

Anthropological Arguments in the Ethical Debate about Human Enhancement*

Jan-Christoph Heilinger[†]
heilinger@lmu.de

ABSTRACT

The paper discusses the role of anthropological arguments in contemporary ethics as exemplified in the current debate about biotechnological human enhancement interventions. Anthropological arguments refer to a normative conception of what it means to be a human being and are highly contested in contemporary moral philosophy. Most often they are promoted to constrain the ethically acceptable use of enhancement technologies. I argue that anthropological arguments can play a fundamental and important role in assessing the moral qualities of enhancement interventions, but only if their normative justification and their specific content are properly determined. I offer an account how to do so, based on the contractualist and pragmatist ideal that all those who are affected by a decision of normative relevance should be included in what I call a “quasi-democratic deliberative process”. However, given that they stand in need of wide agreement, anthropological arguments resulting from such a process will be rather minimal in content. In the exemplary debate about human enhancements they hence turn out to be widely – though not fully – permissive and unable to justify a restrictive stance towards enhancement interventions.

Introduction

This paper discusses the role of anthropological arguments in contemporary ethics, as they can be found for example in the paradigmatic debate about

* I am particularly grateful to Philip Kitcher who provided pertinent challenges to my thoughts and discussed them with me.

[†] Munich Center for Ethics, University of Munich, Germany.

biotechnological human enhancement interventions. Human enhancement interventions are understood as biotechnological interventions in the human organism that aim at altering human physical or mental functioning in healthy individuals, use sophisticated technology and intervene with a certain depth in the human organism.¹ This relatively broad definition allows first to see the bigger picture and allows for a general evaluation of such enhancement interventions. In a second step, it becomes necessary to focus on concrete interventions in individual cases – such as e.g. genetic engineering, mood-enhancement by psycho-pharmaceutical means or brain-machine interfaces to improve human capacities of interacting with a computer system. Only in a broader perspective, however, it is possible to identify common aspects of anthropological relevance that are connected with the problem of altering human beings with biotechnological enhancement interventions.

Anthropological arguments are understood as a class of normative arguments that rely on a normatively charged understanding of what it means to be a human being or of “human nature“. Such arguments are highly disputed in the current debate, to the degree that some claim they should be eliminated from the debate altogether (Buchanan, 2009). I distinguish questionable from more convincing forms of anthropological arguments and conclude that – while in their weaker form, anthropological arguments are rightly rejected – the stronger anthropological arguments are able to play an “elementary” roll in the moral debate about enhancements. They are elementary in two ways: First, in the sense of being fundamentally important, insofar as they provide a basic orientation for human self-understanding and sketch in broad lines what is seen as human. And second, insofar as they remain often implicit and function most of the times only in the background of the routine ethical discussions about concrete ethical problems. In the latter case, anthropological arguments can be found only “trace elements” in a comprehensive moral assessment.

Ultimately, an explicit debate is needed about the essential question, which aspects of “being human“ are to have normative relevance. In the moral debate

¹ Obviously, this definition is somewhat vague. However, a clear and stable definition seems dispensable since the distinction that is of interest here – between morally acceptable and morally questionable interventions into human beings – does not presuppose an exact definition of enhancement. For a detailed discussion of the possible definitions of enhancement interventions, cf. Heilinger (2010, pp. 59–101).

about human enhancement interventions, a general rejection of anthropological arguments hence is not an option.

1. Different Approaches To Ethical Judgements About Human Enhancement

In the field of applied ethics one finds by now a rich set of established tools for assessing the moral quality of specific problematic interventions. The basis of these established standards of evaluation are manifold: they lie in the multifaceted history of moral theory with such different traditions as consequentialist and deontological approaches, theories of justice, virtue theory and others. In the context of applied ethics there is an increasing tendency not to focus on one moral approach alone. Instead different aspects, visible from the perspective of different theories, are combined in a pluralist way to allow for a comprehensive assessment of a given problem (e.g. Beauchamp & Childress, 2009).

In the debate about human enhancement interventions the situation is similar. Several competing and complementary approaches contribute to the moral evaluation of enhancements. Among them figure most prominently (a) risk assessments, (b) concerns for justice, (c) considerations of autonomy and pressure, and (d) anthropological arguments.

(a) Any intervention in a system as complex as the living human organism cannot be completely calculated and its consequences cannot be completely foretold. Hence also any human enhancement intervention – as e.g. interventions to improve cognitive capacities of the brain or to stop the process of ageing in human cells – carries the risk of producing something other than the intended outcomes. Increased intelligence might turn into a burden; interventions into the human genome may lead to infertility. Furthermore, beyond the individual organism, the changes brought about by human enhancement interventions may include risks and side-effects on the societal level. Since the outcomes of enhancement interventions might be not as positive as intended and since their probability of success cannot be determined beforehand, the assessment of potential risks figures prominently among the different types of ethical considerations about enhancements.

