

are needed, external to all systems and structures but applicable to all. Rather than capitalism, rationalization might be a more general and appropriate term regarding the study of Islamic civilization.

A course on the subject would deal with relevant issues and ask questions such as: Can Islamic society adopt science and technology without losing its unique identity? How can Islam mobilize the masses to achieve the transition from societies based on agriculture and low levels of technology to those bent on mastering nature? In this way, the whole structure, approached from within, can begin to yield its secrets and give us its laws, which will no longer be considered defective or wrong. When evaluating, we should not accept as a criterion the degree of proximity to Occidental civilization. The totality of humankind's experience in the East and the West, past or present, should be the only standard.

## Chapter Six

### **An Exploration of the Nature of Human and Artificial Intelligence & the Qur'anic Perspective**

*Mahmoud Dhaouadi*

The ongoing controversy over artificial and human intelligence (HI) is characterized by open disagreement regarding whether artificial intelligence (AI) can become equal or superior to human intelligence. The gap between HI and AI is bound to remain considerable in the short- and long-term, as demonstrated by human cultural symbols and the Qur'anic vision of HI. Humanity's ability to manipulate cultural symbols, upon which the HI phenomenon depends, is a unique human characteristic. This uniqueness is the direct result of a divine decision, not of evolution. This uniqueness contains mysteries hardly accessible to humans. Hence, how could researchers include them in the design of AI machines?

In the last two decades, research in the field of AI has progressed on the theoretical and applied levels. In the field, neurophysiologists and various social scientists have also studied HI and AI. As AI infrastructures continue to expand in modern and postmodern societies, specialists in other areas will also have to become involved. AI research helps relieve individuals of many tedious tasks, while the increasing

speed and quality of actions will likely characterize those societies that have entered the Information Age.

The issue of HI remains central to opponents and proponents of AI and researchers must ask why HI is superior to AI and what HI has that AI lacks. Answering such questions will lead to a better understanding of ourselves, HI, and designing more intelligent machines.

Some researchers believe AI will only match HI if biochemical hardware is used. Others think that machines should be designed to function like the human brain. Digital infrastructure is suggested as a way to allow machines to think and possess conscious intelligence. On the other hand, intuition, mood, and emotions have no place in the AI scheme, preventing a rational thinking machine from thinking in the human sense.

The phenomenon of culture distinguishes humanity from other species and from AI machines. There is a consensus among scholars of culture that humanity's use of symbols is human culture's most striking feature. Behavioral social science theories and paradigms should consider that the human species is cultural-symbolic by nature, and that its ability to use cultural symbols makes it radically different from all other species and AI machines. For a true understanding of HI, the realm of human cultural symbols must be studied.

The ability to manipulate cultural symbols in the creation of thoughts and ideas is fundamental for the acquisition of reliable knowledge about the processes of cognition and semantics. The partial absence of a corpus of solid knowledge on cultural symbols constitutes the missing link in the ever-growing body of knowledge on HI and AI. Building a solid foundation in this domain is imperative for researchers to explain the shortcomings of machines regarding learning. Such disinterest is a major weakness that confuses researchers' understanding of HI's originality.

Modern psychological and sociological studies have highlighted the negative effects of social deprivation on human intelligence, indicating that intelligence is strongly dependent on the cultural symbols that permeate the socialization of human beings to take place. Contemporary studies by cognitive scientists of culture, the mind, and human ideas have adopted two points of view: the enlightenment rational/scientific point of view and the romantic rebellion point of view. These

views are very relevant to the AI debate. The latter group says culture, the mind, and intelligence should not just be measured by the yardstick of empirico-positivism, reasoning, logic, and rationalism.

AI's inferiority compared to HI is due to its narrow logical-rational-logarithmic structural design that does not account for points raised by the romantics. Therefore, how credible is the empirico-positivist paradigm, as two of its fundamental elements are logic and rationality? Humans are more than just logical and rational thinkers, and HI's superiority comes from intangible and subjective traits. HI is a complex phenomenon so AI/HI research should not follow a rigid and narrow formula.

Revealed texts are hardly consulted regarding HI, due to the West's experience of the Renaissance, which bypassed the Muslim world, and the usually hostile relationship between religion and science. A Muslim researcher would logically consult the Qur'an in the AI/HI field to further explore the transcendental nature of human intelligence; thinking and human intelligence; and human intelligence and the act of creating.

Religious and secular doctrines agree that only humans can be held responsible for their acts, and HI gives humanity both responsibility and free will to act. The Qur'anic stand is a close ally of modern scientists and scholars who do not believe AI can be raised to a level equal or superior to that of HI. While the Qur'anic perspective can help us, the empirico-positive approach is not useful due to its refusal to recognize the transcendental nature of intelligence.

## Chapter Seven

### **Confronting Bias in Third World Culture**

*Ferial J. Ghazoul*

Bias against the Third World in intellectual spheres and methodologies is common knowledge. Literature on the other hand can offer resistance to such biases and prejudices, and function as a precursor for theoretical pronouncements addressing and combating such a destructive phenomenon. Literature depends on stylistic techniques and artistic strategies not based on technological superiority of one over the other but on equal access to the verbal and conceptual. On the