

«We can Build You»!

Some Reflections about Human Fate and Vocation

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"With the spiritual revolutions that are necessary for scientific invention, man becomes a changing species or, rather, a species that needs to change."

(Gaston Bachelard, The Formation of the Scientific Mind)

Abstract

There is no doubt that the speed of technical and technological development during the second half of the twentieth century was dizzying to say the least and that many of the scientific discoveries that signalled its evolutionary processuality have profoundly changed and rewritten the codes we use to read and interpret the relationship between man and external reality. A radical change that has largely contributed and continues to contribute to eliminating, one by one, all those prejudices of an anthropocentric nature which, we cannot deny, have characterized the narrative of the human adventure.

Keywords: Man and external reality; Processuality

We Can Build You is a science fiction novel by Philip K Dick: written in 1962 it remained unpublished until appearing in serial form as *Abraham Lincoln Simulacra* (1970). It centres on Louis Rosen, a businessman in the near future whose company produces spinets and electronic organs. Rosen's partner wants to begin production of androids based on famous Civil War figures. The firm completes two prototypes, one of Edwin M. Stanton and one of Abraham Lincoln. Rosen then attempts to sell the robot patents to Sam K Barrows, an influential businessman who is opening up lunar real estate for purchase and colonization. Unfortunately, while the Stanton android proves able to adapt to contemporary US society, Lincoln's simulacrum proves unable to do so, possibly due to the fact that the original experienced

schizophrenia. At the same time, Louis Rosen begins a relationship with Pris Frauenzimmer, the schizophrenic daughter of his business partner, who has designed both androids.

Pris becomes a real obsession and Louis Rosen himself begins to hallucinate.

The remainder of the book deals with Louis Rosen's admission of schizophrenia and his Jungian therapeutic treatment at the Kaisin Centre in Kansas, from which Pris was originally released. It appears that art therapy is the preferred treatment for people who experience schizophrenia, which has become increasingly common in this technological world. Under the influence of his

therapist, Rosen creates a virtual hallucinatory reality of his own, where he resumes his relationship with Pris, marries her, they have children, and grow old together, culminating in his 'murder' of her hallucinatory *Doppelgänger*, thereby curing him.

The end of the science fiction novel asks whether he was actually ill in the first place: but this science fiction novel addresses important questions about human nature, artificial intelligence and 'normality'.

The Lincoln android is more emphatic than Pris; his human characters are more hard than the actual humans who argue over him. This is, after all, the principal question for Louis Rosen: this the principal object of Louis Rosen's schizophrenia.

Why hide it from us? We are, more or less consciously, terrified.

As Philip K Dick suggests in *We Can Build You*, contemporary man, because of his ignorance or at least his extremely vague knowledge of contemporary scientific developments, is absolutely terrified by the idea of an actual manufactured being.

In other words, despite his apparent experience of and familiarity with technology and all things technical, it is not really true that twentieth or even twenty-first century man has fully metabolized the extraordinary scientific progress that he has made and the opportunities it offers. Progress of proportions unequalled in the history of mankind in terms of dimensions and efficiency, let alone all the other things that have been achieved within only the past fifty or sixty years. And all this, I venture to say, with a tangible lack of thought.

There is no doubt that the speed of technical and technological development during the second half of the twentieth century was dizzying to say the least and that many of the scientific discoveries that signalled its evolutionary processuality have profoundly changed and rewritten the codes we use to read and interpret the relationship between man and external reality. A radical change that has largely contributed and continues to contribute to eliminating, one by one, all those prejudices of an anthropocentric nature which, we cannot deny, have characterized the narrative of the human adventure.

But unlike the speed at which the processuality of science evolves, the process of elimination is slow: hence, as indicated by Philip K Dick, the principle object that can engender schizophrenia and psychosis. What's more, to this slowness, with a frequency that is anything but negligible, we must add that this process of dismantling prejudices is happening within a framework of such absolute poverty of reflection and self-reflection that, in the end, we run the risk of losing whatever ability we had to decode the changes that have happened, are in the process of happening, and are yet to come.

It seems to me undeniable that, apart from the question of actual feasibility and the more advanced technical and technological typologies and modalities, by the standards of the main character in *We Can Build You*, Louis Rosen, average contemporary man lives, among other things, with the anxiety and concern, the bewildering astonishment at the eventuality of there being a creature like him, inhabiting the same surroundings as himself, a creature which is not the result of a 'spontaneous process' but 'produced' by a series of 'artificial' procedures and processes. Be these the concrete and tangible processes of series manufacturing, manipulation and cloning or only the rational and deliberate programming of that 'spontaneity'.

The problem lies not so much in making sense of this anxiety, of the schizophrenic responses of average contemporary man, or even of revisiting Freud's analysis of the disturbing, or rather the analyses of that emotion that destabilizes us not because of the sudden eruption of something strange, but through the surfacing of something repressed which is nevertheless familiar, something in the apparently *un-heimlich* (eerie, strange) which takes us back to Heimat, the heimisch (homelike, familiar), which is the most *heimlich* (innermost, private) thing to man's heart. Especially when browsing through Freud's essay which examines E. T. A. Hoffman's splendid tale Der Sandmann (1816) - in which he tells the story of the young Nathaniel who, enamoured of the young and beautiful Olympia, discovers that the wonderful creature is an automaton and is so horrified that he goes mad and then commits suicide - there would be no shortage of diversionary cues¹.

Instead, what needs to be tested and verified as a priority is the complex of mechanisms of thought, the categorical and conceptual complex that swirls around fundamental theoretical questions posed and proposed, even from a temporal perspective not a galaxy's distance from here, for example of genetics, genetic engineering, cybernetics and other related issues.

¹Freud S (1919).

If it is true, as I maintain, and as Jürgen Habermas has rightly emphasized, that 'most fields of practice were impregnated and restructured by the "logic" of the application of scientific technologies'², we should maybe consider that, apart from the critical tenor of the statement, we should not be too troubled. Or at least, philosophers should not be too troubled: in essence, the principle activity of philosophy is to create and work on ideas, whatever the human activity that inspired them or was their source.

An activity which, nevertheless, should not become a process merely of creating and crystallizing the concept itself, still less a self-referential contemplation of the "new production" of thought. But rather an activity that is capable of combining a constant labour of redefinition and honing with further self-analysis of that very procedure which lies at the basis of the aim, anything but frivolous, of constantly being open to the new that is still to come.

To the new that has yet to be made and, at the same time, intimately understood by philosophy. If we do not, we will arrive at a place where this self-implementation of philosophy is halted – a procedure composed therefore of two phases: the foundation of a new idea and its progressive honing with the aim of making space for an understanding of the reality and of opening the way to new acts of thinking – where the latter would be reduced to nothing more than an apology for the *status quo*.

That is to say a defence and an exaltation of the *status quo* in which contemplation, reflection, justification, or rather activities which are more deserving, actually compete but which, essentially and in most cases, respond to precisely those interests, including ideological interests, which must be protected. Activities which, in the final analysis, prove to be deaf and blind to the universe of human life in inexorable motion.

So if my intention were to don the vestments of apologue, it would also be an apologue of the area which you represent and, consequently more familiar because of being more attended to and more intimate, that is to say a moral fable of decidedly more advanced contemporary science, I believe that, in the end, paradoxically, while thoughtfully discussing that 'most intimate' subject, we would find there was very little to say. Because I myself would have very little to say to you that would not, at best, do more than confirm this 'most intimate' to you.

²Habermas J (2001): 44.

