

# Chapter 78

## Of Robots and Simulacra: The Dark Side of Social Robots

**Pericle Salvini**

*Istituto di BioRobotica, Italy*

### ABSTRACT

*In this chapter, the author proposes a theoretical framework for evaluating the ethical acceptability of robotic technologies, with a focus on social robots. The author proposes to consider robots as forms of mediations of human actions and their ethical acceptance as depending on the impact on the notion of human presence. Presence is characterised by a network of reciprocal relations among human beings and the environment, which can either be promoted or inhibited by technological mediation. A medium that inhibits presence deserves ethical evaluation since it prevents the possibility of a mutual exchange, thus generating forms of power. Moreover, the impact of social robots on human beings should be carefully studied and evaluated for the consequences brought about by simulated forms of human presence, which have both physical and psychological dimensions and are still unknown, especially with respect to weak categories, such as children, elderly, and disabled people.*

### INTRODUCTION

In the following, I will attempt to draw a line between what is acceptable and what is not from an ethical point of view with regard to the technological enhancements of human beings through robotic technologies, with a focus on social robots. With such an objective, I may appear to be a technophobe, a Luddite or a conservationist. Quite the opposite. I agree with the definition that humans are technical by nature, even if it may sound to be a contradiction in terms, but I also agree with the truism that “not all progress is good or necessary.” We cannot deny that tech-

nology and science are core aspects of the human nature. Nevertheless, it is also unquestionable that there are other forces, driven by scientific interest and economics, which push scientific and technological developments towards choices that are not always integral to the survival of human species.

This chapter responds to the needs and objectives of the ethics of technology, which are called technoethics or roboethics and these are:

1. To identify the dangers and benefits that come out from the research and application of advanced robotic technologies and systems;

DOI: 10.4018/978-1-4666-6433-3.ch078

2. To develop tools and knowledge which allows us to direct the development of robotic technology in a sustainable way for the human being (present and future generations) and the natural environment (Veruggio and Operto, 2010).

The benefits provided by robotic technologies are manifold and visible: from factories automation to robotic surgery, search and rescue operation, security, space and underwater exploration, assistance to elderly and disabled people, just to name a few of the most popular and current applications. However, there are also concerns surrounding the use of robots, especially with respect to their level of autonomy (e.g. autonomous, semi-autonomous or teleoperated), the task to be performed (e.g. warfare, care, surgery, logistics, etc.), and the typology of users involved (laypeople, children, elderly and disabled people, etc.).

### **Why Should We Care About Technologies?**

There are many ways to demonstrate that care should be taken about technological and scientific progress, which in some way may also be applied to robotic technologies. I have chosen three: two from philosophy and one from history. French philosopher Paul Virilio introduces the concept of the “accident of the future” (Virilio, 1997). According to Virilio: ‘Every time a technology is invented, take shipping for instance, an accident is invented together with it, in this case the shipwreck, which is exactly contemporaneous with the invention of the ship. The invention of the railway meant, perforce, the invention of the railway disaster. The invention of the airplane brought the air crash in its wake’ (Virilio, 2000: 32). Virilio is especially interested in the real-time communication technologies, which, according to him, present new alarming characteristics: one of which is that the accident is no longer limited to a specific here-and-now, but is delocalized,

taking place everywhere. As a consequence, the accident of the future will be integral, meaning it will be a general accident that involves all mankind. Examples of “almost integral accidents,” according to Virilio, are radioactivity leakage and a virus in an electronic network, which make the “globalization” effect of the accident clear. Virilio’s argument is a warning to us against the increasingly dependence on technology, and, at the same time, a recommendation to invest more effort in technological risk assessment in order to diminish (not to eliminate!) potential drawbacks: ‘to examine the hidden face of new technologies, before that face reveals itself in spite of us’ (*Ibid.*: 40).

We can also try and answer the question of why should we care, by looking at the way opened up by Hans Jonas. Jonas introduces the principle of responsibility, which holds human beings responsible for the preservation of life with respect to the current generation of human beings and those that follow along with the natural environment. Indeed, according to Jonas, ‘with certain developments of our powers the nature of human action has changed, and since ethics is concerned with action, it should follow that the changed nature of human action calls for a change in ethics as well: [...] in the more radical sense that the qualitatively novel nature of certain of our actions has opened up a whole new dimension of ethical relevance for which there is no precedent in the standards and canons of traditional ethics’ (Jonas, 1985: 1). Autonomous or teleoperated, connected or disconnected from the human body, robots clearly fall in the category of technologies which transform the nature of human action by allowing one to act from a distance, to enhance its actions, and even to act without physical or cognitive efforts.

If Virilio is telling us that every new discovery brings with it a new danger, similarly Jonas is saying that the new possibilities offered by scientific and technological developments put forward the problem of the consequences that “we do not know yet”: ‘The gap between the ability to foretell and

9 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/of-robots-and-simulacra/117099](http://www.igi-global.com/chapter/of-robots-and-simulacra/117099)

## Related Content

---

### Critical Instruction, Student Achievement, and the Nurturing of Global Citizens: Global and Comparative Education in Context

Howard Menand (2015). *Business Law and Ethics: Concepts, Methodologies, Tools, and Applications* (pp. 1308-1330).

[www.irma-international.org/chapter/critical-instruction-student-achievement-and-the-nurturing-of-global-citizens/125789](http://www.irma-international.org/chapter/critical-instruction-student-achievement-and-the-nurturing-of-global-citizens/125789)

### Internet-Based Social Reporting in Emerging Economies: Insights from Public Banks in Egypt and the UAE

Mohamed Nagy Osman (2017). *Comparative Perspectives on Global Corporate Social Responsibility* (pp. 96-115).

[www.irma-international.org/chapter/internet-based-social-reporting-in-emerging-economies/162807](http://www.irma-international.org/chapter/internet-based-social-reporting-in-emerging-economies/162807)

### Reconfiguring Responsibility in International Clinical Trials: A Multicultural Approach

Ike Valentine Iyioke (2018). *Ethical Standards and Practice in International Relations* (pp. 187-211).

[www.irma-international.org/chapter/reconfiguring-responsibility-in-international-clinical-trials/199494](http://www.irma-international.org/chapter/reconfiguring-responsibility-in-international-clinical-trials/199494)

### Ethical and Legal Data Mining: Paradigms of Organizational Development Practitioners and Organizational Psychologists

Ben Tran (2015). *Human Rights and Ethics: Concepts, Methodologies, Tools, and Applications* (pp. 361-388).

[www.irma-international.org/chapter/ethical-and-legal-data-mining/117039](http://www.irma-international.org/chapter/ethical-and-legal-data-mining/117039)

### Ethical Leadership and Decision Making

Ritu Dahiya, P. Selvakumar, Gaganpreet Kaur Ahluwalia, Sujata, T. C. Manjunath and Nilesh Anute (2025). *Advances in Ethical Work Climate and Employee Well-Being* (pp. 45-66).

[www.irma-international.org/chapter/ethical-leadership-and-decision-making/373830](http://www.irma-international.org/chapter/ethical-leadership-and-decision-making/373830)