

Morphological Freedom – Why We Not Just Want It, but Need It

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Over the years, I have lectured about various enhancements and modifications of the human body; now I am going to deal more with the whys than the hows. I am hoping to demonstrate why the freedom to modify one's body is essential not just to transhumanism, but also to any future democratic society.

Morphological Freedom as a Right

This essay will largely be based on a rights ethics framework, although I am fairly certain most of the arguments easily carry over to other ethical frameworks.

What is morphological freedom? I would view it as an extension of one's right to one's body, not just self-ownership but also the right to modify oneself according to one's desires. Different human rights can be derived from each other (many of the arguments in this section are from Nordin 1992 and Machan 1987).

The right to life, the right to not have other people prevent oneself from surviving, is a central right, without which all other rights have no meaning. But to realize the right to life we need other rights.

Another central right for any humanistic view of human rights is the right to seek happiness. Without it human flourishing is unprotected, and there is not much point in having a freedom to live if it will not be at least a potentially happy life. In a way the right to life follows from it, since death or the threat of it is one of the main threats to the pursuit of happiness.

From the right to seek happiness and the right to life the right of freedom can be derived. If we seek to survive, we must be able to act freely in our own interest. Similarly, since we are different and have different conceptions of happiness (which is after all a deeply personal thing that

cannot be separated from the person pursuing happiness) we need freedom to practice these. Also, since values differ and uncertainties in knowledge and intelligence make people come to opposing conclusions about the best way of acting even when their goals are exactly the same, there is a need for freedom to enable different approaches to be tested, compared, and pursued.

The right to freedom and life imply a right to one's body. If we have a right to live and be free, but our bodies are not free, then the other rights become irrelevant. If my body is coerced or threatened, I have no choice to obey whatever demands the coercer makes on me if I wish to continue to survive. Even worse, changes to my body can be used to affect my pursuit of happiness.

Similarly, a right to ownership can be derived in the same way. We are technological beings who cannot survive without the tools and resources we employ, and if we are denied them we cannot thrive.

From the right to freedom and the right to one's own body follows that one has a right to modify one's body. If my pursuit of happiness requires a bodily change – be it dying my hair or changing my sex – then my right to freedom requires a right to morphological freedom. My physical welfare may require me to affect my body using antibiotics or surgery. On a deeper level, our thinking is not separate from our bodies. Our freedom of thought implies a freedom of brain activity. If changes of brain structure (as they become available) are prevented, they prevent us from achieving mental states we might otherwise have been able to achieve. There is no dividing line between the body and our mentality, both are part of ourselves. Morphological freedom is the right to modify oneself.

Morphological freedom can of course be viewed as a subset of the right to one's body. But it goes beyond the idea of merely passively maintaining the body as it is and exploiting its inherent potential. Instead it affirms that we can extend or change our potential through various means. It is strongly linked to ideas of self-ownership and self-direction (More 1998).

Morphological freedom is, like the others, a negative right. It is a right to be able to do certain things, but it does not in itself imply others are morally obliged to support exercise of it. It would after all be unreasonable to demand others to support changes in my body that they would not see as beneficial or even ethical according to their personal moral. If I want to have green skin, it is my own problem – nobody has the moral right to prevent me, but they do not have to support my ambition. Of course, other ethical principles such as compassion would imply a moral obligation to help, but I will here mainly concentrate on the skeletal rights framework.

As a negative right, morphological freedom implies that nobody may force us to change in a way we do not desire or prevent our change. This maximizes personal autonomy.

This talk will only deal with the basic case of informed consenting adults as regards to morphological change. There exist a number of special cases where volition becomes problematic, such as mentally ill people, pre-persons, or deliberate changes in the motivational systems of the brain. That these cases are troublesome cannot be held as an argument against morphological freedom or any other freedom, since any ethical system will have its limits and messy borderlands. What is important is how well the general principle can be applied, and if it can be adapted with as little contrivance as possible to the special cases. In the case of this kind of rights ethics many liberal thinkers have analyzed the rights of deranged persons, embryos, or the dead (cf. Nordin 1992).

In current debate and legal systems the right to one's body and morphological freedom has been divided into a large number of subject fields, weakening the underlying right. Debates rage about medical privacy, women's right to their bodies, doping, reproductive rights, euthanasia, and the appropriateness of various medical procedures while largely ignoring that they are all based on a common issue: our right to modify (or allow others to modify) our bodies in various

ways. It is important to assert the underlying unity before looking at the various special cases and considerations that have to go into the different issues. Otherwise there is a risk that the right to one's body and morphological freedom will vanish from the ethical debate, to be replaced by a patchwork of largely independent ethical judgments with no overall coherence. In the face of rapid technological and social change we need robust basic ethical principles to build on.