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My work, as outlined, is varied: it tries to be that of a philosopher. Not simply in the literal sense of the term, of that which nurtures and has a love of knowledge. But of that which tries to work, to interpret the complex of human life in inexorable motion, with ideas and on ideas. On ideas and with ideas by means of language, well knowing that language itself is the home (and often the prison) of thought, as well as the seat in which reside not merely ideas, but that very workshop in which the work of refining and re-creating takes place, not to mention the analysis we were talking about.

We can therefore say first of all that the specific modality of philosophy, which is essentially the key to man's qualifying modality (at least in the West) in his adventure that is so distinctive from that of other living creatures, is that of moving through the production and comprehension of ideas in a progression of perpetual becoming.

A becoming which, since it involves the problems that reality sends us, opens up the possibility of an exercise in reflection at a halfway house, an intersection at which things and thoughts take root. An 'in the middle' in which philosophy must necessarily also take root, because it is here that those epoch-making crossroads and inflections are produced, through which not only is it possible for philosophy, history, science and the arts to communicate, but in which the *novum* thought and to be thought takes shape.

If we accept what I have said as a premise emphasizing the content rather than the form of method, it is legitimate to say that it is precisely here, starting from the loss of this 'in the middle', that we find that which I previously defined as 'lack of thought'. It is here, at the reflective interstice which separates old horizons from the actual possibility of creating *ex novo*, that we find that absence and inadequacy of thought which sets in motion contemporary man's schizophrenia, as well as certain forms of disassociation and alienation, as much from that very philosophy as from contemporary science itself.

Having thus established these basic coordinates with the aim of formulating a reasoning which creates a genuine bridge of dialogue and effective communication, it is possible to begin to develop something that will form the theoretical nucleus of this reflection, starting from the assumption that Habermas has maintained in his introduction to a lecture in a volume which has since become rather famous, *The Future of Human Nature*: 'in his novel *Stiller* Max Frisch has Stiller, the public prosecutor, ask: "What does a human being do with the time he has to live? I was hardly fully aware of the question; it was simply an irritation!". Frisch poses the question in the indicative mood. In their self-concern, reflective readers give the question an ethical turn: "What should I do with the time I have to live?". For long enough philosophers believed that they could give suitable advice in reply. But today, in our postmetaphysical age, philosophy no longer pretends to have answers to questions regarding the personal, or even the collective, conduct of life'³.

Precisely because we can have sympathy with Habermas's acute observation, it may be legitimate to go further and say that, considering the fact that, constituently, contemporary philosophy no longer believes in constraining answers and not solely in relation to the conduct of life, the same philosophy is no longer disposed to accept constraints either as concerns its own investigation of that life or of the primary object of a major part of its own reflective flow: man and his condition.

This conviction, which obviously does not cover 'all' of contemporary philosophy, in the course of reason nevertheless leads to many different answers of a speculative nature like those given by Habermas, despite his decision to fully embrace his initial statement defining and reflecting on what is and what will be the future of *human nature*.

We must therefore start by accounting for the unravelling that philosophy is capable of performing and establishing with respect to 'every bond', i.e. with respect to any pretension to crystallization which, as will have been understood from the passage by Habermas quoted above, in a narrow sense has something to do with a certain way in which philosophy is sliding into metaphysics. But it also has something to do with certain acceptations of western humanism. Or rather, and in the final analysis, with those ways of thinking which, based on monolithic and reassuring answers, have touched on visions of the world that are set in stone because they are based on the pretension that they hold the only, and thus the absolutely certain and necessary, truth.

It may be possible to provide a hint of how 'the truth', even as to the mere use of the word, which so often is apparently almost discounted, but which on the contrary is the mediating synthesis of our cultural baggage, can turn out to be misleading, precisely because it has become

³Habermas J (2001): 1.

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the repository for an absolute indisputability that admits no self-reflection.

In an extraordinary novel, *The Apprenticeship of Duddy Kravitz*, the Jewish-Canadian writer Mordecai Richler has one of his minor characters, Benjy Kravitz, say in a letter/will to his nephew (Duddy himself): 'I have notebooks of my clever sayings: don't worry. Experience doesn't teach: it deforms'⁴.

Let us focus on the key term in this excerpt, the verb 'to deform'. In the common acceptation and current usage of 'to deform', in its meaning of 'to assume a different shape or form', and therefore also to 'alter the form of something by stress', there is an underlying negative moral judgement. Negative because it condemns any variation or alteration of the original shape which, by virtue of its originality, is 'good' and must not be touched.

However, the possible accepted meanings of 'to deform' also include 'to change form', 'to become (another form)', and 'to assume a different form'. Here an initial interesting fact lies not only in the decidedly more descriptive and value-free meaning attributable 'to deform' but also and above all because it leaves little margin for moral judgement, let alone for any superiority or goodness that may be ascribed to the originality of the shape that is to be deformed or has already been deformed.

This exercise in terminological analysis, while introducing us to the heart of our questions, also recommends us to re-read and attempt to interpret Richler's words more carefully. Experience deforms, therefore it can be read thus: the accumulation of subjective experiences makes it possible – albeit, as in this case, only at the level of memory – to change, even perfect, those same accumulated experiences. Not necessarily, however, through a distortion or degenerative corrosion of their original version or form.

Let us therefore try to extract an initial nub of meaning from the questions to be tackled, by following a thematic trail based precisely on an analysis of the term in question. If we accept – and then, as we are obliged to, attempt to sustain and justify this option as we go along – that man, the human race is history, a fluid concrescence of historical accumulation, an unresolved summation of experiences *in the wild*, then they would also be those inscribed on the accidental path of evolution, and we could then say that man, the human race, is *deformation*.

⁴Richler M (1959): 326.

And that he is therefore both the object and subject of deformation, constantly modifying and being modified: or rather, as regards his own potential and ability as a subject coping with the eventuality of interaction (and therefore deconstruction and reconstruction) with the world around him – whether it be understood as a complex of beings that he encounters, or as a projective world, or even as that complex of beings that he himself has created through imagination and fulfilment. But he is also the subject and agent of deformation even in the presence of his own $\beta(o\varsigma$, of which he is also the (theoretically conscious) object of deformation.

Now, as is well-known, the lawfulness or otherwise of this constant and uncontrollable *deforming* activity, when placed under the scrutiny of moral judgement, is established in terms of macro-categories such as 'rightwrong', 'good-bad', 'useful-damaging' based on an indicative principle of a maxim that tries to move to the margin of an even more general question which is inherent in the protective guardianship and preservation of man himself. That of his own permanent form.

A protection, or rather derived forms of protection which, nevertheless, have their own roots in historicalcultural structures based on a model of a more or less metaphysical foundation, the recurring motif of which, undeniably, is the return to a single inspirational principle. And from which, as we shall see, the doctrine of natural law is the periodically recurring condensing formula.

Therefore, those that we shall see being formed as true and genuine models of natural law have been assembled in relation to certain specific *ideas* of human nature. Ideas which, discovering their sense and meaning in the individuation of well-established theories of natural law, have in fact anchored man himself to stationary programs and designs, or rather to forms that are immutable because of their metaphysical basis.

As we can see, once again we have a term that is decidedly central to the discourse so far outlined and yet to come: that of form and the passing hint to the 'metaphysical foundation' refers back to the device mentioned above relating to our shared negative acceptation of deformation, or rather that of 'original' or even pre-original form.

But it is also easy to see that, the further we pursue this line of argument, the more the key problems appear to multiply and, in all probability, the more problematical the complex discourse tends to become. We should therefore proceed by degrees and start by clarifying and analysing this nullifying passage relating to natural law.

