

# Personal Identity in Enhancement

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## Personal Identity in Enhancement

The aim of this paper is to introduce the concept of human enhancement, its methods and its relation to personal identity. Also several approaches to personal identity will be described. Transhumanism is a special think tank supporting human enhancement through modern technologies and some of its representatives claim, that even great changes to human organisms will not affect their personal identity. I will briefly describe the most important means of human enhancement and consider the problem of personal identity for each of them separately.

**Keywords:** Enhancement, Transhumanism, Personal identity, Criterion of Identity, Practical Concerns

## What is enhancement?

To understand, how related the topics of personal identity and enhancement are, let me at first introduce you to the concept of enhancement in order to make more obvious why we should be concerned about personal identity.

Human enhancement, also called human augmentation, is a relatively new concept, which refers to the use of medical and scientific technologies and techniques not only for the preventing and curing of diseases, but also for improving those mental and physical capacities, which we consider as normal. Sometimes it is also called a *better than well* concept.

Enhancement in general means any improvement or creation of new capacity either naturally<sup>[1]</sup> or by means of technology. The goal is in overcoming the limits of the human organism. Enhancement is typically compared to traditional therapeutic medicine, i.e. preventive and regenerative medicine, which aims to treat towards the normal range. But enhancement goes further than just normal, which could be problematic for various reasons.

For example WHO defines health as follows: „Health is a state of complete physical, mental, and social [well-being](#) and not merely the absence of disease or infirmity“.<sup>[2]</sup> Therefore we can classify 70–95 % of people as ill or afflicted. Other issues, such as plastic surgery, vaccination or anti-aging medicine, also extend beyond the normal range, but are already taken as parts of treatment. We therefore should rethink the aims of medicine, and expand them to include human enhancement. Questions rise also about the level of the internality of interventions, for example the difference between the wearing of Google Glasses, and that of having a laser eye operation, both with have similar functions.

Even the word *normal* is very questionable. Mostly it is a synonym for the most common, most

expected or conforming. We can consider as normal an average value in a Gaussian distribution. But still someone whose value is lower than average can remain, even after enhancing their capacity, lower on the curve than someone without enhancement. We can also distinguish between intra-normal enhancement, which means changes within the normal range, and supernormal enhancement which is creating new qualities.[\[3\]](#) These difficulties are no big deal for the proponents of enhancement, but those who see a difference between therapy and enhancement must somehow try to explain them.

We can find examples of natural enhancement deep in the history of humankind, in Tibet or India. Buddhist and Hindu yoga masters and monks used to teach that the human being was limited both physically and mentally, and that this limitation was their source of suffering and reincarnation, and therefore that we must overcome our limits.

Some roots of enhancement are present in the ancient heroic epics, and also in the 2nd half of the 20th century in the superhero cult and cyberpunk movement. The most typical contemporary proponents can be found among followers of transhumanism and the posthuman concept, and in cryonics or extropianism.[\[4\]](#) They, sometimes quite uncritically, hold the position that there are no or only a very few moral imperatives justifying embargos on enhancement.

The opposition to enhancement is often called bioconservatism.[\[5\]](#) Some religions and churches argue that enhancement is like playing God and messing with human nature. But this argument goes also against vaccination and cancer treatment, so it cannot be taken seriously. Other frequent arguments against enhancement are those that say that it is harmful and dangerous, that it is a fatal risk for the survival of humankind l etc. We will not examine all of them any closer in this paper because it is focused only on one particular argument, the one considering personal identity.

## **Fields of enhancement**

Enhancement includes many fields and methods for improving human capacities. We can extend our life span, increase our intellectual capacity, body functionality or sensory functions, improve our mood, emotions and concentration or increase our energy. Theoretically it is also possible to change our genetics. Some of the methods that are already used are legally approved, for example drugs such as coffee, smart drugs, antidepressants or plastic surgery. Some of them however are illegal but widely used. Here we could name a lot of illegal drugs. Other categories of methods are those, which are still at the stage of research and of experimental proof (implants, neuromanipulation, cloning and genetic engineering,) or are at an early stage of theoretical discussion (uploading).