(b) Another important aspect in evaluating interventions stems from a justice perspective. After all, enhancement interventions seem to be amenities. Many people on earth do not even have access to clean water, enough food, or

medical care. Hence, every biotechnological intervention to improve human physical or mental functioning above the already high level of the healthy ones in the affluent countries, contrasts in a striking way with the need to first provide elementary goods to those worse off. But even in a narrower frame: Who in the affluent countries would have access to enhancement interventions? As such interventions would most probably not be covered by universal health care, enhancement interventions would only be open to those already better off (and this in the countries that are already better off). This unequal access might cause the social gap within a given society to widen even more. The rich and healthy would become even more healthy, perform even better in qualified and well-paid jobs, while those without access to enhancement interventions were excluded from these advantages. Also, competition for jobs between enhanced and un-enhanced individuals would appear as unfair; a society in which people live much longer would stand in need for a different pension system.

Yet, the impact of enhancement interventions for justice in society could also be different. Some have claimed that human enhancement interventions could be used to level down existing inequalities between individuals in a given society in order to increase equality and justice. The disadvantaged with relatively minor cognitive capacities could, for example, get access to cognitive enhancers to boost their performance and make them better competitors on the job market. With purposeful enhancement interventions, at least some of the existing inequalities caused by the “natural lottery“ could be levelled down (Buchanan et al., 2000).

(c) Yet another standard field of assessing the ethical dimension of new technologies consists of looking at the autonomous decisions for or against some human enhancement interventions. Within the liberal framework of Western societies, informed consent of the treated person is seen as a necessary condition for any medical intervention into an individual’s organism (to be dispensed only under certain, strict conditions). But still, even if one would at first glance say, that an individual made an autonomous decision to undergo a certain human enhancement intervention, there might be hidden influences exerting an indirect or subtle pressure on the putative autonomous decision. The free choice of academics e.g. to use cognitive enhancers might be based less on their free decision and more on peer-pressure exerted by a highly competitive environment in which performance and productivity are the main measures to evaluate academic achievement. Because of these concealed

influences a scrupulous assessment of the alleged autonomy of any decision for the use of enhancement interventions is urgently needed.²

(d) As a last main type of ethical arguments in the debate about human enhancement interventions, consider what can be called “anthropological arguments“, i.e. judgements about a possible human enhancement intervention that are based on a normative understanding of what it means to be human. Assumptions about what it means to be human function as a “regulative idea“, they assess actions or options for actions by comparing the (intended or real) outcome with a normative and ideal understanding of what it means to be a human being. In doing so, anthropological arguments have a prescriptive force insofar as they identify certain actions as forbidden, morally acceptable or morally good.

Anthropological arguments can appear in very different forms and are often implicit. Frequent indicators for ultimately anthropological arguments are references to “human nature“ or to “human dignity“, to specific ideas of a “good“, a “normal“ or a “typical“ human life, or to the existence of “inherently human traits“. Talk of human nature is the most widespread form of anthropological arguments and will be at the centre of my enquiry.

Most often anthropological arguments are used in a sceptical way to criticise human enhancement interventions. It is then said that human beings should refrain from applying these technologies, because in using them certain essentially human traits would be endangered (Kass, 1997; Habermas, 2003; President’s Council, 2003; Sandel, 2007). On the other hand however, some claim that in using the new biotechnological means humans would in a pointed way execute their particularly human capacities (Bostrom, 2003, 2008). A discussion of anthropological arguments must therefore not be restricted to their prohibitive use alone but has to focus also on their permissive side.³

Yet, anthropological arguments from “human nature“ are highly disputed in the current debate. Buchanan argues for example, «that appeals to human nature tend to obscure, rather than illuminate the debate over the ethics of enhancement and can be eliminated in favor of more cogent considerations.»

² For an analysis of the complex relation of freedom and enhancement, cf. Heilinger/Crone (in press).

³ As anthropological arguments and their underlying assumptions about some human ideals or human perfection – in their explicit and implicit forms – are used both to support and to restrict human enhancement interventions, some confusion in the debate follows as to how to assess the strength of such arguments. An analysis of the widespread though often implicit reference to assumptions about human perfection has been provided by Roduit/Baumann/Heilinger, 2013.

(Buchanan, 2009, p. 142).⁴ In the following I will defend the view, that in spite of their bad reputation anthropological arguments play de facto an important role in the ethical debates about human enhancement. Further discussion of this type of arguments is necessary, because human beings rightly do assign relevance to their self-understanding as human beings. In other words: Because it matters for human beings to conceive of themselves as human beings, a thorough discussion of the descriptive and normative components of being a human being is indispensable. The relevance of the human self-understanding is particularly salient under the current conditions, in which new biotechnological interventions may factually change what is considered to be a human being.

What is ultimately needed is a theoretical framework within which the substantial debate about the content of anthropological arguments can be lead in a well-ordered way.

