

Human enhancement: revisiting the ethical framework

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Heilinger, J.-C., 2010, *Anthropologie und Ethik des Enhancements*, Berlin: DeGruyter. 317 pages. ISBN 978-3110223699. Price: € 69,95.

Nagel, S., 2010, *Ethics and the Neurosciences. Ethical and social consequences of neuroscientific progress*, Paderborn: Mentis. 400 pages. ISBN: 978-3897857100. Price: € 42,00.

The topic of enhancement has become an established and booming sector in ethics within the last decade. While an ever-expanding body of articles addresses either concrete empirical questions or general deliberations, examinations and suggestions of a thorough theoretical (or meta-ethical), yet practice and implementation-oriented form are scarce, by comparison. Saskia Nagel and Jan-Christoph Heilinger address one of the key issues of enhancement in their dissertations: the development of an applicable and practice oriented, yet theoretically profound position that can navigate through the various pitfalls of applied and theoretical focal problems.

With her degrees in philosophy and cognitive science, Saskia Nagel brings together key expertise for an integrative approach to neuroethics. This is reflected in her ability to portray the philosophical and scientific positions, theories, and concepts comprehensibly and by discussing the relevant literature of the different fields. On the one hand, she elaborates the ethical issues arising from the application of neuroscientific research in a biomedical context. In this respect her book is a detailed and readable introduction to neuroethics and its theoretical underpinnings. On the other hand, Nagel develops an ethical approach that is motivated by exploring the impact of neuroscientific

progress on our lives, our choices, and our self-understanding. In this, she addresses an interesting and important aspect while providing a solid theoretical account. Nagel's book, however, is clearly practice oriented. Presenting her theoretical account on less than 50 pages, she dedicates the rest of her dissertation to the application of her "context-sensitive approach" to the topics of neuroimaging and manipulation of the brain with a focus on the issue of "enhancement".

But what exactly is meant with a "context-sensitive approach"? Firstly, Nagel is skeptical that traditional ethics accounts are able "to do justice to the diversity of concrete problems" (70). This is a valid claim concerning neuro-ethical issues, since they question traditional approaches precisely because of a variety of context modifications. Secondly, Nagel rejects the moral realism that traditional ethics accounts such as utilitarianism or deontological ethics often adopt or imply. Instead of rejecting traditional accounts altogether, though, Nagel advocates the idea of taking acceptable features of different approaches and using them as tools to reach acceptable decisions in ethical deliberations. Context-sensitivity, then, also relates to the appreciation of pluralism concerning ethical approaches, which all illuminate different important (and sometimes opposing) aspects.

Ensuring a context-sensitive approach in this sense is no easy task. A respective ethical framework needs to be capable of integrating various influences not only from within philosophy or ethics, but also from empirical to social sciences. This is realized by suggesting an open *pragmatist framework*. Drawing on classic pragmatist authors (W. James, Ch. S. Peirce, J. Dewey), Nagel develops a theoretical basis including neopragmatist arguments (e.g., R. Rorty, H. Putnam, W.v.O. Quine) and contemporary critique. She summarizes: "The pragmatist

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perspective [...] weighs arguments from different perspectives and forges ahead by proposing a solution that seems to be best given the situation's context—the social setting, the goals and desires of the concerned, and the nature and scope of the problem at hand" (99). Since this approach needs to include different ethical valuations and approaches, Nagel adopts an *ethical pluralism* as a "middle ground between monism [...] and relativism" (86) concerning foundational moral values. Ethical pluralism implies the arduous task of mediating between opposing stances and approaches while defending notions like the "incommensurability of values" and the "approval of inevitable value conflicts" (88), which Nagel addresses accordingly. Nonetheless, a pluralistic ethics itself needs an evaluative foundation, which Nagel assumes to be the lowest common denominator concerning a key value: the concept of *well-being*. While it may seem that this marks an affinity towards virtue ethics accounts and their concept of a good life, Nagel is cautious to maintain the independent pragmatist approach.

Nagel's method of choice for the effective application of this ethics account in discourse is "reflective equilibrium", a conception effectively introduced into ethics and political philosophy by John Rawls. The goal is to reach a temporary state of balance between coexisting and competing approaches and their valuations, providing a dynamic, yet temporarily stable basis for ethical evaluations. Considering the difficulty of this task, Nagel's deliberations on this central method seem a little generic and scarce. Nonetheless, since one of the major tasks of neuroethics is to structure and mediate the discourse about neuroscience, this method surely is of great use.

With her broad and detailed overview of neuroscientific opportunities of monitoring, altering and enhancing brain function, Nagel provides a thorough insight into the central issues of neuroethics. In summary, Nagel's ethical evaluation of enhancement comes down to two major focal points. First, she advocates a further discussion about the treatment/enhancement-distinction, pleading for seeing this distinction as a "means to guide the discussion but [not as] a normative criterion in itself." (324) Second, Nagel emphasizes that the examination of enhancement technologies itself should be encouraged and linked with the discussion of societal and personal goals. Not least, what makes her book appealing is the consequent application of this claim in her careful review of the various technologies and enhancement techniques. This makes the practice oriented part of her book an example for the application of her theoretical deliberations.

Nagel's framework is not really a means for identifying new and overlooked ethical aspects of neurotechnology. In fact, the ethical issues exposed in her book have already been extensively debated. However, Nagel's aspiration is

to produce an account of the topic that would provide a theoretical grounding of the currently conceivable issues, combined with the pragmatist and pluralist views on the matter. The strength of her approach lies in a well-informed and encompassing contribution to neuroethics and its underpinnings as well as the skilful linking of theoretical and practical aspects in discourse.