Some transhumanists claim that human enhancement will not change personal identity in any direct way, but only indirectly by changing the overall structure and ethos of society.[\[6\]](#) But the progressive conception of enhancement involves some radical methods, which can significantly change the human being. Therefore it is evident, that one of the most typical arguments against enhancement or transhumanism is the risk of losing personal identity. However many transhumanist views and objections to them are very general and vaguely formulated, and so we need to examine them closer. At first we must find out if we can sort enhancement into any types.

I suggest three following types of enhancement. The first one is keeping the body substrate, where the original body materials do not change and we only enhance their function. This type includes fields such as the prolonging of life span, cryonics, drugs, plastic surgery, neuromanipulation, genetics and cloning. Another type consists in partially changing the body substrate, and this refers to implants, prosthetics or cyborgization.[\[7\]](#) The third type of intervention is the changing of the

body substrate totally, and here we include whole brain transplantation and uploading the mind into a digital, analog device or an artificial software network. These three categories may help us to realize what it is in fact that is changing when we modify our natural state. The next important question is to what degree.

### **How much can we change and still stay identical?**

Identity has many meanings in different domains. We can distinguish among bodily identity, psychological identity, social identity, legal identity or digital identity. When talking about personal identity in a philosophical sense we are in fact asking which characteristics are fundamental and elementary for human beings. We should see the difference between qualitative identity, which refers to the similarity of things or for example to the similarity among members of the human species, and numerical identity consisting in the characteristics and capacity of one thing or being to persist during certain changes in time. Numerical identity is crucial for the personal identity concept. What kind of changes could a person go through and still stay the same person depends on the type of relations which we consider as unifying for our *self*. Which characteristics are those that make us our selves is very difficult to specify, and in contemporary philosophy there are various theories of personal identity with many unsolved issues.

### **Psychological criterion**

According to the psychological theory proposed for example by John Locke or Derek Parfit, and also by most of the transhumanists, the existence of the same person depends on the keeping of specific mental qualities such as memory, consciousness or psychological continuity.

*The psychological criterion of personal identity says that: X at  $t_1$  is the same person as Y at  $t_2$  if and only if X is uniquely psychologically continuous with Y, where psychological continuity consists of overlapping chains of strong psychological connectedness, itself consisting of significant numbers of direct psychological connections like memories, intentions, beliefs/goals/desires, and the similarity of character.*[\[8\]](#)

If we pass over some minor difficulties concerning mental connectedness such as amnesia or a permanent vegetative state, we still find we have to solve the problem that psychological identity cannot exist independently of its biological one.

### **Biological criterion**

Animalists claim that human beings are essentially organisms of the *Homo Sapiens* species and that their psychological characteristics are just accidental.

*The biological criterion of personal identity says that: if X is a person at  $t_1$ , and Y exists at any other time, then  $X=Y$  if and only if Y's biological organism is continuous with X's biological organism. Note that Y may or may not be a person, which allows that X might be one and the same as a fetus or someone in a persistent vegetative state. This view is also sometimes called *animalism*.*[\[9\]](#)

Animalism also does not solve all the questions regarding personal identity. It cannot answer for example the problem concerning twins or the argument of practical concerns.[\[10\]](#) And the brain

transplantation thought experiment is a challenge for animalism too because it leads us to some very counterintuitive intuitions.[\[11\]](#)

If the grounding for our practical concerns requires psychological continuity, but psychological continuity ordinarily presupposes biological continuity, then the grounding for our practical concerns ordinarily requires biological continuity as well.

