

Hominisation and humanisation: a perspective from the sociology of technics

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Abstract: This essay will present a few challenges to a new Humanism from the perspective of the sociology of technics. For this purpose Humanism will be described as an effort to intervene in the process of human formation or hominisation. In order to intervene an understanding of this process is needed. Hominisation starts in the Palaeolithic era: technics, religion, language and the human being mutually give birth to one another. Reference will be made especially to the work of Leroi-Gourhan and Girard to analyse this point. Hominisation, however, is a continuous process and has not come to an end. The most recent phase of our hominisation is the industrial revolution: Western modernisation seems to be the future of global humanity. But industrialisation spreads unevenly, leading to a varied network of the human conditions, of advantages and disadvantages. A critical assessment of Africa's position in the global politics of technics will lead to a description of inhuman conditions as part of the network of industrialisation. The scale and extent of misery tolerated and produced by this era of hominisation could be considered as a possible springboard from where to reflect on a contemporary global Humanism even after the 'death of God' in modernity. But to what extent does modernisation allow intervention in the process of industrial hominisation in order to give it the quality of humanization? Aspects of theories on multiple or alternative modernities are considered. A suggestion to the kind of humanist orientation solicited by the inhuman condition of misery is presented with reference to Nussbaum's capabilities theory. Finding the content of a new Humanism is, however, only a beginning of a new humanization. The technical conditions for the possibility of a new Humanism and of its transmission are reflected on. In conclusion, on the basis of the preceding analyses, five technics-orientated tasks for a new Humanism will be identified.

Keywords: New humanism, sociology of technics, hominisation, Paleolithic era, cultural history, ethology, network formation, modernisation, Africa, capabilities theory, globalisation, homogenisation.

1. Paleoanthropological and cultural historical introduction

The living organism that is in the centre of all discussions on humanism, *homo sapiens sapiens*, has been in existence for about 100 000 years and is, with the *homo sapiens neanderthalensis*, the latest

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development in the evolution of the species *homo* that has been present on earth for the last two million years. This is the only species to survive from the hominid genealogical tree of which the furthest testimony is at this stage given by the fossils of Thoumai (seven million years old). *Homo sapiens* represent the most sophisticated point of an evolutionary line of which the most salient characteristics are the following:

- A bilateral symmetrical anatomy accompanied by mobile habits (GP 26);
- The development of the forelimb and facial organs;
- The complimentary anatomical and functional development that withdrew the forelimb from use in locomotion and involved it in a functional coordination with the mouth; and
- The development of the hand to use tools and of the brain to assume the coordination of functions more advanced than in any other species hitherto. The end effect of this process, that I describe here borrowing principally from Leroi-Gourhan¹, is an organism that is characterized by an 'erect posture, short face, free hands during locomotion, and the possession of movable implements'.²

Such is the state of existence of hominids before the dawn of the species *homo*. With the subsequent developments of the hands and brain we encounter an organism with practically the same anatomical qualities as humans have today, this, before the coming of *homo sapiens* in which the functioning of these will still advance.

The specifics of the hominids' digestive system were also responsible for the formation of a recognizable social organisation. This proto-institution is determined by the type of food needed for the organism and hence its territorial spread and population density (GP 150). 'Humans could not have survived living in herds or living alone' (GP 156). Added to this should be taken into consideration the slow growth of infants for which females had to take care and probably the company of weaker individuals, both of which would have inaugurated forms of social specialisation (GP 153).

1 Cf. A Leroi-Gourhan, *Gesture and Speech*, (MIT Press: Cambridge Massachusetts & London, 1993). Randall White, in his introduction to this English translation of *Le geste et la parole* (1964) [to which will be referred to as GP], describes the project of this book as a 'systematic attempt [...] to assemble all the components necessary to a kind of 'united theory' of human biocultural evolution' (p. xvii). This paleoanthropological theory provides the current study of the basic orientation and assumption with regards to the intimate connection between the biological and cultural (technical and linguistic) evolutions of the hominids.

2 These are Leroi-Gourhan's criteria for humanity (GP 19). It should however be noted that what he calls humanity here includes all the organisms that I have opted to refer to as the hominids.

Thus by the time *homo sapiens* appeared on the scene of world history, its ancestors had already made fire and fabricated tools (GP 89³) and it had also had a form of social organisation. But these elements of a proto-culture could still be explained in the same way as one does that of other animals. In order to pass the threshold into humanity (*Homo sapiens*), the biological evolution should be taken over by an *ethological evolution*.⁴ The transgression of this frontier is attested to by fossil remains of human action: in particular the accelerated advance in the development of *tools*.⁵ Initially the fabrication and use of tools were integrated in the biological development of the species to which it remained parallel and of which it could be considered a mere extension (rather than the product of a mental project or discovery, (GP 106). But when the biological development had in essence reached its point of culmination, the technical development of the species started soaring.⁶ The technical development consists of a complexification of means of production of tools, enhanced efficiency of tools and diversification of tools.

