Man-Machine Integration: A Call to Discernment

Intro:

In this age of miniaturization and computers, we have access to mind boggling amounts of information. The information available can be found in the new technology, the social development or in the history of humanity. **When technologies are developed we, as Christians, must use discernment in determining their uses, benefits and consequences, and further follow the principles which we believe God would ask us to follow were He to speak to us directly on the matter. I endeavour to speak concerning the multidisciplinary field of human-machine integration, and the questions a Christian must answer with regard to it.**

Basics:

Thanks to modern computing and increased knowledge of the functions within the human body, the fields of bionics, neural interfacing, and radio frequency identification (RFID) are being tested for applications within the human body. This technology is still in its infancy; the basic components required for its development are all currently available.

BIONICS:

Bionics is a field in which robotic replicas are used to replace missing or inactive body parts.

Neural Interfacing:

Neural Interfacing is a field of study which uses neural imaging and pattern recognition in order to determine the desired action of a person. There are two main types of neural interfaces: Non-invasive (Electroencephalographic or EEG) and invasive. Non-invasive neural interfaces read different electrical patterns from the scalp which are indicators of neuronal activity. Invasive neural interfaces implant silicon rods into the brain to record and determine firing patterns of pools of neurons.

Radio Frequency Identification (RFID):

RFID is the technology of using radio frequencies to gain information pertaining to an object, which in this case is a human being.

Power source:  
Recent developments in thermal induction may allow chips to be powered indefinitely by heat leeched off of muscles in the body. It is more likely that future developments will make this possibility much more likely.

Ethicality:

For a person who is not using a Christian ethic there is little or no need to develop an ethical approach to human-machine integration, but as Christians we are called to discern what is best(Phil 1:9-10) and to consider our paths(prov. 1:15), which implies we need to understand the implications of this technology and how God would have us use it, if at all. As Christians, we must examine how integrating machines with the body can be ethical or unethical. I will explore the difference between integration and replacement. The ethical issue resides in convenial use as opposed to medical or practical use.

Another ethical issue to explore is the sanctity of the human body. What does it mean to be human? Did God create the human body in a specific way for a purpose? Should it be added to or willingly changed?

We are called to look at how human beings relate to each other. This is because part of understanding the nature of being human requires us to look at how we relate to each other; how we relate to each other will depend upon what form our bodies take. A change in the body can change how we interact with people from the past or present.

An issue which could be used as an apologetic to non-christians is the availability of information to large corporations and governments who may or may not use this information for their own personal well-beings.

Conclusion:

I believe that these technologies should be used in a limited scope as necessity or business requires. It will require great discernment and the ability to accept the responsibilities of using this technology as well as the benefits. Above all, we must remember that these technologies do not solve the problems, but only allow us to overcome some of the difficulties associated with them.

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