# Cybernetic Augmentation - a Key to Utopia or Dystopia?

# WM0324LR Ethics Essay 2014-2015

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#### Abstract

# I. Introduction

This is introduction

# II. Analysis

To explore the potential ethical implications of cybernetic augmentation in a more structured manner, a distinction is made between the two types of cybernetic augmentations:

- 1. Augmentations to enhance the user's physical ability
- 2. Augmentations to enhance the cognitive ability.

For example, if one's arm is replaced by a robotic arm which gives the user a superior arm strength and agility, then it is seen as the augmentation which enhances the physical ability. On the other hand, if a computer chip is implemented in one's brain to increase the memory capacity, then it is considered as the augmentation which enhances the cognitive ability of the user.

With such distinction in mind, let us analyze and discuss the ethical implications of cybernetic augmentation. Before we start, it is important to ask ourselves "What is meant by an ethical implication?". According to the Longman Dictionary of Contemporary English, an implication means "a possible future effect or result of an action, event, decision, etc" [1]. Therefore, an ethical implication would mean the possible future effect or result with regard to associated moral values and principles of morality. For analysis, this can be viewed as divided into two main aspects: namely, the potential benefits and risks. Therefore, in this section, the potential benefits and risks of the cybernetic augmentation are contemplated and discussed.

#### A. Potential benefits

What are the potential benefits of cybernetic augmentations (in short, CAs) which are implemented to enhance the user's physical and cognitive ability? The following section answers this question by explaining various elements, factors,

and viewpoints which come into play when analyzing the relevant ethical aspects.

### A..1 Benefits of physical CA

This is the benefits of CA physical

# A..2 Benefits of cognitive CA

This is the benefits of CA cognitive

#### B. Potential risks

What are the potential risks of cybernetic augmentations which are implemented to enhance the user's physical and cognitive ability?

#### **B..1** Risks of physical CA

This is the risks of CA physical

#### **B..2** Risks of cognitive CA

This is the risks of CA cognitive

# C. Authors' viewpoint

This is our opinion.

# III. Recommendations

These are our recommendations

# IV. Conclusions

This is the conclusion

# References

- [1] Pearson Education. *Longman Dictionary of Contemporary English*. 2007.
- [2] Lamber Royakkers Ibo van de Poel. *Ethics, Technology, and Engineering*. 2011.