The same specialisation of the neurology of the brain that lead to the truly human use of tools is also responsible for the truly human use of *language*; the formation of technical syntax testifies to the formation of the technics of language.⁷ This allows paleoanthropologists to believe that the ascent of the fabrication and use of tools was accompanied by the ascent of the use of language (GP 113-114).

3 *Encyclopaedia Universalis*, Edition 8, DVD, 2002: art. 'Paléolithique': 'In the current state of knowledge [...] the invention of the tool is attributed to the Australopithecus.' (My translation.)

4 'By the time of the *Australopithecus*, the hand must have been almost as it is today. By the end of the Archanthropian stage, the development of the technical brain was practically complete' (GP 117). Henceforth 'major changes had to result, not from input of new matter, but from changes in proportions between different parts of the brain' (GP 130). GP 26: 'the brain was not the cause of developments in locomotory adaptation but their beneficiary'. These palaeoanthropological observations seem to affirm at least the essentials of the role of motricity in the functioning of consciousness as described by Merleau-Ponty in his *Phénoménologie de la perception* (cf. especially pp. 114-172, 'La spatialité du corps propre et la motricité').

5 As was already remarked by Marx, in *Das Kapital V*.

6 Cf. *Encyclopaedia Universalis*, Edition 8, DVD, 2002: art. 'Hominidés': 'our evolution that was principally physical up to the arrival of *Homo sapiens*, then became cultural.' And *ibid*, art. 'Paléolithique': 'The passage to humanity, the point of no-return of hominisation is not defined exclusively by anatomical criteria (standing posture, cerebral capacity) any longer, but by a criterion of behaviour: the capacity to fabricate tools.' (My translations.)

7 Cf. GP 114: 'Techniques involve both gestures and tools, sequentially organized by means of a 'syntax' that imparts both fixity and flexibility to the series of operations involved. This operating syntax is suggested by the memory and comes into being as a product of the brain and the physical environment. If we pursue the parallel with language, we find a similar process taking place.'

When this technological and linguistic development beyond biology development took place, when ethology superseded biology as formative of the new species, human society formed in distinction from the zoological species (GP 131); a social body formed of which the characteristics is cultural and of which the study exceeds that of the study of the constitutive members.

The formation of the most archaic human society is theorized by René Girard.⁸ His theory is ethological and starts by what is common to hominids and other animals, namely behaviour of imitation, and more specifically behaviour imitating desire (mimetic desire) that leads to mimetic rivalry.⁹ But instead of giving rise to patterns of dominance as in animals the mimetic behaviour and consequent rivalry is intensified in the late hominids by the augmented brain (*Des choses* 127-8) the complexification of technics (*Origines* 165) and associations by other individuals with the conflicting enemies.

At the height of this rivalry, the initial object of desire blurs to the background; only the mimetic antagonists remain in one another's perspective. In this situation of mimetic crisis, a scapegoat effect enters into motion whereby the antagonism of both the conflicting parties is transferred and directed at a victim (*Origines* 77). Once the intense violence has spent itself on the sacrificial victim, a mimesis of reconciliation appeases the two antagonistic camps and restores social order. In an attempt to avert the reoccurrence of a mimetic crisis, the collective murder of the scapegoat is ritually re-enacted.

This process that is a shorthand rendition of a very long evolutionary process theorises the event of hominisation.¹⁰ The origin of all culture could, according to Girard, be traced back to this process. Space does not allow me to go into the detail of how the domestication of animals and the development of agriculture are explained to have emerged from this religious nucleus. Two elements of his theory should be stressed.

First, the aspect of language. Religion, or sacrifice, or ritual marks the

8 I shall refer principally to *Des choses cachées de puis la foundation du monde*, Grasset, 1978 [abbreviated as *Des choses*] and *Les origines de la culture*, Desclée de Brouwer, 2004 [abbreviated as *Origines*].

9 'Violence is not originary; it is a by-product of mimetic rivalry.' 'Mimesis and violence' (1979) in J G William (ed.), *The Girard Reader*, (The Crossroad Publishing Company, New York, 1996), pp. 9-19, (citation, p. 12).

10 'Beyond a certain threshold of mimetic power, animal societies become impossible. This threshold corresponds therefore with the appearance of the victimary mechanism; it is the threshold of hominisation.' // *Au-delà d'un certain seuil de puissance mimétique, les sociétés animales deviennent impossibles. Ce seuil correspond donc au seuil d'apparition du mécanisme victimaire ; c'est le seuil de l'hominisation.* (*Les choses* 128, my translation.)

commencement of language: it is the first use of something to be not only what it is, but to be taken for something else, in short, it is the first symbol (*Origines* 157).¹¹ The sacrificial victim as first symbol will be taken by the young humans as the transcendental signifier that jumps out of a surrounding atmosphere without signification (*Des choses* 135) and grounds their symbolic universe, of which the meaning of ulterior cultural phenomena would be derivatives, differentiations or elaborations (*Des choses* 138-9). This holds for sexual taboos, hunting, domestication of animals and all other aspects of the field of symbols or language. It certainly holds for what would henceforth be produced by the hands of society: the artisans. Which brings us to the second important aspect of this theory of hominisation by the emergence of culture.