As an introduction to such a fundamental question I believe that the words with which Edgar Morin began *The Lost Paradigm: Human Nature,* may be a good starting point:

'We all know that we are animals of the class of mammals, of the order of primates, of the family of hominids, of the genus homo, of the species sapiens, that our body is a machine of thirty billion cells. controlled and procreated by a genetic system created in the course of a natural evolution lasting some two to three billion years; that the brain with which we think, the mouth with which we speak, the hand with which we write, are biological organs. But our awareness of this ceases to operate when it comes to knowing that our organism is made up of a combination of carbon, hydrogen, oxygen and nitrogen. Since the discoveries of Darwin, we are willing to admit that we are descended from primates, but not that we ourselves are primates. Now descended from the tropical genealogical tree in which our ancestors lived, we are convinced that we have escaped from nature for ever in order to build the independent kingdom of culture. Our destiny is obviously exceptional if we compare it with that of the animals – including the primates – which we have domesticated, modified, defeated, put in cages or nature reserves, whereas we have built cities of stone and steel, invented machines, created poems and symphonies, travelled in space; how can we not believe that, despite being a product of nature, we have become extra-natural or supra-natural?'5.

Leaving aside the anxiety that this final question may provoke, let us try to identify some of the key points that emerge from Morin's comments.

It seems to me that one can detect in the initial premises of his discourse a somewhat unexpectedly positive answer to the final question: if we accept the inescapable conclusion that the start of our 'exceptional destiny' can be traced back approximately four million years, namely to the appearance of the first hominids, if not quite ten million years to the emergence of the first anthropoids, to then pass through the intermediate macro-stage of *Homo Sapiens* (from ten thousand to fifty thousand years ago), we cannot escape one fundamental fact: the historical anchor of our *givenness*, or rather the becoming, modifying, *deforming* of our *givenness* as a result of the temporality which has established us and continues to do so.

⁵Morin E (1973): 17.

Certainly, the 'exceptionality' of our history, a history which, whether we like it or not, tells us of our close link with nature, could equally lead us to conclude, especially since the birth of modern science, that the human genus, while remaining in some way a 'natural product', has also raised itself from that original state and risen to a metanatural dimension which is at the same time a-historical, or rather a-temporal.

It is thanks to this macro-category of 'culture', which is undeniably the historical result of our adventure 'in the wild', that we have been able to raise ourselves to the point of being able to liberate ourselves from that very historical *givenness* that made us and fashioned us.

After all, in a more or less explicit way, certain twentieth-century anthropologists almost managed to explain it. In fact, when Arnold Gehlen pointed out that man's nature is artificial, or rather that culture is a real and genuine 'second nature' which is specific to 'human nature', a structure 'within which he alone can live' so as to be 'the *product* of being that is unique in the world, itself "unnatural", constructed in contraposition to the animal'⁶, he was actually opening the way so that the only possible consideration of man is in relation to his peculiar capacity for supra-elevation.

Based on the assumption, as plausible as it is wrong, of man's natural/biological incompleteness, as highlighted by Roberto Marchesini in his remarkable book *Posthuman*, a large part of twentieth-century anthropology – and not only that – more or less deliberately constructed this schema of man's progressive *detachment* from nature.

In one particularly strong passage, Marchesini reconstructs this fundamental junction with great clarity, highlighting a crucial point when he says that: 'Our thoughts on man's nature and culture are largely constrained within an actual framework which on the one hand allows us to identify some of the most important characteristics of our species in great detail, while on the other it has given rise to a baseless dichotomy [...]. This framework presents itself to man as an all-absorbing model of reference, which defines our speculations and obviously every proposition directing, correcting, or selecting expressions. The paradigm which has made possible this fracture between everything which we call "nature" and everything to which we attribute the title of "culture" is based on the simple and direct assumption that man, as a species, is from a biological point of view an incomplete being'.

Hence, in terms of culture man has transcended his (incomplete and deficient) biological roots to become in a certain sense a being that transcends himself. And essentially, and here it might be possible to find a small point if not of commonality at least of problematical contact, I think we can say that the work of scientific research and application from the second half of the nineteenth century onwards, does adhere in some of its principles, all things considered, to the antagonistic nature/culture device, in order to establish a moment of fracture imposing culture, man's knowledge of man, as a springboard towards the extra-natural essence of man himself.

By this I do not wish to give the impression that I am on the side of the 'natural': I wish only to highlight the fact that contemporary science, which is at the same time the descendant and actor of something like western humanism, has suffered and continues to suffer from certain cultural legacies which tell us, obviously, about some of the conceptual structures and categories which, undoubtedly, should support some of these irresolvable contradictions.

To extend our dialogue further, I will try to advance two suspects relating to the foundation of this nature/culture dichotomy: contemporary science has also acted and interacted within a scenario of presumed incompleteness of the human race inheriting, more or less consciously, a problematic idea of our tradition, that of perfection, an idea with clear roots in the doctrine of natural law. On the basis of which it has had more problems than one could imagine with the notion of the mobility of humankind, such that for example, in more than a few situations, our genetic heritage has been seen as the standard of the actual hard nucleus of humankind itself which, taking account of its constitutive incompleteness, urges in the direction not only of further radicalization of the nature/culture dichotomy, but also towards a cognitive and application *surplus* of culture.

On the contrary, it is the biological incompleteness itself, that 'prerequisite for defining two large receptacles, sometimes synergistic, at other times antagonistic, on which man draws in his every expression: on the one hand it is nature, with its obligations and its laws, its instincts and tendencies, its universal if fixed character, while on the other it is culture as free manifestation, open to values, contingent to expression but transcending the biological being'⁷.

⁶Gehlen A (1940): 28.

⁷Marchesini R (2002): 10.

This twofold suspect, moreover, is based on another undeniable fact: that we must not to lose sight of a crucial factor which describes the epistemological statute of technique and technology, and thus of science itself. As Heidegger understood, this epistemological statute has its roots in the predisposition 'to prepare and procure a view of processes that can be commonly controlled. The limitless power that is required for such a task, if on the one hand it determines that which is peculiar to modern technology, and on the other avoids any attempt to reproduce it by technical means. The technical character of science, which imprints itself ever more univocally, can easily be recognized from the (instrumental) way in which it conceives those categories which from time to time define and articulate their subject area. [...] Their truth is measured by the effect produced by their use within the research process. Scientific truth becomes equated with the efficiency of these effects'8.

Here the point being touched on is diriment and refers to the metaphysical pretension mentioned earlier, that of the pretension to reduce being, the ontological level, to that of entity in order to *ontologize* the entity, a mistake which, among others, can be found in every anthropocentric pretension of which, it is useless to deny, science has to some extent been the vehicle.

Nevertheless, if we accept Heidegger's notion from a purely descriptive and non-valutational point of view, we ought to go a step further. That is, having put forward these two suspects, that it seems to me that genetics, genetic engineering and cybernetics, at least in their conceptually more conscious articulations, have simultaneously managed not only to overcome this dichotomy, but have also provided and continue to provide the concrete possibility of a genuine recasting of humanism from the rethinking of humankind that they started.

Apart from the *effects* themselves as a measurable situation of tangible efficiency, genetics, genetic engineering and cybernetics have imprinted and continue to imprint a very clear marker relating to a new and authentic way of reading what mankind's vocation is. More precisely, in respect of what has been and is man's destiny, in the exact sense of the – truly epoch-making – possibility of discovering his actual condition. A discovery detached from metaphysics: this is our historical situation with the provision that – as Heidegger once again teaches us – 'every scientist' is 'able to turn, pondering' with an 'alert spirit', in the full knowledge that he runs the risk of

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'allowing himself to get involved in conversation with philosophy'⁹.