2. Anthropological Arguments

While reference to anthropological arguments is common – be it implicit or explicit –, anthropological arguments vary greatly in regards to their explanation and their justification. Nevertheless, they standardly comprise of the following elements:

One should not do action A, because as a consequence of A the human trait T would be altered, and T is valuable for an anthropological reason R.

Or in a positive form:

One should do action A, because A allows preserving human trait T from alteration, and T is valuable for an anthropological reason R.

Actions A are possible human enhancement interventions (as e.g. pharmaceutical interventions in the brain-functioning; or the integration of technical devices in the human organism); T are specific human traits which are

⁴ Others have argued that particularly the restrictive use of anthropological arguments is flawed, because “there is no plausible account of human nature that will meet the conditions necessary to support“ the position of “bioconservative” authors like Fukuyama, Annas and the President’s Council that see genetic enhancement interventions as a threat for human nature (McConnell, 2010, p. 415).

considered to be normatively valuable (e.g. to live on average no longer than 80 years; to have a certain capacity for remembering numbers and events; to be capable of autonomous decision making; or to have to practice hard for the acquisition of certain capabilities such as playing the piano); anthropological reasons R are different justifications to value human traits T (e.g. because it is in the God-willed set of human traits; a fixed natural endowment of humans; the naturally evolved biological optimum; or a considered consensus between those who understand themselves as human beings).

In the following I will focus on the justificatory reasons R to declare some traits T as valuable (sections 2.1. and 2.2.). Here I will distinguish between what I call “weaker“, that is less convincing, and “stronger“, that is more convincing, anthropological arguments.⁵ After that I will suggest plausible candidates for T within the framework that provides stronger justification (section 2.3.).

2.1. Weaker Anthropological Arguments

Direct insights into the normative relevance of natural facts or properties are strongly criticised. I will present three forms of standard criticism of attributing normative relevance to natural human traits per se (cf. Birnbacher, 2006). In doing so I do not want to suggest that there are no human traits that might have normative value. I do only criticise certain ways of justifying the potential value of these traits.

2.1.1. Meta-Ethical Criticism of Anthropological Arguments

Meta-ethics deals with the ontological status of moral facts and properties, particularly in scrutinising the language in which we talk about them. Hence talking of a normatively charged “human nature“ raises three meta-ethical questions about the term human nature.

A first calls attention to the ambiguity of the term human nature itself which can be used differently in quite different contexts. It is utterly unclear, what

⁵ By “weaker“ I mean that the claims of these arguments are not sufficiently explained and justified. From another perspective one could say that the weaker arguments raise overly ambitious substantive claims. Hence the arguments I call “stronger“ are characterised by a better explanation and justification and achieve this also by abstaining from overambitious goals that actually weaken the weaker anthropological arguments.

exactly is part of human nature. Looking at how the term is used in practice, one can find examples for nearly all kind of human traits being included in or excluded from it. For example, some say homosexuality is not part of human nature; others say it is. Some say human nature consists of studying hard to achieve some kind of position; others say laziness is an integral part of human nature. For some it is unnatural to commit suicide; for others it is a natural thing to end their lives if they only have to expect suffering without any chance of becoming healthy again. Some conceive of murder as something against human nature; for others it is clear that aggression which may lead to murder only is a natural human trait.

These random examples are meant to show how flexible the use of the term human nature can be and how often it can merely be a projection of particular value judgements. The notion of human nature as giving support to value judgements is in these cases empty and does not fulfil its intended function to justify the normative component in any given human trait.⁶

A second form of meta-ethical criticism appears in form of the reproach to commit a “naturalistic fallacy“ if attributing to any factual claim direct normative relevance. It is assumed here, that there is a gap between the realm of factual and normative propositions and no direct, logical way is leading from one side to the other. In claiming that something is the case (as in saying, something is part of human nature), one has not said anything of normative relevance yet. As Moore famously put it (Moore, 1903, § 12), any “naturalistic“ explanation of the value term “good“ – e.g. saying that “good“ means promoting the well-being of an organism – leaves us with an “open question“: Why is this (e.g. promoting the well-being of an organism“) good? The same holds true for any explanation of normativity through reference to human nature: Why is human nature good?

A third form of meta-ethical criticism focuses on arguments that presuppose some kind of privileged access to this normative knowledge, e.g. if the evaluations result from God’s revealed will and are perceived through inspired insight. Such “esoteric“ justifications are meta-ethically not convincing, as they refer to a basis of knowledge that can not be shared by all, because it presupposes adherence to a certain religion or access to revealed

⁶ There are more conceptual difficulties resulting from whether to conceive of human nature as of traits that have to be fulfilled in every human individual to make it fully human or whether human nature qualifies only such traits that are generally/typically/normally possessed by human beings. I will not go into these details here.

truths. Hence these insights cannot be subject to close investigation and cannot claim to be valid for non-believers.