### **Narrative criterion**

*The narrative criterion of personal identity says, that what makes an action, experience, or psychological characteristic properly attributable to some person, and thus a proper part of his or her true identity, is its correct incorporation into the self-told story of his or her life.*

This theory is too vague, and narrative identity depends on numerical identity so it does not solve the former metaphysical problem. Also, theories such as non-reductionism[\[12\]](#) or four-dimensionalism[\[13\]](#) have so many problems and difficulties and are far more confusing than worth explaining, therefore we will not take them into account in this paper. Also the view that identity does not matter for survival is not useful for the consideration of the impact of enhancement on personal identity, because we still have to decide several issues exceeding survival.

### **No self theory**

The no self theory is rather an eliminative than a reductive one. It was held by David Hume who distinguished between two senses in which we think and talk about personal identity.[\[14\]](#) The first one is the categorical sense, which means that we experience a continuous flow of perception, and our identity is only a fiction or imagination because of the smooth flow of perceptions and their continuity. In a psychological sense we tend to attribute identity to things, plants, animals and people and all things which are variable and interrupted.

The no self theory is supported by the fact that our self-awareness is not essential, it is a secondary phenomenon acquired during our development. Every mentally healthy baby has in its first months of life only pure perception, then there evolves an object of this perception, and finally around the third year a child becomes the subject of its own perception. But even this theory has its own specific problems which will be examined later in this paper.

### **When does personal identity change?**

Here is a table comparing the previous theories of personal identity which I consider as useful and which shows their impact on identity in the various fields of enhancement. It helps us to realize which methods of enhancement might be problematic for the concept of personal identity because of its possible change.

<b>Psychological criterion (Mind)</b>	<b>Biological criterion (Organism, Body)</b>	<b>No self theory</b>
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<b>Life span</b>	SAME	SAME	
<b>Drugs</b>	SAME/CHANGE*[15]	SAME	
<b>Plastic surgery</b>	SAME	SAME/CHANGE**[16]	
<b>Body implants, Prosthetics</b>	SAME	SAME/CHANGE**	
<b>Neuromanipulation</b>	CHANGE	SAME	NOTHING TO BE CHANGED
<b>Genetic engineering</b>	SAME	CHANGE	
<b>Uploading, Brain transplantation</b>	SAME	CHANGE	

### **No self, no problem?**

It might seem that if we accept the no self theory we do not have to solve the metaphysical issues connected with personal identity and can enhance our selves with no fear and the problem is solved. But even if this case was true, many practical questions would still remain. One of them is the accounting of moral or legal responsibility. To do so, we must decide what metaphysical units we are, and which of them are morally relevant. The widely accepted conception of moral responsibility presupposes personal identity, but every theory has its own specific problems. Or we can assume that there are skillful and unskillful actions, and that the distinction between them is universal. But there is no universal ethics to do so.

Another field of problems lies in applied ethics, especially in medical ethics and bioethics, which are closely related to enhancement. We must somehow decide whether the embryonic research of stem cells is morally justified or whether and when women could undergo an abortion. Also the twin problem again, which refers to the splitting of a person in the first two weeks, is a big challenge for the biological theory.

Personal identity is also important for decisions about future demented states, the treating of dissociative identity disorder, or the keeping alive of a person in a vegetative state with permanent loss of their capacity of consciousness. And it also plays an important part in altering the genome of fetuses, where we have to consider what would happen to the previous unaltered persons.

### **Conclusion**

It is obvious that we must take into account two different levels of personal identity: the metaphysical, and the practical conventional one. In our everyday life we may leave the metaphysical questions undecided. But concerning professionals, scientists, doctors and those who deeply care about their actions we must choose a criterion to decide at the practical and more specific level. Even if there is no self, Hume and many Hindu or Buddhists point right at the core of the problem, that we still tend to perceive ourselves or parts of our being as metaphysical units, and which are the basis of ascribing moral and legal responsibility. This way of perception has a very strong influence on our legal, medical and ethical system. But personal identity concepts depending on such metaphysics are full of inconsistency and vagueness. This is a challenge for philosophers to make clear. Or there might be another way how to decide such complicated ethical issues in medicine and enhancement methods, for example by adopting certain values not dependent on