It should be clear that the scapegoat effect and the consequent production of ritual are preceded by the first forms of technology, which also contributes to the emergence of this process. But once the process of hominisation has started, it grafts the young humans into a new phase of development which spontaneously leads to practices of fabrication and use of tools, in a spiralling augmentation of the use of it. The development of technology even in the young humans transforms the form of its being human. Of this we can once again call Leroi-Gourhan to witness. Big 'techno-economic changes' take place at the end of the paleolithic period (GP 157): proto-stockbreeding from familiarisation with animals (GP160), the contemporaneous emergence of agriculture (GP 161), which led to the concentration and sedentation of humans and ultimately to 'capitalization, social domination, military hegemony' (GP 164).

To summarise: In what precedes I have juxtaposed two quite different theories on hominisation. My aim was not to present a critical discussion of them, nor did I intend to claim that they form a harmonious whole. What is decisive is that the paleoanthropological theory of Leroi-Gourhan and the cultural historical theory of Girard concur that biological evolution was for all intents and purposes finished when *homo sapiens sapiens* appeared on the scene of world history. The subsequent development of the evolutionary line of the hominids that gave us the human being, took place on the level of ethology, that is, behaviour. Whereas the use and nature of tools and language followed a line of development parallel to that of the biological evolution

11 Even if one concedes the sacrifice to be the primordial symbol, in the sense that one thing stands for another, it would be unwise to neglect the symbolic or at least signifying character of the use of tools (that necessarily forms a constitutive element of this mimetic theory): I use this or that thing as a tool, as a knife, as a blanket, etc. This has been convincingly argued by Heidegger under the heading of the 'hermeneutical as' (*hermeneutisches Als*) in *Sein und Zeit*, (Max Niemeyer Verlag, Tübingen, 1927), (see especially §§ 32 and 33).

of the earlier hominids, once biological evolution came to an end, human formation or hominisation was taken over by the souring development in the technical and cultural behaviour of the new human being. What should be learned from the reconstruction of the earliest processes of hominisation is the following:

- The process of hominisation had been going on for a long time when *homo sapiens sapiens* appeared on the scene.
- The development of the advanced fabrication and use of tools and the use of symbols and language are not fortuitous accompaniments of the essential process of hominisation; they are in fact constituting elements of the process itself.
- Hominisation happened to a socialised organism who grew to require tools and language and the acquisition of tools and language created new social forms; after the completion of biological evolution, hominisation takes the form of an interdependent evolution of society, technics and language.
- There is no hominisation without violence *and* the question about violence. From this, I shall venture two assumptions that will lead my reflection henceforth.
- Being human means becoming human. This means, humanity is always submitted to the socio-technico-linguistic process of hominisation. Hominisation has not finished, it is continuing up to this day.
- Humanism is an attempt to intervene in the process of hominisation. It is an attempt to bring about a qualitative change in being human.

I shall reflect on hominisation and on the possibility of a new humanism from the perspective of the sociology of technics. This will be done against the background of the preceding indication of the essential intertwined mutual constitution of the technical, biological, social and cultural aspects of our species. Since history is sometimes kind enough towards researchers to have times of accelerated change, or what is sometimes called ‘revolutions’, I shall allow myself to take up the discussion of hominisation at the latest of these accelerations. Incidentally, this is also one of the most dramatic ones in the history of humanity and took place, or rather, has been taking place since the dawn of the industrial age.

2. The recent phase of hominisation: ethology of industrialisation

The changing ethology of *homo sapiens* under industrialisation has been thoroughly documented by sociology. Practically no aspect of human life has been left unchanged by this process that saw a change from the dominance of the countryside to that of the cities, from a

community constituted mostly by families to a society of liberally associating individuals, from traditional power to bureaucratic power, from the sacred symbolic universe to a secular one, but also from human powered labour to labour supplemented or supplanted by machine work and later the industry of services, etc. Three characteristics of the new technical order that is responsible for the changing ethology need to retain our attention.

2.1 Formation of a network

The process of network formation does not merely consist of the spread of unrelated similarities. Industrialisation is formative of networks of corresponding needs, requirements, provisions, standards, etc.¹² Industrialisation demands amongst others the urbanised structure of human organisation and behaviour:

It sets up a requirement for centralized sites of production, distribution, exchange and credit. It demands a regular system of communications and transport. It calls into being duly constituted political authorities with the power to establish a dependable coinage, a standard system of weights and measures, a reasonable degree of protection and safety on the roads and regular enforcement of the laws. All these developments conduce to a vast increase in urbanization.¹³

The technical network or system is the condition for the creation and often for the maintained use of its products. And the formation of the network binds into the technical process natural resources, but also human beings as designers, constructors, marketers, consumers, audiences, etc. Technical network formation also implies the spread of the technicisation of an increasing number of elements from the human life world: from energy and transport, to governance and memory, to nature and recreation. Furthermore, the spread of industrialisation causes changes in the way of life and incites the formation of new ways of being for labour, family life, politics, authority, recreation, education, etc. Consequently symbolisation and transmission are integral aspects of all technical systems.¹⁴

2.2 Homogenisation

Industrialisation starts its acceleration at a *specific* time and place: in North-Western Europe from the sixteenth century onwards. But soon

¹² On the systematic nature of all technics, cf. Jean-Pierre S eris, *La technique*, (PUF, Paris, 2000), pp. 47-65.