2.1.2. Ethical Criticism of Anthropological Arguments

The ethical criticism of weaker anthropological arguments starts also from the examples given above to illustrate the ambiguity of the term human nature. Natural facts, facts about human nature or normal human traits often stand in radical contradiction to what moral theories declare to be good. It cannot be denied that human beings in all times have committed murders, exploited others, raped and cheated etc. Human beings are subject to diseases and often die very young.⁷ There is no reason to declare these facts about human nature morally good simply because they are natural.⁸

2.1.3. Pragmatic Criticism of Anthropological Arguments

A last class of criticism of normative anthropological argument stems from their abuse in the past. Many of the obvious injustices among human beings have been justified with regard to “natural difference“ or in pointing to a “natural position“ of inferiority of some group of human beings towards others. Examples would include the oppression of women, of religious minorities, of strangers, the enslavement of others etc. All of these have been committed with some implicit evaluative assumptions about a human nature and natural order.⁹

Summing up the critique of what I call “weaker anthropological arguments“: some of the claims about normatively relevant insights about human nature or what it really means to be a human being can be criticised on the basis of meta-ethical, ethical, and pragmatic reasons. Any moral claim about what human beings should be like (which human traits are particularly valuable) needs a justification that can withstand the mentioned criticisms. In

⁷ Furthermore it is part of nature to regularly bring about droughts and famines, earthquakes and volcano eruptions, causing the death of many living beings, supporting doubt that “the natural” is in any way morally ideal.

⁸ This is a critique prominently put forward by Mill in his essay Nature (Mill, 1874). – Of course there have been several attempts to declare these facts as good, most often within the tradition of theodicy.

⁹ Obviously a pragmatic argument is a relatively minor argument, as it could have been for contingent reasons that these developments took place, but nevertheless I mention it here, as it sensitises for the possibly high impact of arguments from human nature.

the next chapter I will suggest a way of providing such justification for what I call “stronger anthropological arguments“.

2.2. Stronger Anthropological Arguments

The above mentioned criticism showed that no direct normative claims about value and about the moral quality of particular actions result from appeals to human nature. Even if objective, universal, eternal, and scientifically proven normative claims about human nature seem to be an attractive goal for enquiry, this pursuit is a dead end. But as it still matters for human beings to conceive of themselves as human beings – as it is particularly obvious in the ethical debate about human enhancement with its frequent invocations of human nature – one cannot completely avoid thinking about a normative understanding of what it means to be a human being. The notion being human is, because it is referring to the speaker him or herself, always of a special status:¹⁰ It is never a distant description, but includes some normative relevance. Hence it is necessary to provide a better justification for any normative claims connected with the idea of being human. As direct ways to justify the normativity of the term human being are impossible, the only remaining option consists in taking an indirect way. In the remaining part of this paper I want to sketch and illustrate this indirect way.

Some remarks beforehand: The result of what I call stronger anthropological arguments are not universal and eternal moral facts or truths, but normative ideas that guide action. They function as a “regulative ideal“ in a distinctively Kantian sense¹¹, that is even if we were not able to fully determine their ontological status they are still capable to provide normative guidance.¹²

The indirect way of determining the normative relevance of the notion being human is in my view without alternative. It consists in going through an (ideal) process of deliberation and coming to an agreement. This agreement has to be based on the maximum of information available after a process of mutual engagement and explanation of the different opinions held by those

¹⁰ I would argue, that even the discussion of such “objective“ matters as biological taxonomy is normatively impregnated when talking about the position of human beings. There is something different in classifying fungi or worms or human beings. But more obvious is this special connotation outside of the “purely scientific“ context.

¹¹ See Kant (1787, p. 427 [B 672]).

¹² This claim is informed by a pragmatist approach to ethics, cf. e.g. LaFollette, 2000.

participating in the process. As this process bears similarities with democratic processes, I call it quasi-democratic (cf. Kitcher, 2001).

The participants of this ideal deliberative process¹³ must be as numerous as possible. Nobody can be excluded from participation a priori. Everybody conceiving of her or himself as falling under the term human being has to be allowed to participate in this deliberative process.¹⁴ For some individuals not being able to raise their voice themselves – be it because of their age or some handicap – representatives have to be admitted to the process to assure that their opinion is also present in the deliberation.

The participants will be numerous, so one should imagine a gathering of representatives entering a discussion in which they share the information they have with one another. For this they must make themselves understood, even if it is a highly specialised knowledge they want to bring into the deliberative process.¹⁵ This conversation leads to mutual engagement of the participants.

One important condition of this deliberation consists in that it is public. Publicity prevents hidden interests or strategic lies from entering into the ideal process.

Ultimately the result of such an ideal process would consist in a consensus about the normative self-understanding of human beings in form of significant human traits that are considered particularly valuable. This consensus will be quite minimal and it will not cover all particular opinions about valuable human traits. Nevertheless, a small core of valuable significant human traits may emerge as a justified centre of stronger, that is methodologically sound, anthropological arguments. This view could be called “pragmatic essentialism”.

