

NATURALNESS AND DIRECTING HUMAN EVOLUTION A PHILOSOPHICAL NOTE

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The European tradition of anthropology has always distinguished between the biological and the cultural nature of Man, in other words between what is natural to him in a physical and biological sense, and what pertains to him culturally, what his cultural essence is. This, however, does not mean that both essences, the physical and the cultural, fall apart, and that therefore, as Descartes for example holds, Man disintegrates into two essences. On the other hand, by establishing the distinction between the biological and the cultural nature of Man, problems arise concerning the concept of *naturalness* applied to Man. Is this concept only applicable to his biological nature or essence, or does his naturalness consist precisely in that it is expressed by both natures or essences, that is to say by their unity?

In fact, Man is a natural being, who can live only as a cultural being. *Descriptively*, within the context of biological systematics, mankind is a subspecies of the species *Homo sapiens*, namely *Homo sapiens sapiens*, and is the only recent member of the genus *Homo*. But this definition includes only the empirico-physical side of Man, not that which makes up the nature or essence of humanity *ascriptively*, namely its form of self-description and (not conclusively established) self-determination. The latter was described classically as the *animal rationale*, a being endowed with and determined by reason, or as a being lying between animal and God. More recent anthropologists (after Friedrich Nietzsche) capture this notion in the concept of a *nicht festgestelltes*, i.e. a not-yet-determined being (both biologically and culturally). It would be a category error to interpret our actions and thoughts as the products of natural processes, whereby even the act of interpreting becomes part of nature, a 'natural fact'. But we fall into a new form of naiveté if we oppose this interpretation with a claim that scientifically discovered facts have no influence, or at least ought to have no influence, on the self-

determination of Man. Thus it is a matter of adopting a scientifically informed and philosophically considered position, one which is beyond mere *biologism* and *culturalism*, which, in other words, is beyond an absolute distinction between biological and cultural explanations, and which refers to both the lives and the laws that shape our lives. Such a position should neither reduce Man to (pure) nature, nor to the (absolute) spirit he aspires to be.

In the following, I will talk about what in philosophy and theology is called the *conditio humana* and what role the concept of naturalness could play in this context. I will then consider in what respect the relation between naturalness and the power of directing evolution, particularly Man's own evolution, create serious anthropological and ethical problems. And this with regard to a future which is not only human, but also humane.¹

1. THE NATURAL AND THE ARTIFICIAL

Modern philosophical anthropology takes its point of departure from two opposing conceptions: that attributed to Max Scheler and that of Helmut Plessner. According to Scheler, 'Man' is the 'X that can behave in a world-open manner to an unlimited extent'.² According to Plessner, 'Man' is characterised by an 'eccentric positionality',³ whereby his eccentric existence, which does not possess a fixed centre, is described as the unity of mediated immediacy and natural artificiality. Accordingly, Plessner formulates three fundamental laws of anthropology: (1) the law of natural artificiality, (2) the law of mediated immediacy, and (3) the law of the utopian standpoint.⁴ Similarly, Arnold Gehlen states the thesis that Man is by nature a cultural being,⁵ and in doing so, his cultural achievements are seen as com-

¹ For some aspects of what follows see J. Mittelstrass, 'The Anthropocentric Revolution and Our Common Future', in: W.-K. Raff *et al.* (Eds.), *New Pharmacological Approaches to Reproductive Health and Healthy Ageing (Symposium on the Occasion of the 80th Birthday of Professor Egon Diczfalusy)*, Berlin and Heidelberg and New York: Springer 2001 (*Ernst Schering Research Foundation. Workshop Supplement 8*), pp. 57-67.

² M. Scheler, *Die Stellung des Menschen im Kosmos*, Darmstadt: Reichl 1927, p. 49.

³ H. Plessner, *Die Stufen des Organischen und der Mensch: Einleitung in die philosophische Anthropologie*, Berlin and Leipzig: de Gruyter 1928 pp. 362ff.