The most obvious key to this historical situation lies in the work begun by genetics, genetic engineering and certain aspects of cybernetics on the two fundamental elements which make man what he is and create the temporality that we are: life and death.

If we are prepared to assume that man is not in any way deficient from a biological point of view and that, furthermore, 'it is not true that man makes himself complete through culture, but that it is far more plausible to think that man perceives himself as incomplete as the result of culture'¹⁰, then we can say, completing Marchesini's position, that it is really genetics, genetic engineering and even cybernetics which render a new and different acceptance of the cultural process possible as a "hybrid event", that is in terms of an "externalization" realized through [...] the use of an instrument, the partnership with another species, the conferral of meaning, the proposition of a theory – in short anything that creates a link with external reality'¹¹.

And it is therefore precisely this 'hybrid event' which, having assumed that processuality which is historically determined, shapes and tells us about the human race and its specificity. It is in the explaining of hybridization that culture lies, the reason why there is no longer a dichotomy with nature. Or rather that as a result of its original incompleteness culture can no longer assume the mere completion of nature or, in some respects, act as the 'engine of nature' because of its capacity to retroact on the man-system itself. As Heinrich Popitz well understood, 'technological action develops from a specific technological characteristic of man, from a specific ability inherent in his organism. Technology does not compensate for an organic insufficiency but on the contrary *exploits* an organic capacity'12.

Therefore, and in other terms, technological application, technological objects have, on the one hand, increased the supremacy of man's intervention, while on the other they have contributed to transforming his own competencies, demanding from him new skills and abilities.

In the end, technology and technique do not complete man, in fact they do no more than extend his field of

¹⁰Marchesini R (2002): 24. ¹¹Marchesini R (2002): 25.

⁸Heidegger M (1965): 46.

⁹Heidegger M (1965): 44.

¹²Popitz H (1995): 42.

¹ opitz ii (1753). -

action and deformation. Again: technique and technology do not rescue an original deficient form and extend it in the direction of completeness and therefore of perfection; they 'only' render accessible new ways of co-existing with the internal and external without a precise metaphysical finalism.

Nevertheless, to be able to fully understand this extraordinarily important *novum* of which genetics, genetic engineering and cybernetics are the vehicles, or more precisely, to be able to grasp the whole range of possibilities that modern science unfolds on the way to developing a neo-humanism based on a more authentic notion of *mobility* (*deformation*) of humankind, it is necessary to clear the decks of a few prejudices. These are the cultural prejudices which in fact lay behind the two reservations mentioned a little earlier.

However, I would first like to say that Morin's troublesome question from which we started is simply a question that has been badly put, because it is a question that arises from an initial and fundamental prejudice relating to nature itself and to its statute of fixity.

The problem is that nature, natures, the idea of nature or, more precisely, ideas of nature are in their turn an historically defined fact. The question posed by Morin in relation to our extra- or meta-naturalness, is a question that starts from an historical and fixed idea or rather ideas of man and nature, in the sense of ideas of man and nature that are historically fixable.

My invitation, and therefore my progress further into the construction of this reasoning, consists of an attempt to deconstruct it by finding at the end a key term for the proposition of a neo-humanism: *mobility*. Or rather the term from which I will then try to demonstrate in a definite and definitive manner how the nature/culture contraposition is not only the vehicle of historical ideas – and therefore traceable and explainable – about man and nature, but also that the appeal which is addressed to us, based on the historicity-mobility of human beings, reaches into the heart of that 'epoch-making' rethinking of these same categories.

A rethinking, therefore, which implies a chiastic dialectic of nature and culture through the acceptance of the possibilities offered and yet to be offered by genetics, genetic engineering and cybernetics. From here, from the frontier or even limit of this possibility, I will try to further delimit the concept previously introduced of hybridization and, finally, to advance an alternative concept of man as an open system, that is *deformed*.

In other words, we need to deconstruct further before we can rebuild on new foundations, foundations which are bound to be disenchanted in one sense or another: as much in the sense of nature as of man himself and hence in the sense of culture.

The main object of this deconstructive intention, as already announced several times, concerns the earlier speculative junction of these 'three senses', namely natural law and its formulations and prejudicial and prejudicing definitions. Obviously, the method of this deconstruction cannot but be historical-situational.

Let us begin by trying to provide and elucidate a definition of this central question, or rather to delimit as far as possible the range of this deconstructive intention-action.

In a highly relevant text from modern history/philosophy, *The Philosophy of Enlightenment* by Ernst Cassirer, there is a section dedicated to *Law, State and Society*, a section which contains elements worth investigating in our quest to discover hotlines to unravelling the questions which I have attempted to raise so far.

Skimming over the attack in the first of the two paragraphs of this section, *The idea of right and the principle of inalienable rights*, we find: 'a fundamental feature of the philosophy of the Enlightenment appears in the fact that, despite its passionate desire for progress, despite its endeavors to break the old tables of the law and to arrive at a new outlook on life, it returns again and again to the persistent problems of philosophy'¹³.

We must therefore ask ourselves what there is in the case in point, that is the case of the 'intellectual construction of everything new in existence', which tells us about our current situation in a way that is still relevant, about *one of humanity's most ancient philosophical problems*.

E. Cassirer himself tells us immediately, when he writes: It is 'the problem of law'¹⁴. But in what sense does it then 'become' an 'Enlightenment problem'? In the sense that 'the thinkers of this era are never satisfied with the consideration of conventional historical law; they go back rather to "the laws we were born with"'¹⁵.

¹³Cassirer E (1932): 234.

¹⁴Cassirer E (1932): 235.

¹⁵Cassirer E (1932): 235.

To be clearer still: it is a question of natural law.

So the first step to take, as we have said, is to go and find a definition of natural law. This passage – not the easiest – is, in certain respects, even a preliminary one, also and above all because few concepts are as ambiguously polysemous as that of the doctrine of natural law and hence of natural law itself. This variety and multiplicity is the conceptual and historical testimony of the plurality of positions assumed by the 'idea of natural law' in various moral situations, which only if known historically in their specific individuality can lead to cognitions that are neither vague nor approximate.

Indeed, this idea has for centuries been burdened with closely and subtly contrasting meanings, in an effort to distinguish itself in ramifications that cannot be ascribed to doubt and original colourless unity; however, its passage through various epochs has endowed it with a unitary aspect, thereby legitimizing, through this appearance of unity, its current use as a common denomination, with unitary significance.

Let us take for example a definition of the doctrine of natural law, apparently quite generic on its own, or rather that of the legal-philosophical doctrine that distinguishes – in the sense of recognizing, therefore recognizes – a valid law of nature, intrinsic to human reason, preceding a positive law willed by men.

In other words, the doctrine of natural law is the doctrine according to which there exists a 'natural law' (*ius naturale*) that can be known, or rather a system of norms of inter-subjective conduct that is different from that which makes up the norms of the State. This type of law, to try to be more explicit, has value in itself, it is *earlier* than and *superior* to positive law and, when contrasted with the latter, should even prevail over it.

The doctrine of natural law, therefore, is antithetical to that 'legal positivism' according to which law is only that which is imposed by the State, and the validity of which is independent of any reference to ethical values. Sometimes, or rather very often, in confirmation also of the lack of thought and of the 'dilettantism' which inhabits so much of modern debate on matters of law, philosophical law, bioethics and therefore of politics, the term 'natural law' is reserved for doctrines that share few of the specific characteristics which supported these theories in the seventeenth and eighteenth centuries. So much so that they have given rise to the mistaken opinion that the doctrine of natural law actually has its origins in that period of history. The 'doctrine of natural law' is therefore a dangerously equivocal expression, since its meaning, both philosophical and political, can be presented in very different ways according to the various conceptions of natural law.