The results of such an deliberative process would be capable to withstand the three types of criticism mentioned above: The moral evaluations would designate specific traits agreed upon; their ontological status would not be directly based in “natural facts or properties“ independent of human action,

¹³ My suggestion for an ideal deliberative process takes up ideas from – among others – John Rawls (1971), Jürgen Habermas (1983), and John Dewey (1938). For more details, see Heilinger (2010, part IV).

¹⁴ This condition intentionally allows that some other beings – maybe cyborgs or extraterrestrials – could participate in this process, if they can convincingly claim to understand themselves as human beings. This, of course, is a fictitious assumption, but a necessary condition to avoid any overly simplistic naturalistic understanding of the normativity of being human.

¹⁵ Kitcher has developed a model how to include expertise in democratic decision making processes, Kitcher (2001, part II).

but in a procedure that can be understood by all (who potentially even contribute to this process).

Furthermore its evaluation would not risk to praise obviously morally problematic entities as murder or rape, as the agreement would allow for specific evaluations. And if this procedure were to lead to a narrow and specific selection of certain traits, it would not be problematic, because its selection were based on considered agreement, not on a contingent and arbitrary selection of some natural facts.

And – with regard to the pragmatic objection – history has not shown that considered agreement about the moral status of all human beings has caused the oppression or exploitation of some.

Yet, there are two obvious objections against the suggestion of using an ideal deliberative process to determine the normative content of the notion being human (or to determine the relevance of stronger anthropological arguments). First, it can be doubted that such a process would ever be possible: can such ideal conditions ever be realised? And, second, even if it were possible, would there ever be agreement on the normatively significant traits of human beings?

As I said before, I see the engagement in this deliberative process being without alternatives. If we are not willing to stop the project of determining the normative content of what it means to be a human being altogether, we have to engage in this process. Surely, it will not be providing simple solutions to age old questions and settle ancient disputes within short time. But there is hope that at least some progress can be made in reaching a better understanding of the justified normativity in the notion being human. That is why one would have to try to realise the ideal process even if it should be possible only in a sub-ideal way. The sub-ideal way could consist in many different activities, some of them already going on. Political, societal, international debate about what are the basic elements of human nature that we want to protect from changes are certainly an obvious attempt to engage into the deliberative process. But also more specific debates as in scientific discourse, or in philosophy, sociology etc., play an important role. Furthermore, dialogue between different religions could strive to identify certain common assumptions about what it means to be human. There are already some discussions taking place. But, are there any agreements visible?

Even if a conclusive and stable agreement on what it normatively means to be a human being is out of reach, there might be relatively stable agreements

about basic assumptions. But as there are still new findings about both the human organism itself and its co-existence with others, and as there are also “real” changes of what human beings are and how they live (through cultural evolutions and maybe also through the application of human enhancement interventions), the quest for an “eternal truth” in this matter would be unrealistic. Human beings and their knowledge about themselves are constantly evolving. Consequently, the debate about the normativity of what it means to be a human being must be an open and opening debate, not a closing one.

Still, some results have to be fixed, even if only as preliminary results, if the method suggested here can aspire to be functional at all. To illustrate the fragile agreements (maybe in the form of a reflective equilibrium) and the minimal overlapping consensus that might be found at a given time, I want to use a metaphor, namely speaking of a map of the notion human being which is to be drawn. A map provides orientation according to the needs of those for whom the map was drawn. Even though maps can be “true” to their environment, maps themselves change over time in order to accommodate new demands without that change renders the older maps less “true”.¹⁶

2.3. Four Significant Components of Being Humans

The discourse about what is a human being or what it means to be a human being is rich and multifaceted. Contributions to it stem from different fields (science, philosophy, religion, individual insights etc.) and refer to different aspects of being human (having specific experiences, being a physical organism etc.). In the following I take up the challenge to make an initial suggestion of what might be the result of the ideal deliberate process I have outlined above; i.e. what the content of human self-understanding consists in. The result would be – to stick to the metaphor introduced above – a significant map of the term human being.

Of course my suggestion cannot be other than preliminary: It strives for the description of a fragile, minimal consensus that immediately calls for further examination. It hopefully will stimulate critique and suggestions of alterations and improvements. But, as mentioned above, the deliberative process about what it means to be a human being is an open one, not a closed one. Hence any

¹⁶The metaphor of a map in order to illustrate the claims of “modest realism” has been used by Philip Kitcher in 2001, ch. 5.

contribution or suggested change is welcome and in line with the theory I try to develop. A map is not drawn for ever, but constantly in need of improvements; especially when one gets to know more about the terrain, or if the needs of those using the map alter.

As a single author I cannot perform the deliberative process alone. Hence I suggest another way of putting flesh to the bones of my normative theory. I will draw – yet in a non-systematic and non-comprehensive way – from different sources: From conceptual analysis of the actual use of the notion human being in normative contexts, as well as from the extensive writings within the tradition of philosophical anthropology, philosophy of person, philosophy of mind, biology (currently the developments of neurobiology call for special attention), but also from literature and religious writings. As I said, initially any contribution which can be explained to and scrutinised by the other participants of the debate, can rightly claim attention and is worth to be considered.

