



## AI Ke Samajik Parinaam Aur Chunotiyan

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### Abstract

Artificial intelligence (AI), known by some as the industrial revolution (IR) 4.0, is going to change not only the way we do things, how we relate to others, but also what we know about ourselves. This article will first examine what AI is, discuss its impact on industrial, social, and economic changes on humankind in the 21st century, and then propose a set of principles for AI bioethics. The IR1.0, the IR of the 18th century, impelled a huge social change without directly complicating human relationships. Modern AI, however, has a tremendous impact on how we do things and also the ways we relate to one another. Facing this challenge, new principles of AI bioethics must be considered and developed to provide guidelines for the AI technology to observe so that the world will be benefited by the progress of this new intelligence. Artificial intelligence (AI) has many different definitions; some see it as the created technology that allows computers and machines to function intelligently. Some see it as the machine that replaces human labor to work for men a more effective and speedier result. Others see it as “a system” with the ability to correctly interpret external data, to learn from such data, and to use those learning to achieve specific goals and tasks through flexible adaptation.

**Keywords:** Artificial intelligence, Bioethics, Principles of artificial intelligence bioethics

### WHAT IS ARTIFICIAL INTELLIGENCE?

Artificial intelligence (AI) has many different definitions; some see it as the created technology that allows computers and machines to function intelligently. Some see it as the machine that replaces human labor to work for men a more effective and speedier result. Others see it as “a system” with the ability to correctly interpret external data, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation.

Despite the different definitions, the common understanding of AI is that it is associated with machines and computers to help humankind solve problems and facilitate working processes. In short, it is an intelligence designed by humans and demonstrated by machines. The term AI is used to describe these functions of human-made tool that emulates the “cognitive” abilities of the natural intelligence of human minds.

Along with the rapid development of cybernetic technology in recent years, AI has been seen almost in all our life circles, and some of that may no longer be regarded as AI because it is so common in daily life that we are much used to it such as optical character recognition or the Siri (speech interpretation and recognition interface) of information searching equipment on computer .

Is AI really needed in human society? It depends. If human opts for a faster and effective way to complete their work and to work constantly without taking a break, yes, it is. However if humankind is satisfied with a natural way of living without excessive desires to conquer the order of nature, it is not. History tells us that human is always looking for something faster, easier, more effective, and convenient to finish the task they work on; therefore, the pressure for further development motivates humankind to look for a new and better way of doing things. Humankind as the homo-sapiens discovered that tools could facilitate many hardships for daily livings and through tools they invented, human could complete the work better, faster, smarter and more effectively. The invention to create new things becomes the incentive of human progress. We enjoy a much easier and more leisurely life today all because of the contribution of technology. The human society has been using the tools since the beginning of civilization, and human progress depends on it. The human kind living in the 21<sup>st</sup> century did not have to



work as hard as their forefathers in previous times because they have new machines to work for them. It is all good and should be all right for these AI but a warning came in early 20<sup>th</sup> century as the human-technology kept developing that Aldous Huxley warned in his book *Brave New World* that human might step into a world in which we are creating a monster or a super human with the development of genetic technology.

## NEGATIVE IMPACT

Questions have been asked: With the progressive development of AI, human labor will no longer be needed as everything can be done mechanically. Will humans become lazier and eventually degrade to the stage that we return to our primitive form of being? The process of evolution takes eons to develop, so we will not notice the backsliding of humankind. However how about if the AI becomes so powerful that it can program itself to be in charge and disobey the order given by its master, the humankind?

Let us see the negative impact the AI will have on human society [[10,11](#)]:

1. A huge social change that disrupts the way we live in the human community will occur. Humankind has to be industrious to make their living, but with the service of AI, we can just program the machine to do a thing for us without even lifting a tool. Human closeness will be gradually diminishing as AI will replace the need for people to meet face to face for idea exchange. AI will stand in between people as the personal gathering will no longer be needed for communication
2. Unemployment is the next because many works will be replaced by machinery. Today, many automobile assembly lines have been filled with machineries and robots, forcing traditional workers to lose their jobs. Even in supermarket, the store clerks will not be needed anymore as the digital device can take over human labor
3. Wealth inequality will be created as the investors of AI will take up the major share of the earnings. The gap between the rich and the poor will be widened. The so-called "M" shape wealth distribution will be more obvious
4. New issues surface not only in a social sense but also in AI itself as the AI being trained and learned how to operate the given task can eventually take off to the stage that human has no control, thus creating un-anticipated problems and consequences. It refers to AI's capacity after being loaded with all needed algorithm may automatically function on its own course ignoring the command given by the human controller
5. The human masters who create AI may invent something that is racial bias or egocentrically oriented to harm certain people or things. For instance, the United Nations has voted to limit the spread of nucleus power in fear of its indiscriminate use to destroying humankind or targeting on certain races or region to achieve the goal of domination. AI is possible to target certain race or some programmed objects to accomplish the command of destruction by the programmers, thus creating world disaster.

