy and enables acts of compassion.

Our main conclusion at this point is however, is that a robot that is developed out of empathy not only enables acts of compassion, it *is* in fact an act of compassion.

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