In the following I suggest to identify four normatively relevant core components in a “map” of the term human being. These components design significant aspects of what it means to be a human being. The four components vary in scope. But obviously the question what it means to be a human being¹⁷ is a rich question that cannot be answered by reference to a single level of explanation alone.

C1: Human beings are living organisms

Human beings are living beings. This insight might appear to be trivial, but it is both basic and significant for an anthropological mapping of the term human being. Being alive means having a material organism that is characterised by the properties of living beings: e.g. metabolism, growth, reproduction. I do not want to go into the details of the definition of life, but with this first general qualification of human beings it becomes clear that human beings are part of the living world, and with the fact of being alive comes the inevitability of dying.

¹⁷ I mean here the basic anthropological question what it means to be a human being in comparison to other entities in the universe, as different from e.g. the taxonomical question regarding the DNA of homo sapiens in comparison to other living beings.

It is significant to conceive of human beings as living beings, because their being alive is the condition for all the other traits and activities that distinguish them.

C2: Human beings have a specifically embodied and embedded mind

As important as the first component of the term human being may be, it is not narrow enough to specifically determine human traits. But the human way of being alive is depending on a particular organic structure: There is a specific human body which can be described in detail. This specific human organism gives rise to a specific form of embodied experience and cognition. Human beings have both a material form and an internal dimension of experiencing. This dualism of aspects of human beings is not meant to constitute two unrelated spheres of being human, quite the contrary. That one can conceive of two different aspects presupposes the mutual conditioning of the physical and phenomenal: Without a physical body we would not have any experiences of the world and of ourselves, and without our experiences we would not have awareness of or interest in us being material bodies.

Anthropologically important is the specific form of human embodiment, which gives rise to a specific form of human cognition and experience. As different human beings share the basic forms of this embodiment, they are capable of sharing experiences. This allows human beings in a basic way to jointly refer to entities and to show empathy. To put it briefly: Because human beings are in their specific embodiment very similar to one another, they are able to share a world of things and experiences and to understand one another.

It is the specific form of shared embodiment that avoids the isolation of human individuals and instead gives rise to a commonly shared realm of experiences and things in which humans can interact with one another.

C3: Human beings are in need for orientation

Humans have – as specifically embodied living organisms – the capacity for spontaneous action. This means that they are not completely determined in their behaviour by instincts or by some hard-wired brain or gene structures, but that they have alternative possibilities to live their lives. These different possibilities cause human beings to require orientation. As they can choose to do one thing or another humans are looking for guidance. This guidance is

most often primarily provided by peers, by the social or cultural environment that influences the perceived options to act and to think.

One important form of orientation is given by the cultural self-understanding of human beings. Anthropological thinking is itself the explicit questioning of the implicitly action-guiding background assumptions of what human beings are and what human actions should be like.¹⁸

There is more than one way to conceive of human beings; hence the ongoing competition between the different interpretations of human beings. For example, currently a dispute is taking place between religious conceptions of being human on the one side, and political conceptions of being human on the other side. Furthermore there is a conflict between the scientific interpretations of human beings – as stressing determinism by brains and genes – versus the self-understanding as free and responsible agents on the basis of the individually perceived possibility to choose between different behaviours.

The need for orientation in face of different possible actions and different ways to conceive of human beings is a significant component of the term human being. If it were not for this basic openness and possibility to orient themselves (for better or for worse), human beings would be running a programme or living randomly, and in either case not be responsible for their actions.

C4: Human beings are “anthroponomous“

The fourth significant component of the term human being is based on the other three components mentioned above. Human beings are – as living beings with a specific body and specific mental capacities that allow them to be not completely determined by physical facts – able to decide autonomously about their actions, and to interpret and define themselves. This capacity for autonomous decision making does not stand in opposition to natural facts, but rather takes place under the condition of humans being material beings.

What actions human beings perform and which self-descriptions they accept, depends to a high degree on themselves. Human beings are self-

¹⁸ As human beings need this kind of orientation through certain assumptions about what they are, one could call them “menschenbilderbedürftig“, they stand in need for cultural images about themselves. Cf. Müller and Heilinger, 2008.

interpreting and because of this also self-determining beings.¹⁹ Such a human self-interpretation and self-determination is not completely free floating but stands under the conditions of them being natural beings. Such interpretation and determination are, as it were, part of their nature. But there are different ways to concretely fill out the multiple possibilities human beings have to lead their lives or to conceive of themselves.

If one were looking for a name for this capacity, I would suggest to call it “anthronomy“, a compound from greek *anthropos* (human being), and *nomos* (law, order, custom, determination, definition). The compound “law of humans“ or “humans’ law“ could be understood in two ways. First, as an objective genitive, which specifies that there is some definition or determination of human beings; second, and most important, as a genitive subjective construction, indicating the origin of this determination which governs human behaviour and human self-understanding: it stems from human beings themselves.