And indeed, with respect to those various conceptions of natural law, it is plausible to say that at least three fundamental versions of this have emerged in the history of philosophy: that of a law established through the decision of a divine will, which was revealed to mankind; that of a 'natural' law in the strict sense of being physically innate – like a sort of instinct – to all animate beings; and finally, that of a law dictated by reason and therefore specific to man, who discovers it autonomously within him.

These three versions are substantially heterogeneous concepts, and in some respects even conflict with one another: however, all three different versions have in common the idea of a system of norms which *logically* predate and are *ethically* superior to those of the State, to whose power they constitute an impassable barrier. Legal norms, in other words, but also the political activity of States, of institutions and individuals which conflict with natural law, however it is conceived, are considered as *damaging* to natural law itself.

I spoke, however, of the existence of various conceptions of natural law. At this point, in order to better understand the articulation of these three versions, we need to revisit some of the moments in the history of this 'idea', to see what is 'inherited' and 'transmitted', what is 'remodelled', and what is 'developed', in essence, of this most ancient of questions which has accompanied us to the threshold of this epoch-making turning-point.

We can start by saying that the first manifestations of the doctrine of natural law can be found in Ancient Greece. 'Traces of natural law' are present in Plato (mostly in the political dialogues), fundamentally because his idealism, in which we see the tension of phenomena versus ideas as the universal aspiration to a perfection of every being for that essential purpose which is his and which is concealed in the reasons of his ideality, can be considered finalistic. In the theory of Goodness, Goodness is always presented as an absolute end in which the whole world of ideas should be summed up in its conclusive oneness. If the idea of a natural law is incidentally present also in Aristotle, who speaks of an 'alliance between the physical and metaphysical', it is in the Stoics that we find it substantially developed. For the Stoics, nature is governed by an immanent rational universal law, and man must 'aspire to live in accordance with nature', including with regard to legal relationships.

We know of this Stoic doctrine above all from its 'popularization' by Cicero in works that had a major influence on early Christian thinking, in the Middle Ages and even on the first modern doctrines of natural law. In a famous passage of *De republica*, Cicero defended the existence of a 'true' law, conforming to reason, immutable and eternal, which does not vary according to country or time, and which man cannot violate without disavowing his own human nature.

Reported and collected by one of the Fathers of the Church, Lattanzio, this Ciceronian prescription had a great influence on Christian thought in Latin culture, which based it on the idea of a natural law dictated by reason. However, this gave rise to serious theological problems within Patristics itself, either from the difficulty of explaining the coexistence of a natural law and a revealed law, or because the admission of the presence within man of an autonomous moral law brought into question the necessity for Grace.

Roman lawyers also drew upon Stoicism for their idea of a natural law, although without taking it any further: one of the greatest, Ulpiano, even managed to distort it profoundly, defining 'natural law as that which nature has *taught* all animate beings', among whom he explicitly included the animals. We can easily understand why this implied the reduction of natural law from a 'norm of conduct' to 'pure instinct', and to a real necessity for physical order.

Ulpiano's conception of natural law is nevertheless very important, because at the level of Cicero's idea – antithetical, as we have seen – it was often embraced by medieval writers. In fact it is a characteristic of almost all medieval thought to accept the doctrine of natural law in all its modulations, without an awareness of the irreconcilability between them. Next to Ulpiano's naturalistic version, and Cicero's rationalistic one, medieval thinkers were able to develop the doctrine of a natural law identified with the law revealed by God to Moses and with the Gospel.

This confusion and tangle of versions finally came to an end with Saint Thomas Aquinas in the thirteenth century. With the Aquinate, natural law becomes that part of the order placed by the reason of God the ruler of the universe which is present in the reason of man: a law, and therefore rational. In some respects, the doctrine of natural law has finally managed to become wholly itself: it is the law of the whole of nature, inevitably total by divine decision: to avoid it is to avoid the order of nature which rules both heaven and earth.

Perhaps we can synthesize Thomas's position with this 'formula': union and at the same time distinction of *lex aeterna, lex naturalis* and *lex humana*. The doctrine of natural law in Aquinas is truly itself because it is not limited to being a politico-legal criterion but, anticipating the marriage of physics and metaphysics in the wake of Aristotle, presents itself as the manifestation of the natural reason that rules the universe. One law by which all natures – especially that of man, the summit of creation – must abide if they are to reach that *bonum universi* – the end which the whole of reality is approaching. Aquinas's naturalistic finalism is therefore at the same time a cosmology, a model of ethics and a theorization of an ideal arrangement of a moral world.

However, in the climate of the theology of the late Middle Ages, Aquinas's doctrine of natural law conflicted sharply with current voluntaristic trends, the major exponent of which was undoubtedly William of Ockham (fourteenth century). But the idea I particularly wanted to highlight in Aquinas's doctrine of natural law, and the one most often asserted, is the principle according to which a positive law deformed by natural law, and therefore unjust, is not a true law and, as a result, does not have to be obeyed.

In reality, the Thomistic doctrine of natural law did no more than restate, even if it surrounded it in a theological framework, that Stoic-Ciceronian view of true law as something rational. And although a highly diffuse common historiographical passage may maintain the contrary, today there is a growing opinion that the modern doctrine of natural law – which particularly during the eighteenth century assumed decidedly secular characteristics, as well as decidedly liberal ones in the political sphere – has in its turn developed largely on the basis of the Stoic-Ciceronian doctrine, which has been handed down thanks to the 'Aristotelian' reception achieved by St Thomas Aquinas.

However, within the dispute between voluntarism and the Thomist doctrine of natural law, the theologians and jurists of the sixteenth century generally made an attempt at mediation. In this context we can find a place for the Dutch writer Hugo Grotius, who is normally acknowledged as the father of the modern doctrine of natural law.

In his work *De jure belli ac pacis* (1625), while placing natural law on the basis of an identifiable law, Grotius affirmed that this natural law is dictated by reason and that it is independent not only of God's will, but even of His own existence.

If we look at Cassirer's text again, we find this transition effectively underlined: 'as we find [...] in the prolegomena of [Grotius's] work On the Law of War and Peace, the Platonism of modern natural law is most perfectly expressed'¹⁶. And again: 'in enacting his various positive laws the legislator follows an absolutely universally valid norm which is exemplary and binding for his own as well as for every other will. It was in this sense that Grotius made his famous statement that the propositions of natural law would retain their validity even if one were to assume that there was no God or that the Deity was not concerned with human things. This statement is not intended to open up a chasm between religion on the one hand and law and morality on the other. [...] The assertion that there can and must be a law even without the assumption of divine existence, is therefore not be understood as a thesis but as a hypothesis'¹⁷. Ultimately, it means bringing into the field of law those things that had been acquired by modern science: it means finding a source of legal knowledge which does not flow from divine revelation, but which is established in itself, in its 'own nature', in fact. Just as Galileo asserted and fought for the autonomy of physicalmathematical knowledge, so Grotius stood up for the selfdetermination of knowledge of law.

Therefore, and just to make explicit the centre of nascent modern natural law, for Grotius the law does not exist because God exists: 'it springs from the pure idea of the good, from the idea which Plato had said surpasses everything in force and age'¹⁸.