What Possibilities Do We See Today and Tomorrow?

Being technological animals we have a long tradition of both integrating artificial components into ourselves or our personal space, as well as deliberately modifying ourselves to fit personal or cultural aims (Weber 2000). Clothing, ornamentation, cosmetics, tattoos, piercing, and plastic surgery have all long traditions. They have mainly been intended to affect our appearance and social impression, rather than actual bodily functions.

Today we have the technological means to modify functions in addition to appearance, making morphological changes far more profound. Various chemical methods of adjusting or enhancing physical or mental efficacy exist and many more are under development (Sandberg 1997). Sex changes have gone from something extremely rare and outrageous to something still rare, but merely unusual (it was amusing to notice that when asked few in the 2001 audience even remembered the transsexual Israeli artist Dana International, who in 1998 won the Eurovision song contest).

We are already seeing suggestions for human genetic modifications (either somatic or germline) for not just treating disease but to enhance quality of life through increased DNA repair, decreases in age-related muscular decline, cancer, and AIDS prevention as well as possibly cognitive enhancements (Stock and Campbell 1999; Migliaccio et al. 1999; Tang et al. 1999; Barton-Davis et al. 1998). While implants are currently only used for treating illness, it seems reasonable to assume that implants for preventing illness or enhancing health or other functions are possible, for example ways of maintaining or controlling homeostatic functions and interfacing with external information sources.

In the past medicine was mainly curative and palliative. Today there is an emphasis of preventative medicine. But the edges are being blurred between the areas. A more health-conscious public is integrating preventative medicine in the form of exercise, nutrition, and functional food into their lifestyle. Methods intended for one field, such as hormone replacement therapy, can be applied to enhance quality of life outside the field. Techniques are rapidly becoming cheaper and available to more people. We are rapidly approaching a time where there is not just curative, palliative, and preventative medicine, but also augmentative medicine.

Technology and morphological freedom go hand in hand. Technology enables new forms of self-expression, creating a demand for the freedom to exercise them. The demand drives further technological exploration. It is not just a question of a technological imperative, but a very real striving of people towards self-actualization.

Morphological Freedom and Society

It should be noted that morphological freedom is not atomic. Although it has been stated, as is common with a rights ethics, from the perspective of individuals, morphological freedom is part of human interactions. That individuals have rights does not absolve them from their

obligations to each other or their need of each other. But these obligations and needs cannot ethically overrule the basic rights. No matter what the social circumstances are, it is never acceptable to overrule someone's right to life or morphological freedom. For morphological freedom – or any other form of freedom - to work as a right in society we need a large dose of tolerance.

Morphological freedom does not threaten diversity, as has been suggested repeatedly by critics of genetic modification or other forms of physical modification, but in my opinion would have quite the opposite effect.

Today we see in Western societies an increasing acceptance and cherishing of individual self-expression and diversity (Brin 1998; Weber 2000). Although peer pressure, prejudices, and societal biases still remain strong forces, they are being actively battled by equally strong ideas of the right to “be oneself,” the desirability of diversity and an interest in the unusual, unique, and exotic. These ideas are being expressed through organizations and institutions that are affecting our culture in pervasive ways (Brin 1998).

If new tools for expressing individuality and uniqueness become available, there are always some people willing to embrace them regardless of risks and societal condemnation, just as there are always others who refrain from them for different reasons, including wanting to retain their individuality. While a large majority may choose practical or popular tools, be they telephones or plastic surgery, that only enhances the self-definition of those who refrain from them, which is attractive to a noticeable fraction of people. There is little risk in a diversity-valuing society that everybody is going to jump on a bandwagon, because we also value the critics, conservatives, and opponents highly (Brin 1998).

It is sometimes argued that morphological freedom, for example genetic therapy, would increase class differences, possibly leading to a strongly stratified world of haves and have-nots. This argument is based on the assumption that any morphology-changing procedures are going to be costly and remain so. However, this is not borne out in economic experience where the costs of technology in general decrease exponentially compared to the average wages. In addition the rate of technological diffusion is getting faster, both within Western societies and between rich and poor societies. Especially regarding technologies that may affect future generations such as germline therapy or life extension it is important to remember that the time constant of technology diffusion appears to be much shorter than the human generation time. Issues of value differences may be far stronger determinants of inequalities, in addition to regulations artificially keeping prices up. The best way of making actual morphological freedom an option is not to restrict it, but rather to encourage the use and development of it among a wide variety of people.