⁴ H. Plessner, *op. cit.*, pp. 309-346. See K. Lorenz, *Einführung in die philosophische Anthropologie*, Darmstadt: Wissenschaftliche Buchgesellschaft 1990, pp. 102f.

⁵ A. Gehlen, *Anthropologische Forschung: Zur Selbstbegegnung und Selbstentdeckung des Menschen*, Reinbek: Rowohlt 1961, p. 78.

pensation for missing organs and 'Man' is defined as a creature of defect (*Mängelwesen*).⁶ Common to all these approaches is that Man has a particular nature and that it is an essential element of this nature to work on it.

Stipulations of a similar kind can also be found in the history of philosophical anthropology. Thus Man is called the creature without an archetype by the Italian Renaissance philosopher Giovanni Pico della Mirandola: he himself, according to the will of his creator, is to determine the 'form', that is, the cultural form in which he wishes to live.⁷ According to Immanuel Kant, the question 'What is Man?' can only be answered if we already have answers to the questions, 'What can I know?', 'What ought I to do?' and 'What may I hope?'⁸ The attempt to determine '1. the source of human knowledge, 2. the extent of the possible and profitable use of knowledge, and finally 3. the limits of reason',⁹ is itself an anthropological research programme, and on the background of the critical philosophy of Kant it is an open research programme that defines Man according to what he can achieve in theory and practice. For Friedrich Nietzsche, finally, Man is the not yet determined animal,¹⁰ and thus science too is seen as the expression of the human endeavour 'to determine himself'.¹¹ Furthermore, one of the reasons for the difficulty of saying what Man is lies in the fact that Man is the (only) creature that possesses a reflective relation to itself, that Man, as Martin Heidegger says, is the creature 'that in its being relates understandingly to its being',¹² or that it is 'concerned in its being with this being itself'.¹³ This opens up a broad horizon for an answer to the question,

⁶ A. Gehlen, *Der Mensch: Seine Natur und seine Stellung in der Welt* [1940], 9th ed., Wiesbaden: Akademische Verlagsgesellschaft Athenaion 1972, p. 37. In a biological definition, 'cultural' is applied 'to traits that are learned by any process of nongenetic transmission, whether by imprinting, conditioning, observation, imitation, or as a result of direct teaching' (L.L. Cavalli-Sforza and M.W. Feldman, *Cultural Transmission and Evolution: A Quantitative Approach*, Princeton: Princeton University Press 1981, p. 7).

⁷ G. Pico della Mirandola, *De hominis dignitate. Heptaplus. De ente et uno, e scritti vari*, ed. E. Garin, Florence: Vallecchi 1942, p. 106.

⁸ I. Kant, *Logik A 25, Werke in sechs Bänden*, ed. W. Weischedel, Darmstadt: Wissenschaftliche Buchgesellschaft 1958, vol. III, p. 448.

⁹ *Ibid.*

¹⁰ F. Nietzsche, *Jenseits von Gut und Böse* [1886], in: F. Nietzsche, *Werke: Kritische Gesamtausgabe*, ed. G. Colli and M. Montinari, vol. VI/2, Berlin: de Gruyter 1968, p. 79.

¹¹ F. Nietzsche, *Nachgelassene Fragmente Frühjahr 1881 bis Sommer 1882, Werke*, vol. V/2 (1973), p. 533.

¹² M. Heidegger, *Sein und Zeit* [1927], 14th ed., Tübingen: Niemeyer 1977, pp. 52f.

¹³ *Op. cit.*, p. 12.

what a human being, what his nature is. The only thing that is clear is what, with regard to the essential openness of Man, can be called the *anthropologically basic situation*.