## POSITIVE IMPACT

There are, however, many positive impacts on humans as well, especially in the field of healthcare. AI gives computers the capacity to learn, reason, and apply logic. Scientists, medical researchers, clinicians, mathematicians, and engineers, when working together, can design an AI that is aimed at medical diagnosis and treatments, thus offering reliable and safe systems of health-care delivery. As health professors and medical researchers endeavor to find new and efficient ways of treating diseases, not only the digital computer can assist in analyzing, robotic systems can also be created to do some delicate medical procedures with precision. Here, we see the contribution of AI to health care.

### Fast and accurate diagnostics

IBM's Watson computer has been used to diagnose with the fascinating result. Loading the data



to the computer will instantly get AI's diagnosis. AI can also provide various ways of treatment for physicians to consider. The procedure is something like this: To load the digital results of physical examination to the computer that will consider all possibilities and automatically diagnose whether or not the patient suffers from some deficiencies and illness and even suggest various kinds of available treatment.

### **Socially therapeutic robots**

Pets are recommended to senior citizens to ease their tension and reduce blood pressure, anxiety, loneliness, and increase social interaction. Now cyborgs have been suggested to accompany those lonely old folks, even to help do some house chores. Therapeutic robots and the socially assistive robot technology help improve the quality of life for seniors and physically challenged].

### **Reduce errors related to human fatigue**

Human error at workforce is inevitable and often costly, the greater the level of fatigue, the higher the risk of errors occurring. AI technology, however, does not suffer from fatigue or emotional distraction. It saves errors and can accomplish the duty faster and more accurately.

### **Artificial intelligence-based surgical contribution**

AI-based surgical procedures have been available for people to choose. Although this AI still needs to be operated by the health professionals, it can complete the work with less damage to the body. The da Vinci surgical system, a robotic technology allowing surgeons to perform minimally invasive procedures, is available in most of the hospitals now. These systems enable a degree of precision and accuracy far greater than the procedures done manually. The less invasive the surgery, the less trauma it will occur and less blood loss, less anxiety of the patients.

### **Improved radiology**

The first computed tomography scanners were introduced in 1971. The first magnetic resonance imaging (MRI) scan of the human body took place in 1977. By the early 2000s, cardiac MRI, body MRI, and fetal imaging, became routine. The search continues for new algorithms to detect specific diseases as well as to analyze the results of scans [9]. All those are the contribution of the technology of AI.

### **Virtual presence**

The virtual presence technology can enable a distant diagnosis of the diseases. The patient does not have to leave his/her bed but using a remote presence robot, doctors can check the patients without actually being there. Health professionals can move around and interact almost as effectively as if they were present. This allows specialists to assist patients who are unable to travel.

### **Seven requirements are recommended:**

- AI should not trample on human autonomy. People should not be manipulated or coerced by AI systems, and humans should be able to intervene or oversee every decision that the software makes
- AI should be secure and accurate. It should not be easily compromised by external attacks, and it should be reasonably reliable
- Personal data collected by AI systems should be secure and private. It should not be accessible to just anyone, and it should not be easily stolen
- Data and algorithms used to create an AI system should be accessible, and the decisions made by the software should be “understood and traced by human beings.” In other words, operators should be able to explain the decisions their AI systems make
- Services provided by AI should be available to all, regardless of age, gender, race, or other characteristics. Similarly, systems should not be biased along these lines



- AI systems should be sustainable (i.e., they should be ecologically responsible) and “enhance positive social change”
- AI systems should be auditable and covered by existing protections for corporate whistleblowers. The negative impacts of systems should be acknowledged and reported in advance.

From these guidelines, we can suggest that future AI must be equipped with human sensibility or “AI humanities.” To accomplish this, AI researchers, manufacturers, and all industries must bear in mind that technology is to serve not to manipulate humans and his society. Bostrom and Yudkowsky listed responsibility, transparency, auditability, incorruptibility, and predictability as criteria for the computerized society to think about.

## CONCLUSION

AI is here to stay in our world and we must try to enforce the AI bioethics of beneficence, value upholding, lucidity and accountability. Since AI is without a soul as it is, its bioethics must be transcendental to bridge the shortcoming of AI's inability to empathize. AI is a reality of the world. We must take note of what Joseph Weizenbaum, a pioneer of AI, said that we must not let computers make important decisions for us because AI as a machine will never possess human qualities such as compassion and wisdom to morally discern and judge. Bioethics is not a matter of calculation but a process of conscientization. Although AI designers can up-load all information, data, and programmed to AI to function as a human being, it is still a machine and a tool. AI will always remain as AI without having authentic human feelings and the capacity to commiserate. Therefore, AI technology must be progressed with extreme caution. As Von der Leyen said in *White Paper on AI – A European approach to excellence and trust*: “AI must serve people, and therefore, AI must always comply with people's rights.... High-risk AI. That potentially interferes with people's rights has to be tested and certified before it reaches our single market”.

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