Why Do We Want It?

Why do we want morphological freedom? As has already been suggested, humans have an old drive for self-creation through self-definition. It is not done just through creating narratives of who we are and what we do (Hardcastle 2001) but by selecting aspects of our selves we cultivate, changing our external circumstances and physical bodies (Weber 2000). We express ourselves through what we transform ourselves into.

This is a strong drive, motivating and energizing us in many fields. From an evolutionary perspective it improves the fitness of an intelligent being if that being actively seeks to explore

and achieve its potential rather than passively wait until a need or circumstances arise. The highly pleasurable flow state we experience when we are doing (to us) purposeful and challenging tasks (Csikszentmihályi 1990) might be an evolved incentive towards self-improvement. Since self-definition is often challenging and by its nature intensely personal, it is not surprising that it is deeply motivating to most people.

A common criticism against ideas of morphological freedom is that there exists a natural human nature that is disrupted by morphological freedom. But even if one accepts the idea of a particular human nature this nature seems to include self-definition and a will to change as important aspects; a humanity without these traits would be unlike any human culture ever encountered. It is rather denying these traits to oneself or others that would go against human nature. Also, there is no contradiction in having a nature that implies a seeking of its own overthrow; it would rather be a transitory nature that would change as humans change.

Another kind of reason for morphological freedom is practical benefits. Although people have a broad range of views and personal projects, a sizeable fraction experience various forms of self-transformation as beneficial for their personal lives. It may range from improvements in health or life quality to specific desires such as enhanced skills.

We change as humans not because we are unhappy about who we are, but rather because we desire to become better. Self-transformation is not a search for some imaginary state of perfection, as is sometimes suggested, but rather an open-ended process. As we grow as people our ideals and values also grow and change.

Why Do We Need Morphological Freedom?

Just as there are positive arguments for morphological freedom, implying why it would be beneficial to regard as a basic human right, there are also negative arguments showing why not accepting morphological freedom as a basic right would have negative effects.

A strong negative argument, possibly the most compelling argument for the acceptance of morphological freedom as a basic right that may not be infringed, is to protect from coercive biomedicine.

Many have expressed fears that technologies such as genetic modifications would be used in a coercive manner, enforcing cultural norms of normality or desirability. Preventing the development of technology cannot hinder this efficiently, since the technology is being developed for a large number of legitimate reasons on a broad front in many different cultures and jurisdictions. But misuse can be prevented by setting up strong ethical safeguards in our culture and institutions.

Seeing morphological freedom as a basic right is one such safeguard. If it is widely accepted that we have the right to control how our bodies are changed both in the positive sense (using available tools for self-transformation) and in the negative sense of being free to not change, then it becomes harder to argue for a compulsory change.

The desirability to many of the possibilities allowed by morphological freedom also helps support the right to not change, as people see that they are two sides of the same coin. This can be compared to purely negative expressions, such as the statement in the UNESCO Declaration on the Human Genome and Human Rights that children have the right to be born with an unmodified genome. In this example there is already an inherent conflict between the positive demand for giving children the best possible health that is mentioned elsewhere in the

document and the negative right. The positive demand is sometimes expressed through *in utero* surgery for certain congenital defects, a process that changes the body and the potential person far more than any present form of genetic modification could hope to achieve (see Mauron and Thévoz 1991 and Stock and Campbell 1999 for further debate and criticism of the genetic heritage concept).

If protection from coercion and ill-advised procedures is the only goal of laws and norms, then they will only gain support proportional to how strongly people feel their rights are being threatened. As various potentially transforming technologies become available, common, and eventually familiar, it is very likely that the familiarity would erode the fear and suspicion that today underlie many bans on applying new biomedical procedures leaving very little support for these regulations, even when they provide a protection against real possibilities of abuse. However, if the regulations are instead based on both the positive and negative aspects of morphological freedom, then they gain continually renewed relevance as they are being supported both by the desire to prevent abuses and the desire to reap the benefits from the technologies.