This statement by Grotius, in the Age of Enlightenment, appeared revolutionary and a precursor of the new secular and anti-theological culture, to which Grotius's doctrine of natural law would therefore open the way in the field of morals, law and politics. And indeed we can also add that in that sense he acted historically. Grotius's work, created in the seventeenth century, as a systematic treatise on supra-natural law, and the fame it attracted all over Europe, had the merit of disseminating the idea of a 'natural law' in the sense of a 'non supernatural' law, a law whose source of validity lay exclusively in its conformity with human reason. This conception of natural law, without a doubt, contributed fundamentally in spreading the idea of the necessity for positive law and for the political constitution of the States to conform to such a law.

Before proceeding any further, it is worth repeating a summary of the salient passage: essentially, there is no fracture between ancient, medieval and modern doctrines of natural law, on the contrary, there is a traceable sign of substantial continuity. As emphasized by one of the great scholars of these problems, Pietro Piovani: 'having perfected itself in the medieval order, the doctrine of natural law is being corrupted in the modern "disorder". The effort of creating a *single* order realized in the Middle Ages with the aid of impulses originating in Hellenic and Hellenistic culture is giving way to an effort towards an ordinatio ad plura.'19 As the sought-after unity of the medieval universe has disintegrated, the modern age has certainly pursued the universalistic trajectory of natural law, but in the sense of completing the parabola. In this, therefore, lies the mark of continuity.

The modern doctrine of natural law has placed the accent strongly on the subjective aspect of natural law, on its so-called *innate rights*. It is precisely because of that very characteristic that it has had such a profound effect on political doctrines of an individualistic and liberal tendency, imposing the demand for respect on the part of political authority for what are proclaimed as the 'innate rights of the individual'.

The State itself is considered by the modern doctrine of natural law to be a voluntary action by individuals rather than, as in most classical and medieval doctrines, an institution which is by nature necessary. For modern jurists of natural law, individuals are abandoning the 'natural state' and putting their faith in the politically organized State, endowed with its own authority in order that their natural rights may be better protected and guaranteed; and the State is legitimate by virtue of and until it fulfils its essential function, which has been delegated to it through a contract, namely a pact between citizens and sovereign. In some of these modern doctrines of natural law, individualism is even pushed to the point of regarding this contract between individuals to be society itself, and of defining the social contract in two expressions: a pact of union and a pact of subjection. But this is much rarer than we might think, because even among modern jurists of natural law the 'natural state' has been generally represented as a form of society: a

¹⁶Cassirer E (1932): 240.

¹⁷Cassirer E (1932): 240.

¹⁸Cassirer E (1932): 241.

¹⁹Piovani P (1961): 77.

society which is nevertheless precarious and uncertain, meaning that it is not only appropriate but necessary to find a way out of this condition and create an organized politico-legal institution.

This was the case of Hobbes, for example, who, in order to overcome the 'natural state' in which one man preys on the other, was forced to invent a State that was so powerful that it commanded as much fear as possible.

Here I would like attempt to extract a few points of connection: innate rights, natural state and social contract, although interpreted differently by various authors, are characteristic concepts of the modern doctrine of natural law. They are to be found in all doctrines of natural law of the seventeenth and eighteenth centuries, so much so that it was possible to speak of a 'school of natural law', albeit somewhat inappropriately.

Inappropriately, because the theories of the various sixteenth and seventeenth century natural philosophers, among whom we count not only Grotius, Hobbes and Locke, but also Milton, Pufendorf, Thomasius, Wolff, Vattel and in a very particular position Rousseau, Kant and, during the early phases of his thinking, Fichte, present us with differences that are sometimes extremely profound.

Amongst this fissure of differentiations we must surely consider the case of Rousseau: in his second work, Discourse on the Origin and Basis of Inequality Among Men (1755), Rousseau was already trying to reconstruct the history of humanity from a hypothetical 'natural state'. Not a state, however, conceived in the manner of natural philosophers, as the natural social basis from which the State will rise, but rather as a primitive and brutal condition in which animal-man has yet to distinguish himself from other animals and knows no form of sociality. According to the reconstruction provided by Rousseau, natural catastrophes gave rise to the formation of the first social groups, on the basis of which would develop that which is unique to the human race: language, passions, technology, arts, work. Only at this point did the idea of inequality begin to establish itself, and not on the basis of original and natural differences, but on the basis of causal events which had allowed some to secure what goods there were, while obliging others to sell their own work to survive.

The doctrine of natural law of the sixteenth and seventeenth centuries, and I believe that this is the crucial fact to bear in mind, committed a grave error of historical interpretation: not only by advancing these as events that had actually happened as well as being required by reason, but also by conceiving as claims and necessities of reason those very things which in reality were political and economic demands of the society of the time, in essence imposing that same reason as a unifying code of reality and, therefore, as a metaphysical claim that everything can be harmonized. A claim which, all things considered, again presupposes the classical form of humanism with which we still interact today.

A first deconstructive observation comes to us from Marchesini, on the very subject of 'harmony' as a distinctive mark of the totalistic metaphysics of the theories of natural law, when he states that: 'order and harmony reveal the deep need to clamp down on becoming, namely to identify ontological limits [...] capable of sustaining the system in a state of apparent motility. The logical consequence of this interpretation is the tendency to consider change as something opposed to the natural order of things and therefore to be considered as some kind of dangerous mutation. [...] Harmony, as the finalistic and organized arrangement of relationships [...] is a characteristic which [...] closes the system and in a certain sense is enclosed in itself. Harmony is autarchical organization [...]. It is given by [...] and is indicative of beauty and justice. Order and harmony rest on the idea of measure, or rather of particular entities which rule the nomos of the cosmos in an inflexible and static manner.'20

We could also add that a highly significant guilt was added to these metaphysical cathedrals, and with extreme theoretical efficiency, by Ortega Y Gasset when he stated that 'nature is a thing, a great thing, that is composed of many lesser things. Now, whatever be the difference between things, they all have one basic feature in common, which consists simply in the fact that things *are*, they have their being. And this signifies not only that they exist, that there they are, in front of us, but also that they possess a given, fixed structure or consistency. [...] Today we know that all the marvels of the natural sciences, inexhaustible though they be in principle, must always come to a full stop before the strange reality of human life. Why? If all things have given up a large part of their secret to physical science, why does this alone hold out so stoutly? The explanation must go deep, down to the roots. Perchance it is no less than this: that man is not a thing, that it is false to talk of human nature, that man has no nature [...]. Human life [...] is not a thing, has not nature [...]. Man [...] has no nature; what he has is ... history.'²¹

²⁰Marchesini R (2002): 200, 201.

²¹Ortega Y Gasset in Cassirer E (1944): 218.

But if things really are as Ortega says, why linger so much over apparently minor aspects of 'questions of natural law'?

This major part dedicated to the doctrine of natural law, extended to the point of involving issues such as those of the State, the law, the social contract, in fact militates against an understanding of the full import of the *epochality* of the historical situation in which we find ourselves living.

If the speculative capacity of our traditional humanism is at stake, as it is at stake, that means that what is in question, the *object* of the question, is the structure, the entire conceptual scaffolding of this humanism and, consequently, of everything which has depended on it and still depends on it today.

Let us try to understand and assess this junction a little better: the ideas and visions of natural law gave rise not only to certain interpretations and acceptations of human nature, but over the centuries we have also used them as the basis on which we have produced and erected our superstructures. Elaborations and concepts such as those of State, society, religion, law and even science have been moulded and modelled, including in the way in which they interrelate – an interrelation which defines our identity – from these visions or rather from these metaphysical and totalistic acceptations that have a strongly anthropocentric background.

Visions and acceptations of a realm of order, of reason and spirituality or of both, a realm based, in its various forms, on a definition of man as the bearer of a supremacist autonomy and separateness which, owing to ontological tendencies towards steady decay existing within the being (man), have guaranteed, in terms of an original purity and perfection (that of being) to which it finally conforms, not only a kind of existential independence, but also the possibility of building and maintaining a unique and systematic whole. And it is here that the meta-naturalistic, meta-physical pretension of traditional humanism lies and has lain.