¹³ K Kumar, *The rise of modern society: aspects of the social and political development of the West*, (Basil Blackwell, New York & Oxford, 1988), p 15.

¹⁴ For a perspective on the symbolic and transmitting character of all technics, cf. my 'Transmettre et interpreter: le temps du dialogue' in *M edium* 6, January-March 2006, pp. 30-47.

it seems to become a paradigm on which the whole world is modelled. Very often however the following of this paradigm is considered not that much the consequence of a deliberate plan of imitation, but rather the inevitable outcome of a subjectless process that unfolds itself according to its own logic.

Marxist theorists (from Ellul to Marcuse) have been especially sensitive to this aspect of the technological world. This process of homogenisation could not be ascribed to the forces of colonisation alone. It is clear that even after the process of decolonisation the pressure to develop, i.e. to adopt a program of industrialisation, has augmented. In fact, whereas decolonisation has been suggested to be the political manifestation of the death of God,¹⁵ one could say that the dominant international discourse on development forms a new 'God', a new ultimate and unitary foundation and goal of human culture.

Today, development is a transcultural framework of values, discourses, and symbols, but also of legitimisations, institutions and praxis that is internationally adopted and propagated. This process has not been completed, but is already astonishingly advanced.

2.3 *Marginalization or differentiation*

The effect of marginalisation due to industrialisation is felt locally when the countryside loses its dominance and becomes an annex or extension of the cities; it also happens in the weaker parts of cities, namely in the formation of slums or squatter settlements. Internally, in the industrial centra, marginalisation takes place with the formation of lower classes and the associated precariousness due to automatism, job insecurity, deskilling, dehumanising work and consequent miserable living conditions. These marginalising consequences of industrialisation are spread over the globe, not only in the 'third world', but also in a fourth world of marginalised citizens, immigrants, and illegal immigrants in richer countries

One should also insist on the fact that marginalisation takes a special form inside the centres of power and influence: those who are lucky enough to have an advanced education are in a sense marginalised with regards to the process of technical progress. They are not capable of grasping the totality of their situation;¹⁶ surrounded by the astonishing products of scientific and technological advances, people often live in ignorance about these things, their constitution and their origin. They are frequently reduced to apathy and/or impotence. And

15 Implied by Emmanuel Lévinas in *Humanisme de l'autre homme*, (Fata Morgana, 1972), p. 34 linked with p. 40.

16 This disorientation inherent in the modern condition has already been analysed by Karl Jaspers in *Die geistige Situation der Zeit*, ([1931], De Gruyter, Berlin, 1979).

the conditions for a prosperous life also has a heavy toll in its specific forms of fragilisation of jobs in the service sector, stress and related diseases, loneliness, strained family situations, etc.¹⁷

In short, what I have presented, not without simplification in these three points, is a global industrial network of similar phenomena that creates centres of wealth and influence, in matters of economic, political and symbolic power, and relegates other areas or forms of life to a periphery often of powerlessness and misery. Such is the human technical condition in the world today. In order to qualify better some aspects of this condition, I shall now return to each of these points.

3. Globalisation of the socio-technical network

The expansion of the technical network has become global, as we all know. Two aspects of the global spread of technology should be highlighted.

1. The industry responsible for its spread is not only of the nature of production and trade of goods, but is also an industry of communication, culture, sport, crime, war, information, etc.; and
2. If the metamorphosis of the technical condition of primitive humanity was integrally linked with that of other aspects of being human (as described above), this still holds for human beings in the age of the global industrial society. This fact is recognised in the use of the term *socio-technical system*. The lesson of the social constructionist theories of technology,¹⁸ has been to emphasise the indispensable social aspect of any technical system: technical systems are 'both socially constructed and society shaping'¹⁹ (and Leroi-Gourhan could just as well have written these words). The socio-technical system comprises physical artefacts, but also organizations, scientific elements, a legislative and judicial sphere and natural resources, each with its own associated sociosphere of personnel and institutions.²⁰

The socio-technical network spreads its web throughout all aspects of human reality, carrying with it, implicitly or explicitly, values,

17 On this subject, see K Kumar, *The rise of modern society: aspects of the social and political development of the West*, pp. 23-25.

18 Cf. W.E. Bijker, T.P. Hughes and T.J. Pinch (eds.), *The social construction of technological systems: new directions in the sociology and history of technology*, (MIT Press, Cambridge, Massachusetts & London, 1987) and W.E. Bijker and J. Law (eds.), *Shaping technology / Building society. Studies in sociotechnical change*, (MIT Press, Cambridge, Massachusetts & London, 1992).