The four components are suggestions of what could qualify as significant elements in the term human being. It is not meant to provide an exhaustive description of what human beings are, but a minimal designation of important facts about humans. I claim that these four components might be agreed upon by potentially all human beings as apt descriptions of what human beings are.

Of course, this is nothing but a very minimal description and there is much more to be said about human beings. But the challenge was to find significant components of the notion being human, to which most – if not all – could agree. Even if the result is only a small overlapping consensus, it is still of use. It might support the view that anthropological arguments should only focus on a restricted set of propositions about human beings.

2.4. An Example: Life-Extension

To employ these arguments with regard to concrete enhancement interventions would demand more extensive discussion than I can provide here, so a short illustrative example has to suffice. Imagine it would become possible for human beings to radically improve their healthy and active life-span. For the sake of the anthropological argument, it should be assumed here

¹⁹ For this, see, e.g., Charles Taylor’s work on philosophical anthropology (Taylor, 1971 and 1985).

that the risks involved in this intervention are minimal, that there has been found a way to deal with the societal challenges coming along with a radically prolonged life for example with regard to pension payments and that everyone who underwent this intervention has given her fully informed consent. Of course it is highly improbable that these conditions will ever be met, but my question here is: How would anthropological arguments assess such an intervention if no other moral considerations would speak against it?

For answering this question it may be interesting to keep in mind that in the Western world the average life expectancy continuously increased in the past. This has so far not brought about any danger for our self-understanding as human beings. Humans still are living, interacting beings, with a capacity to autonomously make the necessary choices in life. So it seems reasonable to assume that a stepwise further increase of the average life expectancy can be coped with without endangering human nature. But imagine, humans would now be able to radically expand their life-expectancy from say about 80 to about 250 or 500 years, or even longer. Would that have a detrimental impact on the self-understanding of humans as human beings? My suggestion was to answer this question with regard to the four normative components²⁰ that determine what it could mean to be a human being. Obviously, as long as humans do not become immortal, the first significant element of human nature remains intact. Equally, there seems to be no reason to doubt that humans will remain embodied, sentient and interacting beings that are not fully determined in their choices and hence stand in need for orientation. So the second and third significant components would remain unchanged even if human lives would suddenly last much longer. It is only with regard to the fourth component of being human that anthropological arguments can raise some moral objections about radically extending the healthy human life span. For this, think of an argument provided by Bernard Williams in his discussion of the “Makropoulos case” (Williams, 1973). Williams argued that a radical increase in the amount of time available to human agents would decrease the necessity and urgency to make choices and to act here and now since it would always be possible to postpone action to a later time. He illustrates his claim by referring to “E.M.”, the long-living heroine in Leoš Janáček’s Opera *Věc Makropulos*. While a stepwise increase of life-expectancy that does not goes

²⁰ As argued above, these components are tentative and open for revision by the quasi-democratic deliberative process.

beyond a certain threshold could match with the human intellectual set-up to act autonomously and make life-plans, a radical increase beyond this threshold would possibly endanger agency altogether. Autonomy might be lost, if the purpose of acting and living fades out by exceeding a manageable and rather short life span.

Obviously, further argument would be necessary to determine more precisely the permitted pace of increasing the average life-expectancy and also the threshold beyond which making life plans that presuppose autonomous actions here and now. Yet, the example should illustrate *that* anthropological arguments even in their minimal form as defended here *can* indeed come up with constraints against enhancement interventions. The anthropological constraints about radically increasing the healthy human life span – in the hypothetical absence of any other moral constraints based on considerations of risk, justice or doubts about informed consent to the intervention – are admittedly very basic. This shows that anthropological arguments are best understood as widely permissive and not as restrictive as often suggested by proponents of “bioconservatism”. Indeed, human nature seems capable to integrate much change and to accommodate diverse forms of human life. Parochial thinking about what is familiar should not be taken for moral arguments against possible change. Biological and also cultural evolution have shown that change is essential to life, and also to human life.

Conclusion

In this paper I discussed the relevance of anthropological arguments, exemplarily in ethical debate about human enhancement interventions that aim at altering human traits or functioning or at pushing the boundaries of human nature. I have argued that anthropological arguments can be justified and specified in their content with the help of an idealised process of “quasi-democratic deliberation”. However, such anthropological arguments stand not alone in evaluating these biotechnological interventions; there are also justice-related, risk-related, and autonomy-related issues.²¹ From the point of view of anthropological arguments, the evaluation of human enhancement interventions tends to be most often permissive, since the justifiable content of

²¹ There might be convergence between the different types of ethical judgements. However this classification is not meant to establish firm boundaries but rather to give an orientation about the different approaches to assessing the ethical challenge at hand.

anthropological arguments is rather thin: Often, they do not support seeing a “threat for human nature” or a potential de-humanisation in human enhancement interventions. It is only in some rather extreme cases that anthropological arguments would be able to speak against certain interventions. The main part of the debate focusses correctly on the more pertinent dimensions of justice, autonomy, and risks. But still, anthropological arguments are elementary. They play an important, basic role in the background of the debate, insofar as they discuss and make explicit the fundamental orientations about what it means to us to be human beings. Furthermore, they are elementary, because elements of this basic debate find their ways also in the other layers of the debate: risks are risks for human beings, because they threaten to harm the specific human way of living and well-being; justice matters, because from an anthropologically informed perspective, we judge every human being to be basically equal in value and moral standing; and autonomy is of relevance, because it crucially matters to human beings that they can either have it or not.