This is not a value judgement that is in question here, merely a descriptive profile. The problem is not to judge whether it has been a good or an ill: at this stage of the analysis that would not make much sense. We must limit ourselves to recording a development which, despite everything, despite its irresolvable internal contradictions, has opened the way to our current epochality with its definitive short-circuit. Although, and it is nullifying to even specify this point, from a perspective that is anything but attributable and ascribable to the philosophy of history. Hence without this development being compressible in any forced chain or historical processuality.

Changing, thus, the idea, the vision of man in the sense that we shall shortly reveal, that not only is traditional humanism in crisis, but also everything that has been and is unrelated to it. This, we can say, is the meaning of that crossroads, that epochal junction (because historical and determined historically) in which genetics, genetic engineering and cybernetics have pursued and continue to pursue a project of decisive fracture.

If the aim is the delineation of a neo-humanism which tries to base itself on new acquisitions of these points advanced by contemporary science, then all our superstructures are affected. This is epochality and it obliges us to think and to act less as a consequence, or even *in* consequence, that is *in* a situation, or rather in the preliminary awareness that, beyond traumas or schizophrenic responses, we cannot go back and embrace lost horizons. Horizons which, on account of their unitary and cohesive nature, have surely engendered safety and certainties.

But the epochality of our historical period is the abandonment of any kind of metaphysical safety, of a totalism in which every tiny fact necessarily has its place and order. The aim of metaphysics as counter-evidence of the projective self-referentiality of mankind is to collapse the edifice of self-absolving and self-fulfilling guarantees and certainties, such as those that consider culture to be 'second nature'.

We therefore need to define some new coordinates, based on the old ones, in the knowledge that this *novum* – and not just potentially – will in itself be of interest to every area of humanity.

Provocatively, I would like to hazard a perhaps more stimulating hypothesis to lighten the discourse, and that is that the literary genre of science fiction, among its more dedicated authors, has cultivated some fundamental features towards a delimitation and definition of this *novum*. And it has done so not so much and not only through its visionary capacity to envisage prophetic scenarios, but rather because of its own constitutive charter which, precisely because 'the true protagonist of a Science Fiction story or novel is an idea and not a person' and 'if it is good Science Fiction the idea is new, it is stimulating, and, probably most important of all' it sets off 'a chain reaction of ramification ideas in the mind of the readers²², it is able to reveal 'a new need for contiguity and experimentation of being based on the most advanced acquisitions of science'23.

We can see, in a special way, what Philip K. Dick - the author we started out with - wished to convey in his own science fiction stories.

'I have, in some of my stories and novels, written about androids or robots or simulacra - the name doesn't matter: what is meant is artificial constructs masquerading as humans. Usually with a sinister purpose in mind. I suppose I took it for granted that if such a construct, a robot, for example, had a benign or anyhow decent purpose in mind, it would not need to so disguise itself. Now, to me, that then seems obsolete. The constructs do not mimic humans; they are, in many deep ways, *actually* human already. They are not trying to fool us, for a purpose of any sort; they merely follow lines we follow, in order that they, too, may overcome such common problems as the breakdown of vital parts, loss of power source, attack by such foes as storms, shortcircuits - and I'm sure any one of us here can testify that a short-circuit, especially in our power supply, can ruin our entire day and make us utterly unable to get to our daily job, or, once at the office, useless as far as doing the work set forth on our desk'24.

But what then is the question, the central idea supporting this type of framework?

'I would like, then, to ask this: what is it, in our behaviour, that we can call specifically human? That is special to us as a living species? And what is it that, at least up to now, we can consign as merely machine behaviour, or, by extension, insect behaviour, or reflex behaviour?'25

And, most likely, the outline of the response prepared by Dick will supply some interesting elements to be developed.

First of all, 'by "android" I do not mean a sincere attempt to create in the laboratory a human being [...]. I mean a thing somehow generated to deceive us in a cruel way, to cause us to think it to be one of ourselves. Made in laboratory - that aspect is not meaningful to me; the entire universe is one vast laboratory, and out of it come sly and cruel entities that smile as they reach out to shake hands. But their handshake is the grip of death, and their smile has the coldness of the grave'²⁶.

And: 'a human being without the proper empathy or feelings is the same as an android built so as to lack it, either by design or mistake. We mean, basically, someone who does not care about the fate that his fellow living creatures fall victim to; he stands detached, a spectator, acting out by his indifference John Donne's theorem that "No man is an island", but giving the theorem a twist: that which is a mental and moral island *is not a man*^{'27}.

Now, apart from the science fiction (?) intrusion of the android, of the human-android relationship, the question before us is clear: what is human? What is it that makes a human being human? If Dick's assessment of the android holds true, despite the brilliant idea behind it relating to the bordering progressive nuance that would sustain his attempt to mix the human and android in terms of the extraneousness of otherness, it seems obvious to me that a first level of response would lead us to distinguish the human as something to which we attribute the prerogative of the 'natural'. Even if, in the final part of the passage quoted above, Dick himself has taken a decisive theoretical turn on this: owing to the extraneousness of the other already referred to, there is no difference between the 'natural' and the 'synthetic'. And that's not because the notion of naturalness, and with this that of artificiality, is in crisis.

Again, we must start by clarifying our terminology: as for natural, after the long excursus on the doctrine of natural law we should at least have an idea of its problematic nature, namely the problematic nature of something which we can express as the 'essential quality, innate disposition', if not quite the 'inborn character' and 'state of being'. But the thing that is interesting to stress relates to the term 'artificial'. In its commonly accepted meaning, it is 'not natural', i.e. something that involves a 'mechanical labour' in order to create a form out of nature.

From which it appears clear that its traditional acceptation is the result of contraposition, of differentiation through negation by a preconception: precisely that of nature, of the natural.

It is therefore the conceptual crisis of the 'natural' which calls into question, calling for transformation, the 'artificial'. It is naturalness, the notion of man's nature – as Ortega understood - which is in crisis, or rather the

²²Dick PK (1981): 100.

²³Marchesini R (2002): 139.

²⁴Dick PK (1972): 129.

²⁵ Dick PK (1972): 130.

²⁶Dick PK (1976): 147.

²⁷Dick PK (1976): 148.

foundation of our classical humanism; which means that we are being called upon to reformulate all these categories, starting with the artificial, awarding it its own substantive autonomy.

If it is true, as seems plausible, as the biophysicist Gregory Stock recently claimed, that 'we are on the cusp of profound biological change, poised to transcend our current form and character on a journey to destinations of new imagination'²⁸, such that the prospect of 'the arrival of safe, reliable germline technology will signal the beginning of human self-design'²⁹, or rather that presage that 'the technological powers we have hitherto used so effectively to remake our world are now patent and precise enough for us to turn them on ourselves. Breakthroughs in the matrix-like arrays called DNA chips, which may soon read thirty thousand genes at a pop; in artificial chromosomes, which now divide as stably as their naturally occurring cousins; and in bioinformatics, the use of computer-driven methodologies to decipher our genomes - all are paving the way to human genetic engineering and the beginnings of human biological design'³⁰.

If it is true, in other words, that 'never before have we had the power to manipulate human genetics to alter our biology in meaningful, predictable ways'³¹, precisely because 'biological enhancement will lead us into unexplored realms'³² to the point where we can predict that 'progressive self-transformation could change our descendants into something sufficiently different from our present selves to not be human in the sense we use the term now'³³, it all implies that we are changing the meaning (or meanings) that we have hitherto attributed to the concept of what it is to be human.