19 TP Hughes, 'The evolution of large technological systems', in *The social construction of technological systems*, *op. cit.* pp. 51-82 (citation p. 51).

20 Cf. *ibid.*

symbols or ideas that determine how human beings understand themselves and live their lives. The spread of this socio-technical web has in our time become known under the popular name of globalisation, and could be defined as

the widening, deepening and speeding up of a worldwide interconnectedness in all aspects of contemporary social life, from the cultural to the criminal, the financial to the spiritual;

it is

a process (or set of processes) which embodies a transformation in the spatial organization of social relations and transactions – assessed in terms of their extensity, intensity, velocity and impact – generating transcontinental or interregional flows and networks of activity, interaction, and the exercise of power.²¹

None of the terms used to compile this description can retain their meaning if they are emptied of their socio-technical import. It is, however, important to know that this development is neither complete, nor unambiguous. The following two points – the precisions on homogenisation and marginalisation – bring further precisions to this global network.

4. Multiple modernities

That socio-technical globalisation is not completely as homogenous as presented above, has also been well documented. We know that the new technical possibilities open up new possibilities of resistance to globalisation. We also know that globalisation is accompanied by movements of localisation or regionalisation or even anti-globalisation. But often these movements also use the means of the global network.²²

The most spectacular recent example is the use of advanced media technologies by religious fundamentalists in the clash of ‘Jihad vs McWorld’, in fact Barber acknowledges that ‘Jihad is not only McWorld’s adversary, it is its child’.²³ This, however, only suggests a deeper ambiguous and contradictory process of homogenisation. Correlative to the emergence of a theory of social constructivism in the sphere of technology seems to me to be the subsequent theory of multiple modernities. Instead of presuming that the western form of modernisation is the template according to which all societies will

21 D. Held (et. al.), *Global transformations: politics, economics and culture*, (Polity Press, Cambridge, 1999), pp. 2 & 16.

22 Cf. Krishan Kumar’s overview of ‘Globalisation’ in *From post-industrial to post-modern society: new theories of the contemporary world*. (second edition), Malden, Oxford, Carlton: Blackwell, 2005), pp. 7-16. This book has been an invaluable aid in the writing of this article.

23 As cited by Kumar, *From post-industrial to post-modern society*, op. cit. p. 13.

sooner or later be arranged, this theory illustrates and argues that modernisation does not necessarily imply westernisation.²⁴ The combined conclusion of the social construction of technical systems and the theory of multiple modernities, would seem to point to a global process of non-uniform modernisation due to the spread of the one industrial network. Thus modernisation produces fairly similar phenomena everywhere, forming symbolic worlds that are like the dialects of a same language.

Evidently not every form of modernisation, not every position in the global socio-technical network, is equally advantageous for the people concerned. This brings me to my area of focus.

5. Focus: Africa

Whereas it now seems impossible to say where globalisation is taking us, it is much easier to state where it has brought us thus far. We know that the biggest part of Africa falls on the periphery of the global network. This fact might tempt some to ask if this is necessarily something bad – could Africa not just hypothetically disengage itself from the process of globalisation, continue to live without the means without which it had been living since times immemorial and thus escape the processes that tend to homogenise Africa with its styles of life and symbolic universes to those imposed from elsewhere? Is development the appropriate response to the situation of Africa? I move that if ever there was a time at which this question could be answered in practice with a ‘no’, it is past now. The reason for this is the advanced stage of global industrialisation by which practically the whole world is integrated in one way or another, even if it is only to be the margin of the centre, or to be the used or exploited of the powerful. It becomes exceedingly difficult, if not impossible to live outside of this network, and this holds also for Africa. This seems to me a plausible conclusion to draw from the work of Manuel Castells.²⁵

24 Cf. SN Eisenstadt, “Multiple Modernities” in *Daedalus* 129/1, Winter 2000, pp. 1-29. The author describes the issue as follows: ‘The idea of multiple modernities presumes that the best way to understand the contemporary world – indeed to explain the history of modernity – is to see it as a story of continual constitution and reconstitution of a multiplicity of cultural programs. These ongoing reconstructions of multiple institutional and ideological patterns are carried forward by specific social actors in close connection with social, political, and intellectual activists, and also by social movements pursuing different programs of modernity, holding very different views on what makes societies modern. Through the engagement of these actors with broader sectors of their respective societies, unique expressions of modernity are realized.’ (p. 1); See also D. Sachsenmaier & J. Riedel (eds.) (with S. N. Eisenstadt), *Reflections on multiple modernities: European, Chinese and other interpretations*. (Brill, Leiden, Boston, Köln, 2002.)

25 I draw here especially from chapter 2 ‘The rise of the fourth world: informational capitalism, poverty, and social exclusion’ in Manuel Castells, *End of millennium*, (Blackwell, Oxford, 1998).