Jan-Christoph Heilinger revisits the relation between anthropology and ethics and the efficiency of anthropological reasoning. He develops this broad and important question in regard to the highly topical field of biotechnology and enhancement, carefully reviewing the key concepts (24–55) and prominent positions (103–173) of the current debate. Ethical positions concerning enhancement often adopt the perspective of applied ethics and focus on aspects of risk assessment, deliberations on justice, and the concept of autonomy. Heilinger objects that these established valuation standards, as well as most traditional approaches, fall short since they are based on a fixed understanding of the "menschliche Lebensform" (Dieter Sturma). Biotechnological interventions, however, are capable of changing this very "human form of life". Anthropological deliberations can be used as a tool to revisit this issue and complement established valuation standards.

The relevance of anthropological arguments concerning issues of enhancement is revealed by what Heilinger calls "Kolonialisierung des Natürlichen durch das Kulturelle" (colonization of the natural by the cultural) (18). According to traditional anthropological approaches, human beings constitute themselves through self-descriptions, reverting both to (observable but unchangeable) *empirical facts* provided by natural sciences, and to (dynamic and adjustable) *cultural processes of self-understanding*. In light of recent advances in biotechnology that allow interventions in the formerly fixed material foundation of ourselves, the very relation between naturalistic and cultural self-descriptions and self-definitions changes: naturalistic (self) descriptions of human beings become susceptible to cultural adjustable self-definitions, which begin to extend to or "colonialize" the very material foundations of man. Hence, anthropological aspects are not additional aspects, but they are woven into biotechnological issues, provoking anthropological questions. Heilinger points out the philosophical implication by speaking of an underlying "Dramatisierung der anthropologischen Grundfrage" (dramatization of the anthropological basic question) (cf. 18) in biotechnology.

Building on this interesting observation, Heilinger examines the efficiency and scope of anthropological reasoning regarding the topic of enhancement. He concludes that anthropology cannot be used as a foundation for ethics, nor can most anthropological arguments be used as normative standards. But at least anthropology can help to

provide orientation concerning our self-understanding, i.e. which aspects of being human are worthy of protection. Which aspects exactly these may be in the future, however, needs to be worked out in a “quasi democratic” process of deliberation (207–219) about what we would want to be, this being the central question of today’s philosophical anthropology.

Two aspects are particularly noteworthy and show by way of example how purposeful Heilinger conducts his study. First, he carefully and accurately revisits current definitions of the term “enhancement”. As it turns out, the notorious health/disease distinction is as inadequate for defining enhancement as the conceptions of “nature” or “human nature”, since these became a mere reservoir for various implicit normative preconceptions. This leads to ethical evaluations whose outcome is fixed before the debate even started. Heilinger suggests a “dynamic minimal definition” (cf. 92) of enhancement that contains as little preconceptions and normative dimensions as possible. Calling it dynamic indicates that interpretations of aforementioned concepts should remain open to changes and reinterpretations. Its normative element, which of course is unavoidable, lies in the positive subjective *estimation* of the intervention (and not in an objective *evaluation* by means of a normative concept). There are additional interesting aspects to his definition which cannot be addressed here. However, Heilinger provides a convincing starting point for continuing the debate about the term enhancement.

Second, Heilinger develops four components that play a decisive role in the concept of “man”, by which he elaborates the normative core of his position (cf. 223–240). Human beings are (1) living organisms, (2) embodied and conscious beings, (3) in need of orientation, (4) capable of self-determination. His deliberations on the first and second aspect are of particular interest because they refine aspects of his enhancement definition. Inasmuch as human beings are biological and living organisms, they can be described by natural sciences (cf. above, “self-descriptions”). However, also various mental qualities need to be included, leading us to a meaning of “living” that exceeds purely physical descriptions. Thus, Heilinger suggests that human beings need to be understood as an “organismic functioning”. This also covers the phenomenon that human beings are thinking and experiencing dependent on their being

embodied and part of a social world (cf. Plessner’s “Mitwelt”). The third and fourth aspect—need of orientation and capability of self-determination—emerge from this sense of organismic functioning.

Heilinger claims that these four aspects are agreeable core aspects. While this claim may receive a lot of scrutiny and critique from experts (which, of course, is desirable), I would like to point out a minor observation. Heilinger’s conception of the human being as an “organismic functioning” may be extended to systemic redefinitions of the brain as a social organ. This definition exceeds our understanding of the brain as a computational unit of the physical body generating mental capacities and features. Thomas Fuchs, for example, presents an “ecological” redefinition of the brain as an equal part of the unity of organism and environment, a conception that is capable of integrating phenomenological aspects of being human into the neuroscientific perspective. It appears that Heilinger’s preliminary definition of enhancement and his concept of man might benefit from considering systemic theories like this one.

Based on these deliberations—and many thorough examinations of relevant aspects as well as a discussion of specific enhancement options left out here—Heilinger concludes that anthropological arguments are *elementary* in the sense that (a) they are equal to other arguments and (b) they are “subsidiary”, i.e. they occur on a very fundamental level. Thus, their suitable part in ethics is to provide orientation concerning our self-understanding, while specific prohibitions of enhancement interventions cannot be justified by anthropological arguments alone. Indeed, according to Heilinger, most interventions could not be rejected on account of anthropological arguments.

Nagel and Heilinger present different approaches to enhancement without being mutually exclusive. Both authors develop their studies from a pragmatist stance, cautious to ensure that public dialogue plays an important role in ethics. Popular approaches like principle-based accounts or applied ethics are scrutinized but not discarded. In their conclusions concerning specific enhancement opportunities, they both lean towards a secular and liberal valuation. Beyond that, Nagel and Heilinger competently prove their synoptic view on the issues at hand and meet the scientific standard, providing valuable contributions to the field.