The question, therefore, extracted from the science fiction of 'what is human', to avoid falling once again into the metaphysical trap, could be merely that which is less recognizable and which, through the medium of science itself (Ortega's naturalism, for example), wonders about the *essence* of humanity, should be remodelled or even reformulated as follows: what is the *sense* of humanity?

Our age is asking us and we cannot wait any longer. We need to reconsider the sense of what is human, and we need to do this from the enucleation of what is the method, what are the methods of humanity. There is no doubt, as has been emphasized, that we have entered 'the confused stage of a man in completion, in which mutations, hybridizations, infections/invasions of the human *kosmopolis* [...] are turning into opportunity'³⁴.

That is to say, principally, of an acceleration in the direction of man's mobility. A mobility which is defined first and foremost historically and which, with an ever more insistent rhythm thanks to the possibilities of modern science, is articulated through contamination, the mixed co-existence with extraneousness, with otherness, whether that otherness be organic or inorganic.

Here, evidently, we find again the initial hurdle that we decided to overcome, that of the nature/culture antinomy. Hybridization, or any plan to deform and mutate is plausible only if it is capable of imagining a plastic and flexible correlation and co-partnership between the 'innate' and the 'learned'. If we consider our genetic heritage as a static form which is handed down from generation to generation, just round the corner there now lies not only and not so much the danger of a drift from the nature of innateness and substantiality, but a reintroduction of a more sophisticated form of natural law.

Mobility on the other hand is fundamental to human beings: our genetic heritage also is in a constant process of deformation if only, as it has appeared hitherto, by 'natural' evolution. But that does not really tell us about the plasticity of mankind or, in a nullifying way, of what we should understand by 'innate', of how that adjective can be misleading in its pretension of 'unity'.

Plasticity, that constant tension with change, with deformation as a device for osmotic dialogue with difference, as a true and proper co-existence beating time with difference (in this sense of otherness), is therefore something structural to and structuring of human nature.

We can decide to force up the tempo of this plasticity by completely new methods. But not in a regime of contraposition between nature and culture – or rather under the sign of cooperative correlation – or under the banner of another mythical drift: that of the absoluteness of technology, and that is because technology is not a new method of self-revelation of being, but nothing more than an opportunity of mankind for mankind.

²⁸ Stock G (2002): 1.

²⁹ Stock G(2002): 3.

³⁰ Stock G (2002): 13.

³¹ Stock G (2002): 1.

³² Stock G (2002): 2.

³³Stock G (2002): 4.

³⁴Marchesini R (2002): 192.

Coexistence mixed with difference, a differing which is as organic as it is inorganic, finds shaky ground on and in this plasticity: and here, as a further step, plasticity no longer refers only to man's biological 'disposition', but also and above all to his historically determined ability to build and make himself over time.

Man is 'making' because he is before everything a selfcreation, a continual self-fabricating exercise which traces its own unique frontier in the concept of an existentive limit.

The innovation that makes the epoch, therefore, and which colours our deforming capacity in a completely new way as unbroken bio-poietic processuality, we could connote as a *bio-mechanical-poietic* deforming activity. In other terms, innovation is above all about the modalities of $\pi o (\eta \sigma \iota \varsigma o n)$ the $\beta (o \varsigma a n d)$ which, including for reasons of communicative synthesis, we could call 'mechanical'. Not in the sense of being subject to some ideal form of mechanism, or simply because the bio-poiesis resolves itself in a mechanical 'product'. But principally because ποίησις is realized through machines (and correlated technologies), designed and built by the β (oc and, above all, for the $\beta(oc, with a view to deforming that <math>\beta(oc, Here$ the three words of the inscription, β ios, π oinois and machine stand in a very close, not to say intimate and indissoluble correlation to one another. An osmosis which plays on a more articulate and innovative acceptation of man: man as open system.

Open above all in the sense of a system that is constantly been projected towards new methods – theoretical or practical – of interpretation and experimentation as much by its own phylogenesis as its ontogenesis to the point that, as indicated, its distinctiveness resides in that inexorable deformative relationship, of contamination-mutation with the complex of external agencies and with itself. But open also in the sense of contra-reciprocal of pure system, that is closed around its own imaginary purity and perfection, its own self-referentiality as being, not just quantitatively, but also qualitatively finished once and for all.

Obviously, here 'open' does not mean that, deep down, there is no equilibrative tension. It is only that it moves gradually, situationally, in terms of its deformative capacity and possibility. Man, therefore, is an 'open system' which proceeds in progressive shifts, attempts not so much to push his own frontiers a bit further as if there were a communication trench that had already been marked out and, consequently, a new finalistic order to be recomposed. But rather, and more strictly, further shifts and attempts at deformation and contamination-mutation caused by that inscribed pressure for modification against any ontological fissism.

Reading man as an open system definitively collapses any substantialistic conception and any pretension of unchangeability in man himself. As Roberto Marchesini has explained, once again in exemplary fashion, man is 'an explorer capable of finding continual conjunctive methods of approach'³⁵ to the point that 'humanity exudes the nonhuman and builds itself through the abandonment of solitude and the pleasure of connection with the other, the different, capable of bringing new states of nonequilibrium and yet of reinforcing man's instinct to conjugate with the world' $^{36}\!\!\!$, the consequence is soon stated. The subject can no longer identify itself 'in a project of rediscovered virginity or in a process of purging itself of otherness but, on the contrary rediscovers its own personal and creative character through dealing with the system of otherness [...] that moves within him. In this sense every subjectivity is open, the fruit of a creative and non-determined process'³⁷.

And that is the subject, man is *conatus fabbricandi* beyond any chauvinistic presumption of anthropocentrism. In the end, there is no possibility of that because there subsists a universal law that consecrates anthropocentrism, that is a law connoted by its anteriority and ethical superiority. Man's space, what makes man a *conatus fabbricandi*, lies in the effort-value relationship.

If the value has value, provided it passes, each time, through the (historical) reaffirmation of its own validity and applicability, or rather the value and valuation which must unfailingly take account of its own historical effectiveness and ethical persuasiveness, and if the effort has value, as a capacity and (historical) possibility of opening new bio-(mechanical)-poietic horizons, the effort-value relationship is bi-directional. On the one hand value as historical enhancement tests and verifies the effort; on the other, the effort itself calls into question, and intrinsically induces, the validity and historical resistance of the value itself and hence of its own applicability.

This *fluid* effort-value correlation certainly throws open the doors to the possibility of an unstable ethics which is consciously provisional and no longer supported by an anchor to metaphysics, to an ultra-physical ethical

³⁵Marchesini R (2002): 69.

³⁶Marchesini R (2002): 70.

³⁷Marchesini R (2002): 70-71.

An effort which, ever the child of the dual burden of man's temporal finiteness and of his precarious effortvalue relational situation (which could be described as a provisional situational ethic), makes room for the foundation of an ethics carried by an ethical *surplus*. Because to maintain itself, without 'tables of the law', in the situation and, at the same time, to have the capacity to orientate itself within it in reformulating distinctions of value that may actually be valid from time to time and, finally, to come to a decision about them, requires a surplus of strength and reflective application, as well as a prospective test.

fascinating scenarios, in an optic of circularity that does

not know, cannot know, the solution to continuity.

But, in the end, and here a small anthropocentric stain could easily seep into the tracery of the discourse, it may be possible to say that it is this which harbours the *dignity* of man which, in whatever way, together with his deforming capacity, marks out his distinctiveness, and in some respects, his uniqueness.

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