A last clarification: The anthropological arguments alone are incapable of providing substantive reasons not to engage in interventions aiming at overcoming the human condition and radically transgressing human boundaries. But they show, that if we did, we would enter a post- or non-human stage in which anthropological arguments would have lost their bite simply because they would not apply any more. Yet, as long as we stay in the human realm, sound elementary anthropological arguments do provide fundamental moral orientation. In particular, they call for moderate changes that can be caught up with in a deliberative process of collective self-determination as human.

REFERENCES

- Beauchamp, T.L., & Childress, J.F. (2009). *Principles of Biomedical Ethics*. 6th edition. New York/Oxford: Oxford University Press.
- Birnbacher, D. (2006). *Natürlichkeit*. Berlin/New York: de Gruyter.
- Bostrom, N. (2003). Human Genetic Enhancements: A Transhumanist Perspective. *Journal of Value Inquiry*, 37(4), 493–504.

- Bostrom, N. (2008). Why I Want to be a Posthuman when I Grow Up. In B. Gordijn, & R. Chadwick (Eds.), *Medical Enhancement and Posthumanity*, Berlin: Springer Netherlands, 107–136.
- Buchanan, A. (2009). Human Nature and Enhancement. *Bioethics*, 23(3), 141–150.
- Dewey, J. (1938). *Logic. The theory of inquiry* (The later works vol. 12, ed. by Jo Ann Boydston). Carbondale: Southern Illinois University Press 1986.
- Fischer, J. (2008). *Philosophische Anthropologie. Eine Denkrichtung des 20. Jahrhunderts*. München: Karl Alber.
- Habermas, J. (1983). Diskursethik: Notizen zu einem Begründungsprogramm. In J. Habermas (Ed.), *Moralbewußtsein und kommunikatives Handeln*, Frankfurt: Suhrkamp, 53–125.
- Heilinger, J.-C. (2010). *Anthropologie und Ethik des Enhancements*. New York: de Gruyter.
- Heilinger, J.-C., & Crone, K. (2014). Human freedom and enhancement. *Medicine, Health Care, and Philosophy* 17(1), 13–21.
- Kant, I. (1787). *Kritik der reinen Vernunft* (2nd edition [B]). In Kants gesammelte Schriften, Königlich Preußische Akademie der Wissenschaften (ed.), Volume 3, Berlin (1904/11).
- Kitcher, P. (2001). *Science, Truth, and Democracy*. Oxford/New York: Oxford University Press.
- LaFollette, H. (2000). Pragmatic Ethics. In H. LaFollette (Ed.), *The Blackwell Guide to Ethical Theory*, Oxford: Blackwell, 400–419.
- McConnell, T. (2010). Genetic Enhancement, Human Nature, and Rights. *Journal of Medicine and Philosophy* 35, 415–428.
- Mill, J.S. (1874). Nature. In J.S. Mill (Ed.), *Essays on Ethics, Religion and Society*, Indianapolis 2006: Liberty Fund, 373–402.
- Moore, G.E. (1903). *Principia Ethica*. Cambridge: Cambridge University Press.
- Müller, O., & Heilinger, J.-C. (2008). Zehn Thesen zur “Natur des Menschen”. Grundriss zu einer Anthropologie. In D. Ganten, V. Gerhardt, J.-C. Heilinger

and J. Nida-Rümelin (Eds.), *Was ist der Mensch?*, Berlin/New York: de Gruyter, 190–196.

The President's Council on Bioethics (2003). *Beyond Therapy. Biotechnology and the Pursuit of Happiness*. New York: Dana Press.

Rawls, J. (1971). *A Theory of Justice*. Cambridge, MA: Harvard University Press.

Roduit, J., Baumann, H., & Heilinger, J.-C. (in press). Human Enhancement and Perfection. *Journal of Medical Ethics*.

Sandel, M. (2007). *The Case Against Perfection. Ethics in the Age of Genetic Engineering*. London: Harvard University Press.

Taylor, C. (1971). Interpretation and the Sciences of Man. *Review of Metaphysics*, 25, 3–51.

Taylor, C. (1985). Self-interpreting animals. In C. Taylor (Ed.), *Philosophical Papers I*, Cambridge: Cambridge University Press, 45–76.

Williams, B. (1973). The Makropoulos Case. Reflections on the Tedium of Immortality. In B. Williams (Ed.), *Problems of the Self*, Cambridge: Cambridge University Press, 82–100.