It is equally clear that a differentiation between that which has *become*, which has occurred without any influence of Man, the natural, and the *made*, which has been created or shaped by Man, the artificial, is not easy to draw, and due to new possibilities of manipulation, not just of nature generally, but also of the (biological) nature of Man, it is getting even more and more difficult. The differentiation between the natural and the artificial, however, is still the essential differentiation on which our orientations are based. Even though we know that Man has taken a hand in much of what we consider natural, for instance climate or the flora, and that creating the artificial is natural to Man, we still use this distinction as orientation. After all, what would a world look like in which this distinction, the distinction between the natural and the artificial, could not be drawn? And how could it be possible to achieve a self-understanding that forgoes this distinction?

Philosophical views that reduce the one to the other, in which everything either turns into that which has become, or into the made, illustrate that such ideas nonetheless play a role in thinking about Man and his world. For Arthur Schopenhauer, for instance, in his fiction of a contemplative 'clear world-eye',¹⁴ everything is purely given, unchangeable by human wants and actions, while, by contrast, for Johann Gottlieb Fichte, everything, also the natural, is constituted by an absolute I or self.¹⁵ In one case (Schopenhauer) everything would be nature, in the other case (Fichte), everything would be spirit.

It is not just our natural intuitions, our way of dealing with the world and ourselves, that speaks against such radicalisations, so does a more detailed analysis of the implicit conceptualisation of that which has become, i.e. the natural, and the made, i.e., the artificial. In actual fact, we are always dealing with, in the terminology of Plessner, a *natural artificiality* (as opposed to something seemingly created out of nothing, thus being

¹⁴ A. Schopenhauer, *Die Welt als Wille und Vorstellung* I § 36, *Sämtliche Werke*, ed. A. Hübscher, vol. II, Mannheim: Brockhaus 1988, p. 219.

¹⁵ These examples are to be found in D. Birnbacher's writings, on whose detailed analyses of the concept of naturalness I will be drawing in what follows (*Natürlichkeit*, Berlin and New York: de Gruyter 2006, p. 3).

artificial) and an *artificial naturalness* (as opposed to something seemingly given without intervention, thus being natural). Here, a distinction made by Dieter Birnbacher is helpful to understand the concept of naturalness, namely that between a genetic and a qualitative naturalness, or a genetic and a qualitative artificiality, respectively: 'In the *genetic* sense, "natural" and "artificial" make a claim about *the manner in which a thing has been created*, in the *qualitative* sense, they make a claim about its current *characteristics* and *appearance*. "Natural" in the genetic sense is that which has a natural origin, "natural" in the qualitative sense is what cannot be distinguished from what is found in nature'.¹⁶ This distinction in turn may be connected to the scholastic distinction between a *natura naturans* and a *natura naturata*: 'The genetic concept of naturalness relates to the aspect of *natura naturans*, that of a creative nature, the qualitative concept relates to the aspect of *natura naturata*, that of nature as nature having the properties it does'.¹⁷ This also illustrates that already tradition has noticed the dialectical nature of the concept of naturalness, the reciprocal determination of natural artificiality and artificial naturalness.

2. HOMO FABER

Today developments in biological and medical knowledge place Man in the unique position of being able to change not only nature in a general sense, but also his own nature, namely to intervene ever more powerfully not only in evolution in general but even in his own. And he is on the brink of changing the measures with which he previously described and regulated his situation, that is to say, the human condition.

While we have known since Darwin that Man, not only from the point of view of philosophy and culture, but also biologically, has no fixed essence, he is nevertheless subject to evolutionary changes, even though this is imperceptible to the individual and only recognisable to science over long periods of time. And it has become clear in the light of the new biology that Man can intervene in these changes himself – an ability to deliberately change his own genetic constitution, and that of his progeny. In fact, the *conditio humana* itself is changing: in the sense that now even Man's

¹⁶ D. Birnbacher, *op. cit.*, p. 8.

¹⁷ *Ibid.*

biological foundations are at his disposal. This creates a completely new and momentous situation in the domain of anthropology as well as in the domain of ethics – although the idea of determining our own nature is nothing completely new.

