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## MAN, MACHINES AND CONSCIENCE?

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Abstract. This paper presents a summary of the impact that the impetuous development of information science and technology may have, emphasizing the trends and the role of artificial intelligence. It sets out what conscience is, the way in which the information is processed in the system of human thought, which is the relationship between this system and the study of human conscience and the way in which man-to-man, man-to-machine and machine-to-machine intercommunication is made. Then some controversial views on the possibility of the existence of some machines with conscience are presented and it is demonstrated why it is not possible to build such machines in the near future. The conclusion is that, in the near future, machines with a conscience are not consistent with reality and that the best thing would be to state that it will be possible in the future to build machines not with human intelligence, but only machines with algorithmic, binary intelligence.

Keywords: artificial intelligence, conscience, intercommunication

*"Man, know thyself and thou wilt know the Universe and the Gods"* Inscription from the frontispiece of the Temple of Delphi.

## 1. Introduction

Information science and technology<sup>2</sup> is one of the rapidly evolving areas with the most spectacular implications on the economic and social life. However, there are some serious reasons to believe that what we have seen so far only its beginning.

Artificial intelligence is an important factor in the evolution of information science and technology. This intelligence makes each element, device, component or

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<sup>&</sup>lt;sup>2</sup>For the enunciation of the new scientific achievements in the field of automated information processing the Europeans have promoted the term computer science (designed by the French in 1964) and the Americans have oscillated between "Computer Science" for the theoretical aspects and "Electronic Data Processing" for the applicative, practical aspects. The term information technology, which has become widely accepted today, is relatively new and marks a maturation of the field which has exceeded the stage of science and craft, entering the industrial phase. As the technology of automated information processing generalized beyond the scope of numerical calculation, the data and the computer are no longer perceived as essential (nowadays, the potential visit to a virtual museum seems to have no connection with the earlier introduction of data with punched tape to calculate wages or prices). In addition, the term information technology shows symmetry with communication technology, offering the possibility of a linguistic integration in the term information and communication technology with the acronym ICT.