Without morphological freedom, there is a serious risk of powerful groups forcing change upon us. Historically the worst misuses of biomedicine have always been committed by governments and large organizations rather than individuals. The reason is simply that centralized power broadcast error: if the power makes an erroneous or malign decision, the decision will affect the lives of many individuals who have little recourse against the power and the consequences will encompass the whole of society. Individuals may make mistakes equally often, but the consequences remain on the individual level rather than affecting society as a whole. It hence makes sense to leave decisions on a deeply personal ethical level to individuals rather than making them society-wide policies. Global ethical policies will by necessity both run counter to the ethical opinion of many individuals, coercing citizens to act against their beliefs and hence violating their freedom, and also contain the temptation to adjust the policies to benefit the policymakers rather than the citizens.

As an example, we can imagine that in a near future treatments exist to restore function to many currently handicapped people. In countries with national healthcare systems it becomes very tempting for cost-conscious government officials to reduce costs by curing people – being handicapped is a very expensive “lifestyle” from the perspective of the official.

There clearly exist many people who deeply wish to be cured from various disabilities. But there are also many people who over time have become used to them and instead integrated them into their self-image. The investment of personal growth and determination necessary to accept, circumvent, or overcome a disability is enormous. Suggesting a cure to them implies a change to themselves on a far deeper level than just “fixing” a broken tool, and quite often is experienced as an attack on their human dignity.

The government official would from his perspective do society good by enforcing a cure. But he would deeply violate the self-image and autonomy of a large number of people in doing so. In a society where individual freedom is not viewed as essential, such a violation would be acceptable.

A simple ban on coercive medical procedures would not be enough, even if it is better than nothing. The reason is that it does not imply any right to have an alternative body or protect differently bodied people. The official could encourage “normal” bodies through various means, including officially pronouncing disabled people who did not change as irresponsible and wasting public resources. Without any protection of the right to have a different body, both in the

legal sense to prevent discrimination and in the ethical sense as a part of public ethics guiding acceptance and tolerance, the disabled would be in a very disagreeable situation.

It should be noted that the disability movement has been a strong supporter of the right to determine one's body just for this reason. This seems to be a natural point of agreement between transhumanists and the disability movement which might prove fruitful in future debate. The postmodern critique of the normal body also supports the right to be differently bodied, although in this case rather by dethroning normality than by supporting any ethical project.

It might be argued that what is needed here is merely the protection of those whose bodily state is the result of accidents and illness, rather than the full morphological freedom I have discussed. But as the lines blur between curative and augmentative treatments, self-expression moves further into the realm of self-transformation and treatments that might be seen as desirable by some people but not others (such as cochlear hearing implants or genetic therapy) become more available, it becomes increasingly hard to define what constitutes a natural body and what is a body modified in a volitional way. Attempting to set up regulations based on any such distinction will lead to a situation where the dividing line is constantly challenged due to new technological advances, experienced as arbitrary and not protecting people in need of protection. Taking the step to full morphological freedom creates a far simpler ethical guideline, which both protects those who do not wish to change, those who are differently bodied, and those wanting to change their bodies.

Morphological Freedom and Future Healthcare

The health official example points at a relevant issue regarding healthcare in the future. As new and often initially expensive biomedicine becomes available it is not obvious what to make available in national healthcare. The blurring of the lines between curative and augmentative medicine compounds the issue.

As an example, at the time of writing the earlier subsidies of Viagra and Xenical treatments in Sweden have been withdrawn as they are regarded as "lifestyle medication" rather than normal medication. However, it is possible to be granted exception for this, but the Cabinet will handle the case! This not only makes the details of the case public according to Swedish law, but also puts politicians rather than medical professionals in the position to judge the medical needs of a person. This odd situation will unfortunately likely become more and more common as traditional healthcare must deal with ever more advanced options for morphological change. Even without a public or legal acceptance of morphological freedom the mere existence of such options will force healthcare systems to consider them.

Morphological freedom implies that healthcare systems must be able to deal with not just wishes for health but different kinds of health. Since the purpose of healthcare is to be life-enhancing but the amount of resources is always finite, the allocation issue is a dilemma. It might be possible to define a baseline health everyone is entitled to, with further treatments left to the private sector. Voucher systems might entitle to a certain amount of healthcare, and so on. These issues are complex and controversial, but not unsolvable. Although to my knowledge there does not exist any healthcare system – private or nationalized – that is unanimously agreed to work well, societies can and do reach more or less workable compromises. Morphological freedom just adds another factor to this issue.

Morphological freedom implies the need to redefine concepts of health and illness.