In 1488, Giovanni Pico della Mirandola wrote the following about God's intentions towards Man: 'We gave you neither a fixed dwelling, Adam, nor a particular appearance, nor any special talent, in order that you might have and own the dwelling, the appearance and the talents that you desire for yourself. (...) We made you neither heavenly nor earthly, neither mortal nor immortal, so that you might form yourself as your own, worthy, free and creative sculptor'.¹⁸ One hundred years later (1596) Johannes Kepler writes in the dedication letter of his *Mysterium cosmographicum*: 'We perceive how God, like one of our own architects, approached the task of constructing the universe with order and pattern, and laid out the individual parts accordingly, as if it were not art which imitated nature, but as if God himself had looked to the mode of building of Man who was to be'.¹⁹

What Pico della Mirandola and Kepler still affirm in a pious and expressive language is nothing other than the extension of the concept of Man as *Homo sapiens* to include that of *Homo faber*, both with regard to himself and to his world. Pico della Mirandola's characterisation of Man as 'his own sculptor' again corresponds to Nietzsche's and Plessner's definition of Man as the not-yet-determined animal, or indeed to Plessner's characterisation of Man by means of his eccentric positionality (which is juxtaposed to the undistanced centricity of the animal). Similarly, Kepler's characterisation of a *Homo faber* competing with God paradigmatically corresponds to the modern notion of scientifically supported technical cultures, in which Man creates and encounters – both in and by means of his productions – not only the world, but indeed himself.

Is Man his own work, in the way that the (modern) world is his work? Certainly not in the sense that Man is an artefact that created itself. For even in his role as *Homo faber*, and independently of the complementary

¹⁸ *Op. cit.*, p. 105f.

¹⁹ *Prodromus dissertationum cosmographicarum continens Mysterium cosmographicum*, in: *Gesammelte Werke*, ed. W. v. Dyck and M. Caspar and F. Hammver, Munich: Beck'sche Verlagsbuchhandlung 1937ff., vol. I, p. 6 (1596), vol. VIII, p. 17 (1620). Translation by A.M. Duncan, *Johannes Kepler. Mysterium Cosmographicum / The Secret of the Universe* (Introduction and Commentary by E.J. Aiton, with a Preface by I. Bernard Cohen), New York: Abaris Books 1981, pp. 53/55.

definitions of his natural artificiality and his artificial naturalness, Man remains bound to what has been called the *conditio humana*, and what is meant by the work-like character of Man is above all his self-determining ('cultural') essence, not his biological essence. Nonetheless, such distinctions, which are also boundaries, are beginning to give – not only in an epistemological and anthropological perspective as explained here. Against the background of modern scientific and technical developments, the possibility has raised its head that along with the rational nature of Man (that which makes him *homo sapiens*) we might change not only his external (physical and social) nature but also his internal (biological) nature. Is his naturalness at risk? Is it at all possible to define this in any detail in a context that is not epistemological or anthropological? And how about the ethical question?

3. THE ETHICAL QUESTION

The recourse to naturalness, which is epistemologically and anthropologically mostly unproblematic, is, however, problematic ethically, in particular, when ethical conclusions are drawn from definitions of naturalness of Man. In such cases, what counts as natural lays claim to moral validity, for instance in Hans Jonas, who declares the natural as the highest norm and views any intervention into natural processes which might be of ethical relevance as an offence against 'naturally' given norms, as something against 'the strategy of nature'.²⁰ According to Jonas, this is also and, indeed, in particular, valid with respect to the naturalness of Man.

Such views immediately provoke the charge of a naturalistic fallacy, in so far as, apparently, an inference is made from an 'is' (a given naturalness) to an 'ought' (naturalness as a principle or norm).²¹ Strictly speaking, however, this charge may only be voiced or, rather, upheld, when an actual *inference* is made from an 'is' to an 'ought'. If instead it is merely used as a point of departure – as compassion is used in Schopenhauer, or the will to power

²⁰ H. Jonas, 'Laßt uns einen Menschen klonieren: Von der Eugenik zur Gentechnologie', in: H. Jonas, *Technik, Medizin und Ethik: Zur Praxis des Prinzips Verantwortung*, Frankfurt: Insel-Verlag 1985, p. 179.