personal identity. Instead of solving complicated (and perhaps unsolvable) metaphysical questions we may accept some more or less universal ethical code. But this option is strongly related to the ontological view of the universe and consensus on this level seems to be more complicated and misleading than solving metaphysical issues regarding personal identity concepts. There is here an important space for open discussion among philosophers, physicians, psychologists, geneticists, bioengineers, theologians and lawyers on how we should treat and enhance our selves and future generations. Such a discussion is very important, not only because of solving the already existing issues, but also because evolving technologies now give us the opportunity to not only to treat diseases but also to prevent them and make our lives better with new capacities to enhance our selves. Whether it will actually save mankind from disaster, or rather bring one about right away still remains a big question mark.

Instead of an answer to this difficult question I will give you one cogent quotation from a Polish science fiction author Stanislaw Lem:

Stepping to the left, you lose your head, step to the right, you perish, no way back.[\[17\]](#)

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## Notes

- [\[1\]](#) The most common examples of natural enhancement are learning, exercise or meditation.
- [\[2\]](#) See the WHO definition of health, which has not been amended since 1948. *WHO Definition of Health*, 1948 [online]. New York, World Health Organization, 2003 [cit. 7. 5. 2015]. Available from: <http://www.who.int/about/definition/en/print.html>.
- [\[3\]](#) WACHBROIT, R.: Human Enhancement Uses of Biotechnology: Overview. In: MURRAY, T., MEHLMAN, M. (eds.): *Encyclopedia of Ethical, Legal and Policy Issues in Biotechnology*. Wiley: Interscience 2000.
- [\[4\]](#) Transhumanism is a recent think tank which consists in enhancing human potential by means of contemporary or future technologies. Extropianism and cryonics are special modifications of transhumanism. The best known representatives of these think tanks are Nick Bostrom, James Hughes, Julian Savulescu, Eliezer Yudkowsky or Max More.
- [\[5\]](#) The most famous arguments come from Francis Fukuyama, Leon Kass, Jürgen Habermas or George Sandel.
- [\[6\]](#) BOSTROM, N., SANDBERG, A.: *The Future of Identity* [online]. Oxford, 2011 [cit. 7. 5. 2015]. Available from: <http://www.nickbostrom.com/views/identity.pdf>.
- [\[7\]](#) Cyborg or cyborgization is a hypothetical term for being or becoming a person with both organic and biomechatronic parts.

[8] SHOEMAKER, D.: Personal Identity and Ethics. In: *Stanford Encyclopedia of Philosophy* [online]. 20. 12. 2005 [cit. 7. 5. 2015]. Available from: <http://plato.stanford.edu/entries/identity-ethics/>.

[9] Ibid.

[10] The twin problem refers to splitting one embryo into twins after the first week of pregnancy. The question is if we should consider the first week embryo as a person and what would happen to this person after splitting.

Practical concerns are for example the ascribing of moral or legal responsibility to a particular person.

[11] BĚLOHRAD, R.: *Osobní identita a její praktická hodnota*. Brno: Masarykova univerzita 2011, p. 147-149.

[12] Non-reductionism claims the existence of a separate ego, i.e. an immaterial substance unattached to any psychological properties. We do not have epistemic access to this substance, so it is impossible to find any ethical relations.

[13] Four-dimensionalism refers to the three spatial dimensions and a fourth one which is time. It says that some parts of a person are temporal, and that identity matters, but only in the sense of connectedness.

[14] HUME, D.: *A Treatise of Human Nature*. Harmondsworth, Middlesex: Penguin Books 1969.

[15] \* Depends on the permanency and connectedness.

[16] \*\* Depends on the degree of intervention.

[17] LEM, S.: *Golem XIV*. Praha: Svoboda 1983, p. 262.

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