Machine ethics in the context of medical and care agents. (MEMCA-14) Introduction to the symposium proceedings

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Robots and non-embodied artificial agents are playing increasingly prominent roles in human society. One group of application areas concerns medical treatment and care and personal and social support: treatment and care for people in hospitals, care homes and private houses and other domestic contexts - areas where artificial agents will be doing the jobs of people working in close proximity to many individuals, often the most vulnerable members of the population. Artificial agents in these applications would be fulfilling functions that routinely require interactive and affective sensitivity in human professionals, practical knowledge of many different kinds, and general ethical insight, autonomy and responsibility. agents, and associated smart technologies would be deployed to provide support for people who are in fragile states of health, or who have physical or cognitive disabilities of various kinds, who are very young or very old, etc. The professions involved have well-defined codes of conduct for dealing with children, old people and other vulnerable individuals, in relation to minimizing harm, responsible and safe action, privacy, informed consent, respect for personal autonomy, security, and so on. Artificial agents working in such professional contexts are likely to be required to be, or to be looked on as, ethical agents, in a rich sense of the term. However, it is a matter of debate as to when it will be appropriate to make them shoulder, or share, moral blame or credit for outcomes resulting from their actions.

This symposium (part of the 2014 AISB50 International Annual Convention, held at Goldsmiths, University of London) provides a forum to discuss the numerous ethical questions that arise in relation to the cluster of technological developments implied by this scenario, and more broadly, the many questions that arise concerning the ethical responsibilities of artificial agents which operate with increasing autonomy in spheres which involve personal contact with humans. Contributions were invited from a range of disciplines, including ones concerned with the design and development of such artificial agents; with their deployment in live health or care situations; and with disciplines, such as psychology, philosophy, human-robotic

interaction, etc. where the range of theoretical issues relating to such care agents are being considered.

We are proud to present a set of excellent papers that deal with questions ranging from how to build "ethical" intelligent agents that are capable of moral reasoning and supporting decisions, to how to integrate artificial agents in care environments in a way that maintains or enhances the quality of care, is not demeaning, and ensures ethically acceptable practice.

As well as contributors from the UK and elsewhere in Europe, we have several from the USA. Authors and co-authors of the fifteen papers include some of the most eminent and influential researchers in Machine Ethics. We hope that our symposium contributes to what seems to be a growing community of researchers concerned with, and working on, the ethics of artificial agents in health and care contexts, and that its results and discussions will be useful to others outside this community who are engaged in moral philosophy, human-robot interaction, health care management, and other relevant disciplines and practices.

ACKNOWLEDGEMENT

We would like to express our gratitude to the EU Framework 7 EUCogIII network, which has kindly agreed to provide financial support to our Symposium.