It might be the same process of globalisation that stretches over the whole globe, but this obviously does not mean that all people are being globalised in the same way:

Under the new, dominant logic of the space of flows [...], areas that are non-valuable from the perspective of informational capitalism, and that do not have significant political interest for the powers that be, are bypassed by flows of wealth and information, and ultimately deprived of the basic technological infrastructure that allows us to communicate, innovate, produce, consume, and even live, in today's world.²⁶

Even the processes that bring about deprivation, or that cause some regions to be bypassed, are nothing but ways of starting the integration, albeit a distorted integration, of such regions into the global network. This can be adequately demonstrated with reference to the international trajectories of African natural resources, the depositing of toxic waste from over the world in Africa, the quite well-integrated 'high consuming elite'²⁷ of Africa, the sale of weapons to and in Africa, Africa's provision of human capital in forms such as soldiers, even child soldiers, and prostitutes to the rest of the world and lastly Africa's effective internal spread and external export of AIDS. Africa can thus not escape development, it is being developed, it is being hominised all the time.

With this focus on Africa I conclude my discussion of the first subject in the title of my paper, namely *hominisation*, as I have called it, with palaeoanthropology and ethology, but that I would like to call, for the purposes of this essay, *Menschbildung*. Human beings are constantly subjected to a process by which they – their ways of living, thinking, symbolising – are formed. A significant number of writers have stressed the (relative) autonomy of technical progress: technics progresses and functions according to an inherent logic and momentum and not (or not in the first place) according to the wishes and designs of a human author or subject. The autonomy of technics seems to leave little room for improvisation by human beings that are integrated into its field of power. This is not the place to argue about the extent of initiative still available to us, though the recent theories of the social constitution of technics and that of multiple modernities *might* indicate a bigger space for manoeuvring than is sometimes allowed for by the more cynical of authors.

Two points have to be stressed here:

1. There is a global process of *Menschbildung* going on despite us, whether we like it or not. There are different globalisations that bring about different hominisations.

²⁶ *Ibid.*, p. 74.

²⁷ *Ibid.*, p. 91.

2. But this fact is open for evaluation: highlighting the more positive aspects as we have seen in the modern era since Bacon, or the more negative aspects as has been done at least since Rousseau. It has long since become very difficult to consider these changes in a neutral way, as simply the newest phase in human evolution. Some forms of hominisation could be considered as dehumanisation²⁸ and to this I now turn.

5. Technical conditions for humanisation

5.1. Ethical orientation: Adorno on education after Auschwitz

My intuition is that we find ourselves in a situation not dissimilar to the one in which Adorno found himself when reflecting on culture and education after Auschwitz. According to him, Enlightenment has switched over to its contrary to such an extent that this fact confronts us as it were with an appeal for intervention. He says:

Hitler has imposed a new categorical imperative on humans in their condition of unfreedom: your thoughts and actions should be arranged in such a way as to prevent Auschwitz from being repeated, so *that nothing similar happens*.²⁹

Something similar things would happen if the value of a human being were to become instrumental to attaining some other purpose that in practice contradicts the value of humans.³⁰ For me as an inhabitant

28 According to Castells – and I agree fully with this – dehumanisation is not only that of people living and dying in misery (as referred to in the citation above), but that of everybody albeit in different ways: ‘I shall try, in the following pages, to show the complex interplay between economy, technology, society, and politics in the making of a process that denies humanity to African people, as well as to all of us in our inner selves.’ (*Ibid.* p. 83.)

29 ‘Hitler hat den Menschen im Stande ihrer Unfreiheit einen neuen kategorischen Imperative aufgezwungen: Ihr Denken und Handeln so einzurichten, daß Auschwitz nicht sich wiederhole, nichts Ähnliches geschehe’ *Negative Dialektik*, in *Gesammelte Schriften* VI, (Suhrkamp, Frankfurt-am-Main, 1977), p. 358 (my emphasis).

30 The correspondence with the Kantian imperative is undeniable. See also ‘Über Technik und Humanismus’, *Gesammelte Schriften* XX/1, p. 317 in which he pleads for a ‘Menschwürdigere Gesellschaft’ (more humane society or a society more respectful of human dignity), which is described in ‘Résumé über Kulturindustrie’ (*Gesammelte Schriften* X/1), p. 345 by its negation: in the cultural industry ‘Aufklärung, nämlich die fortschreitende technische Naturbeherrschung, [wird] zum Massenbetrug, zum Mittel der Fesselung des Bewusstseins. Sie verhindert die Bildung autonomer, selbständiger, bewusst urteilender und sich entscheidender Individuen. Die aber wären die Voraussetzung einer demokratischen Gesellschaft, die nur in Mündigen sich erhalten und entfalten kann.’ (Enlightenment, that is, the progressive technical mastering of nature, [becomes] mass deception, a means of blocking the consciousness. It prevents the formation of autonomous and independent individuals who judge and decide consciously. Such individuals would however be the condition for a democratic society that could only survive and develop amongst mature people (my translation).

of Africa at the beginning of the twenty first century, I can not but identify this ‘something similar’ as that which is happening today *inter alia* on an enormous scale in the misery of those living in abject poverty in its multiple forms. As for our response to this first categorical imperative, Adorno maintained the very important role of education and claimed that all education (or *Bildung*)³¹ start with the lesson that Auschwitz (or by implication, anything similar) should never be repeated.³² This lesson cannot, and should not be justified, as Adorno indicates. In the same spirit I claim that if there is to be an intervention in our hominisation, if there is to be a new humanism, it could be conceived of only as starting as a response to a similar first lesson, namely that humanity should not be left to sink into the kind of miserable situation tolerated today. This conviction seems to be shared by Jörn Rüsen in the formulation of the project for a new humanism.³³

Inspired by Adorno in this way, I would now like to reflect on the technical conditions for the possibility of any humanism that would be an intervention or a disruption, but also a changed continuation, of the process of hominisation, which means a humanisation or *Bildung* that strives at recognising and safeguarding the value of every human being within a particular historical situation.