A possible model for how to do this might be the volitional normative model of disease of Robert Freitas, which implicitly includes morphological freedom. In the volitional normative view health is the optimal functioning of a biological system. Normal and optimal function is defined from the patient's own genetic instructions rather than by comparing with the rest of the population or some Platonic ideal of function, making health something individual. The physical condition of the patient is viewed as a volitional state, and the desires of the patient are crucial elements in the definition of the health. Disease is a failure of optimal functioning or desired functionality (Freitas 1999).

This fits in well with the new view of patients not as clients but rather as customers. Patients participate in the health process as active partners rather than passive subjects of the physician. Emphasizing this new view and shoring it up with a strong system of individual rights will likely help people gain access to individually life-enhancing tools and to avoid or at least counteract the paternalism that is currently common in healthcare.

Conclusions

I have sketched a core framework of rights leading up the morphological freedom, showing how it derives from and is necessary for other important rights. Given current social and technological trends issues relating to morphological freedom will become increasingly relevant over the next decades. In order to gain the most from new technology and guide it in beneficial directions we need a strong commitment to morphological freedom.

Morphological freedom implies a subject that is also the object of its own change. Humans are ends in themselves, but that does not rule out the use of oneself as a tool to achieve oneself. In fact, one of the best ways of preventing humans from being used as means rather than ends is to give them the freedom to change and grow. The inherent subjecthood of humans is expressed among other ways through self-transformation.

Some bioethicists such as Leon Kass (Kass 2001) has argued that the new biomedical possibilities threaten to eliminate humanity, replacing current humans with designed, sanitized clones from Huxley's *Brave New World*. I completely disagree. From my perspective morphological freedom is not going to eliminate humanity, but to express what is truly human even further.

Note

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References

- Barton-Davis, Elisabeth R., Shoturma, Daria I., Musaro, Antonio, Rosenthal, Nadia, and Sweeney, H. Lee (1998) "Viral Mediated Expression of Insulin-Like Growth Factor I Blocks the Aging-Related Loss of Skeletal Muscle Function." *Proceedings of the National Academy of Sciences USA* 95 (December), pp. 15603–15607.
- Brin, David (1998) *The Transparent Society*. Reading: Perseus.
- Csikszentmihályi, Mihaly (1990) *Flow: The Psychology of Optimal Experience*. New York: Harper & Row.
- Freitas, Robert A. Jr. (1999) *Nanomedicine*, vol. 1. Austin: Landes Bioscience.

- Hardcastle, Valerie Gray (2001) "The Development of the Self." *Journal of Cognitive Systems Research* 1, pp. 77–86.
- Kass, Leon R. (2001) "Preventing a Brave New World." *The New Republic*, May 21.
- Machan, Tibor R. (1987) *Freedom Philosophy*. Stockholm: Timbro.
- Mauron, A. and Thévoz, J. (1991) "Germ-Line Engineering: A Few European Voices." *The Journal of Medicine and Philosophy* 16, pp. 649–666.
- Migliaccio, Enrica, Giorgio, Marco, Mele, Simonetta, Pelicci, Giuliana, Reboldi, Paolo, Pandolfi, Pier Paolo, Lanfrancone, Luisa, and Pelicci, Pier Giuseppe (1999) "The p66shc Adaptor Protein Controls Oxidative Stress Response and Life Span in Mammals." *Nature* 402, pp. 309–313.
- More, Max (1998) "Self-Ownership: A Core Extropian Virtue." *Extropy Online* (January), <http://www.maxmore.com/selfown.htm>.
- Nordin, Etik Ingemar (1992) *Teknik & Samhälle: Ett Rättighetsetiskt Alternativ*. Stockholm: Timbro.
- Sandberg, Anders (1997) "Amplifying Cognition: Extending Memory and Intelligence." *Extropy Online*. Based on a talk given at the Extro 3 conference, San José, August 9–10.
- Stock, Gregory and Campbell, John, eds. (1999) *Engineering the Human Germline*. New York: Oxford University Press.
- Tang, Ya-Ping, Shimizu, Eiji, Dube, Gilles R., Rampon, Claire, Kerchner, Geoffrey A., Min Zhuo, Guoasang Liu, and Joe Z. Tsien (1999) "Genetic Enhancement of Learning and Memory in Mice." *Nature* 401, pp. 63–69.
- Weber, Robert J. (2000) *The Created Self: Reinventing Body, Persona and Spirit*. New York: W.W. Norton.