

# Chapter 90

## Mapping Human Enhancement Rhetoric

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### ABSTRACT

*This chapter raises ethical questions about the relationship between HET and the discourse of human enhancement technologies. Specifically, it explores some problems in mapping human enhancement rhetoric. In the first section, human enhancement rhetoric is defined. Questions are raised about the rhetorical act of re-defining “human enhancement” as a problem of self-descriptive narrative and performance measurement. In section two, various approaches and terms for mapping are presented as a way of underscoring the slippery qualities of human enhancement as a dynamic, expanding discourse. Section three explains the changing ethical positions for enhancement technology users through the concepts of “over claim,” “reacting to technology,” and “ethos.” In section four, boundary changes for HET users are discussed as a complex mapping of shifting concepts, discourse, and communities. In conclusion, the transition from human enhancement to transhuman enhancement is emphasized with suggestions for future research.*

### INTRODUCTION

*2024:* A human patient is undergoing head reconstruction surgery. The human surgeon is located in Vienna, Austria; the patient is located in New York, NY in an operating theatre equipped with the latest robotic da Vinci surgical system. The system incorporates new 3d printing technology. Implantation of a new bionic right eye is a major part of the head reconstruction surgery. The lens has been designed to match the patient’s left eye in appearance; it will be an unnoticeable change to those with biological vision. The patient will have superhuman vision that applies 3d printing technology. During the surgery, a transhuman programmer with HET-user knowledge hacks into the robotic surgical system. Distracted by a software translation error, the surgeon and other technicians are unaware of the hack. The programmer uploads an encrypted file to the patient’s eye that will automatically upgrade vision as per coded knowledge marshaled from specific HET users. The now transhuman patient with a reconstructed head

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and enhanced vision teams with other HET users to develop 3d-printing and scanning upgrades. Knowledge gained from the use of these upgrades will further enhance vision and transformative capabilities beyond the human for specific HET users.

Given this hypothetical scenario, questions can be raised about the shifting ethical positions in human and transhuman enhancement discourse. Are we motivated to talk and act differently if our physical, sensory, or cognitive capabilities improve, for example, if our vision is superhuman or hijacked? How do we apply discourse about improved capabilities (hypothetical versus actual) to create or avoid current and future ethical problems, such as programming a coded upgrade for only certain users or determining responsibility for translations that result in computer-dependent and enhanced behaviors? If we are enhanced, how do we know and how do we persuade others? How do others react to our enhancement rhetoric and who benefits?

Computing power has simultaneously moved inside the human body and beyond our solar system. The cochlear implant has made a hybrid human hearing sense possible through embodied computing power. Through NASA and satellite computing power, the Voyager 1 entered interstellar space in late 2013. Both human flesh and global activities are now computer-mediated. As patients, athletes, and astronauts seek restored capabilities, sensory enhancements, and performance advantages, computing power and human enhancement technologies demand further study as an ethical dimension of humans and their co-evolving transhuman relatives.

Concepts that have been introduced since 1960, such as “cyborg,” “internet,” “information technology,” “transhumanism,” “human genome,” “body scan,” “digital native,” “upgrade,” “smart phone,” “smart fabric,” “nanotechnology,” “wi-fi,” “space tourism,” and “Mars mission,” among others, mark significant changes in culture and research. They also mark changes in human and technological scale. The lexicon related to human enhancement has been growing and changing over the past half-century.

From the microscopic to the macroscopic, from the personal to the global, from the cellular to the cosmic, humans are simultaneously exploring boundaries of physical matter, boundaries of the flesh, boundaries of consciousness, and boundaries of time and space. With each boundary exploration, there is a corresponding lexicon and scale. With each boundary exploration, considering the rhetorical concept of circumference, questions arise about human ethics. As we map human enhancement rhetoric, we also map ethical dimensions. Mapping such a dynamic discourse to reveal ethical dimensions requires an effective mapping strategy.

This simple map shows two circles with openings; both circles are shifting as situations and discourse communities change. One circle represents the changing rhetoric of human enhancement; the other represents the changing rhetoric of transhuman enhancement. Humans who seek enhancement through HET will eventually gain actual enhanced capabilities. When they describe their enhanced capabilities, they will develop rhetoric using new knowledge, transhuman knowledge based on transformative computing power. The overlapping area of the two shifting and open circles shows this discourse. As discourse about actual enhanced capabilities beyond the human is directed to HET users (both existing and future users), these users develop transhuman enhancement rhetoric. These users develop specific discourse around their enhancement, as shown in two circles, e.g., vision and hearing enhancements. Upgrades move discourse towards new rhetoric and further upgrades/enhancements.

This chapter is organized around four questions:

1. What is human enhancement rhetoric?
2. How can we map human enhancement rhetoric?

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