5.2 The ‘capabilities approach’ and the technical conditions for an intervention in hominisation

It could be considered counterintuitive to some extent to want to insist on the positive link between ethics and technics, especially when this entails the technics of hominisation. We have in philosophy, amongst others in the critique of humanism, become accustomed to

31 This use is allowed by the citation of *Gesammelte Schriften X/1*, p. 345 of the previous note.

32 *Gesammelte Schriften X/2*, ‘Erziehung nach Auschwitz’, p. 674: ‘Die Forderung, daß Auschwitz nicht noch einmal sei, ist die allererste an Erziehung.’ (The demand that Auschwitz should not happen again, is what is primordial to all upbringing. – my translation) This is the sentence with which the essay starts.

33 When justifying the project for a *new* humanism he writes: ‘Zweitens aber geht es auch darum, die Schreckenserfahrungen des 20. Jahrhunderts und der Gegenwart systematisch zur Geltung zu bringen: Ein Humanismus, der mit den Verbrechen gegen die Menschlichkeit nicht wirklich umgehen kann, die zur Signatur der späten Moderne in der ganzen Welt gehören, läßt sich nicht plausibel machen und bleibt schwach und wirkungslos von Anfang an. Demgegenüber kommt es darauf an, aus den massiven historischen Erfahrungen der Unmenschlichkeit einen neuen Funken des Verständnisses des Menschen zu schlagen. Die dem Menschen in fast allen Kulturen zugeschriebene hohe Werthaftigkeit muß wieder neu und überzeugend zur Geltung gebracht werden.’ (p. 2-3) – Jörn Rüsen, *Der Humanismus in der Epoche der Globalisierung. Ein interkultureller Dialog über Kultur, Menschheit und Werte*. Last download, 7 October 2006 at <http://www.kwi-nrw.de/cms/k126.Humanismus-Projekt.htm>.

calls for vigilance against whatever form of ethical reflection that would seem to programmatise, that is instrumentalise, ethics.³⁴ We could in this regard think about the criticism levelled at a technocracy in which a hermeneutical sensitivity for the specifics of the relevant situation as well as the creativity and engagement of the ethical agent are sacrificed in favour of a bureaucrat or a technician that would mechanically execute a one-size-fits-all program based on *a priori* principles. I do not deny, nor wish to neglect, the important contribution of such critical theories. But I do claim that there is no ethical agency that does not have a technical aspect, just as there is no ethical goal and its implementation that does not depend on some technical support and that has to be worked out in a technical world. It should be emphasised that what I try to reflect on is not ethics or justice or humanism in their entirety, but only the minimal technical conditions for a humanisation or *Bildung* that would be true to the lesson of Adorno.

A rereading from the point of view of technicity of what has become known as the ‘capabilities approach’ to development could inform our reflection on this matter. Though I have not found a discussion of technology in her work, I believe that Martha Nussbaum’s philosophy (that I shall use here as example) is impregnated with an implicit support by technology that I shall now try to highlight.

What she proposes is a partial theory of justice or a theory of the requirements for a minimal level of justice. According to this theory, the expression ‘human dignity’ or ‘human value’ has only been realised if a person disposes of at least of a number of basic human functional capabilities or abilities or opportunities. In other words, human dignity is less a thing or an abstract value, and more a way of existing; human dignity exists in the living of a valuable life, in the exercise of the capacity to an existence worthy of being called human. The aim of any development program would consequently be, before anything else, to assure that people are capable of exercising a set of ten capabilities that Nussbaum drew up.³⁵ These are: 1) life; 2) bodily health; 3) bodily integrity; 4) use of senses, imagination and thought; 5) use of emotions; 6) use of practical reason; 7) practice of affiliation; 8) practice of care for other living species; 9) play or recreation; and 10) political and material control over one’s environment. She claims that this set of capabilities can gain a broad cross-cultural consensus. The aim of any developmental intervention based on this theory

34 See for instance the succinct formulation of this problem by Jacques Derrida in *Adieu à Emmanuel Lévinas*, (Galilée, Paris, 1997), p. 201.