²¹ Cf. D. Birnbacher, who considers in great detail the most important arguments against naturalness as a principle or norm (*op. cit.*, pp. 17ff.).

in Nietzsche, understood as a natural inclination of Man – the emphasis shifts towards the plausibility of that approach itself, in this case, towards the previously described ‘dual nature’ of Man, expressed in the concepts of natural artificiality and artificial naturalness. Thus it would be an anthropological premise, from which certain conclusions are drawn in an ethical context. In any case it is a *material* approach that causes the problems, if any; the fact that something in particular, namely the natural – in other cases of ethical reasoning it might be conceptions of the good, the just, or the rational²² – is meant to play the role of a norm or justificatory authority.

The question then is again what may or should be called ‘natural’. Clearly, nature as a whole cannot be meant with this, but also a recourse to Man as natural being would not go to the heart of the matter, as illustrated by the complementary concepts of natural artificiality and artificial naturalness. After all, ethics (and morality, of which it is the theory) is always the manner in which Man deals with his natural inclinations and needs, thus cultivating them.²³ Immanuel Kant even declares this the ‘essential purpose of humanity’, that is, as the purpose in the realisation of which the true nature of Man finds its expression. ‘Whoever subordinates his person to his inclinations, acts against the essential purpose of humanity, since as a freely acting being he should not be bound by his inclinations, but should instead determine them through freedom, as when he is free, he must have a rule, but this rule is the essential purpose of humanity’.²⁴

Connected to this purpose in Kant is the concept of *dignity*, making reference to the ‘dignity of a rational being’,²⁵ in more recent discussions the concept of a *species ethic*. This concept – and thus a ‘moralisation’ of human nature – is used by Jürgen Habermas against interventions in the integrity of the human species, for instance using the means of reproductive medicine.²⁶ Thus the natural foundations are at issue, and, in that sense, again what is essential to human nature. If we also count the cultural nature of

²² See O. Schwemmer, ‘Ethik’, in: J. Mittelstrass (Ed.), *Enzyklopädie Philosophie und Wissenschaftstheorie*, vol. II, 2nd ed., Stuttgart and Weimar: Metzler 2005, pp. 404-411.

²³ Again, see D. Birnbacher, *op. cit.*, pp. 49f.

²⁴ I. Kant, *Eine Vorlesung über Ethik*, ed. G. Gerhardt, Frankfurt am Main: Fischer 1990, p. 135.

²⁵ I. Kant, *Grundlegung zur Metaphysik der Sitten, Werke*, vol. IV, p. 67.

²⁶ J. Habermas, *Die Zukunft der menschlichen Natur: Auf dem Weg zu einer liberalen Eugenik?*, Frankfurt am Main: Suhrkamp 2001, p. 27. Cf. the discussion in D. Birnbacher, *op. cit.*, pp. 169ff., and M. Kaufmann/L. Sosoe (Eds.), *Gattungsethik: Schutz für das Menschengeschlecht?*, Frankfurt am Main: Lang 2005.

man as human nature, the fact that Man is by nature a cultural being, in other words, that the definitions of natural artificiality and artificial naturalness are again applicable, interventions in his biological nature would change his entire nature – in a manner that possibly cannot be calculated or controlled. Thus the request for a species ethic.

In the Kantian tradition, such an ethic is only conceivable if it is, at the same time, a version of a *rational ethics*, that is, of an ethics that has its universal basis in a formal principle formulated in accordance with the Categorical Imperative, or else biological classifications or categories would take the place of ethical categories. But this means that an ethics of human nature that may be called a species ethic is not, if properly understood, an ethics of a particular kind, that might possibly be subject to the charge of a naturalistic fallacy, but an implication of a rational ethics, with which the principle of human dignity, which, speaking with Kant, expresses ‘the dignity of a rational being’, is applied to the entire human species.

Concluding Remark

Will Man put at his own disposal all the ‘parts’ that make up his essence – body, soul and reason? Has he become master of his own nature in a sense which would have been unimaginable even for Pico della Mirandola or Kepler? I think that we must accustom ourselves to the fact that this disposal of Man over himself will increase, driven as it is by scientific and technical development. But we must at the same time preserve, in opposition to this development, those indispensable things which are experienced in love and in happiness, in sickness and in death, and in which, despite the threat of the triumph of *Homo faber* over *Homo sapiens*, an essential part of our humanity is contained. Might this be what Pico della Mirandola meant when he had God say to Man that the latter was created neither heavenly nor earthly, neither mortal nor immortal?

Movements exist today that do not want to stop there. So-called ‘Posthumanism’ or ‘Transhumanism’²⁷ is endorsing a perfecting of Man, made possible by technological and medical advances, as well as the overcoming of the limitations of the species Man which have been taken as natural till now. The

²⁷ See L.M. Silver, *Remaking Eden: Cloning and Beyond in a Brave New World*, New York: Avon Books 1997, London: Weidenfeld & Nicolson 1998; N. Bostrom, ‘In Defence of Posthuman Dignity’, *Bioethics* 19 (2005), pp. 202-214.

question here is not merely whether this is playing God²⁸ or whether a new Pandora's Box is opened, but also, as to what species Man might be considered to belong if, as envisioned, he would have left his own species. After all, things such as the experiences of contingency, of neediness, and of ageing²⁹ are at issue here, which until now had been considered constitutive of the human species. But independently of that, this example equally illustrates the difficulties generally involved in a definition of how human nature is to be understood.³⁰ But it is also clear, on the other hand, that it is not just the perspective of biological evolution, thus a *descriptive* perspective, but also the perspective of cultural evolution, thus an *ascriptive* perspective, that will play a role.

This may be illustrated in yet a different manner. God's order to Man to subdue the Earth certainly didn't include the order to subdue himself, neither in the categories of master and servant, nor with respect to his essence, which is reflected, for instance, in the previously mentioned experiences of contingency and neediness. Wherever Man attempts to modify his own essence, his own nature, he is at risk of losing his very nature, the nature that makes him human. Natural artificiality and artificial naturalness would lose their balance. Man would assimilate with his creation; he would return to a paradigm of machinery, which has already unsettled thoughts and feelings once before, in early modernity. For after Man there wouldn't be Man, but a product (of Man), setting about to take the place of Man. The *conditio humana* would become a *conditio technica*; the species Man would have ceased to be itself; it would have crossed species borders. But this also means that Man, in a certain sense, cannot be optimised, at least not insofar as with such an optimisation he would step out of his own nature – however difficult it might be to define that in any detail.

²⁸ See M. Midgley, 'Biotechnology and Monstrosity: Why We Should Pay Attention to the "Yuk Factor"', *Hastings Center Report* 30 (2000), No. 5, pp. 7-15; L.R. Kass, 'The Wisdom of Repugnance', *The New Republic* 216 (1997), No. 22, pp. 17-26, also: *Life, Liberty and the Defense of Dignity: The Challenge for Bioethics*, San Francisco: Encounter Books 2002, 2004.

²⁹ See also C.F. Gethmann *et al.*, *Gesundheit nach Maß? Eine transdisziplinäre Studie zu den Grundlagen eines dauerhaften Gesundheitssystems*, Berlin: Akademie Verlag 2004, pp. 10-23.

³⁰ Cf. on this also N. Roughley, 'Was heißt "menschliche Natur"? Begriffliche Differenzierungen und normative Ansatzpunkte', in: K. Bayertz (Ed.), *Die menschliche Natur: Welchen und wieviel Wert hat sie?*, Paderborn: mentis 2005, pp. 133-156.