35 For the most recent formulation thereof, see M Nussbaum, *Frontiers of justice. Disability, nationality, species membership*. (Belknap Press of Harvard University Press, Cambridge Massachusetts, London, 2006), pp. 76-78.

is thus restricted in the sense that it strives after a threshold level of each of these capacities, rather than imposing an idea of the good. Thus, the theory is open-ended in that it does not prescribe any use that should be made of these capabilities.³⁶

What I find attractive in this theory is its potential sensitivity for the nature and consequences of the process of technical hominisation connected with a certain notion of human dignity or value. Human value is inseparably linked to the technical conditions for the possibility of the provision and of the exercise thereof. One could consider the list of capabilities as an indication of what the technical requirements of human dignity would be in a specific historical situation. The fact that these capabilities are not merely ten liberties, but minimal opportunities to function in a certain way implies and calls for a situation in which each human being could be formed or educated or developed to practice these capabilities.

It follows from this that the socio-technical idea of development that I see as the driving force behind the capabilities approach and that I consider sound for a new humanism is to be defined very carefully. 'Development' has to be defined in terms of the globalising socio-technical system, but in a way that is primarily detached from and critical of the ideology of progress, expansion or growth, even though it could not in principle exclude any of these. Since this ideology sees the western style of industrial growth as the model for the whole world and since it is impossible to emulate this model without adopting the appropriate individual and social lifestyle that supports it, they implicitly proclaim that the 'Western' world has discovered the only viable way of life for the whole planet. This ideology reflects a dangerous logic of identity with the disastrous consequences that we have now come to associate with it. Typical of this ideology is the division of the world into 'developed' and 'developing' zones. At this stage in history, the past participle in the name 'developed' country, indicates the state of a country that has realised a self-sustaining economic growth – the use of the term however implies a description of the state of hominisation that does not consider the state of humanisation, neither inside the country (as is so clearly the case in the USA), nor outside the country (as should be evident for instance from what I have highlighted about Africa's relation to the rest of the world).

If a part of the response to the primordial categorical imperative is the development of a situation in which capabilities expressive of human

36 Though it becomes quickly clear that the distinction between helping someone to gain a certain capability and the real use or functioning of that capacity can not always be maintained in practice – cf. M Nussbaum, 'Functioning and capabilities', in *Women and human development. The capabilities approach*. Cambridge University Press: Cambridge 2000, pp. 86-96.

dignity could be formed, then the centres of power in the current state of the global socio-technical network could not unilaterally contain the answer for the rest. Nobody would claim the inverse, namely that the marginalised world contains the example for the world at the centre either. But I do claim that the question with which we are confronted by the misery of the margins of the global system could serve to orientate us in a quest for humanisation everywhere. In our current state of affairs, no country is developed; no country is not in need of an intervention in the process of hominisation. Every region needs to be developed not only in the provision of at least the basic functional capabilities of all of its citizens, but also in the development of the capability of all citizens to be engaged in the care for themselves and for those in the world whose life is reduced to the passive submission to blind processes of hominisation, and thus compromising not only their human dignity, but also that of the rest of the world.³⁷

6. Conclusion

To conclude, I would like to list a number of tasks that my perspective from the sociology of technology brings to the project of a new humanism.

- A thorough study is needed of the technical aspects of the processes of hominisation. I have opted to present this issue here by using paleoanthropology; I could not imagine not supplementing this approach with a hermeneutics of the technical condition of the structure of being human.
- Such a study of hominisation should ideally be done to cover the whole of human history, as well as the history of its interpretation. This should be done not only to inform us of the nature of this process and to understand the genealogy of currently living human beings, but to open us up to the plurality of possibilities of human technicity and its interpretation, and safeguard us against any one-sided, cultural-specific perspective on technics. Such a history would be vital to inform our reflection of the extent and possibilities of intervention in the process.
- Notice should be taken of the contributions from all disciplines concerned with the description and assessment of the current state of globalisation and modernisation in all its various particularities. This would enable us to understand what it means to be or to become human in the different positions in the system. Such a study would naturally be accompanied by a cultural critical analysis of

³⁷ I recall in this regard once again the reference of Castells to 'the complex interplay between economy, technology, society, and politics in the making of a process that *denies humanity to African people, as well as to all of us in our inner selves.*' (*Ibid.* p. 83, my italics.)

hominisation and of the destruction of certain forms of being human.

- The technical conditions for the possibility of interventions in the process of hominisation should be reflected on. This implies that there are technical conditions for the possibility of installing a new humanism. It would be naïve to think that a new humanism means anything if the ideas formed by it are not transmitted. Transmission is amongst others a question of technics. What is needed is a mediology³⁸ of all the different varieties of humanisms worldwide, of their dialogue and their possible continued influence. But this too, would be only a means to the utopian end of a humane existence for the whole of humanity.
- How should the technical conditions for the possibility of a valuable human life be understood in a world in which the capacities to express this value themselves tend to be defined by a situation dictated by the 'Western' or at least non-African techno-cultural word? One might, for instance, claim that our list of capabilities are culturally unspecific, but in most cases people cannot practice their practical reason in the domain of politics without being informed by information that comes only by newspaper, radio, television or internet – i.e. by means formed by the western world.

This confronts us with one of the biggest problems for a new humanism today. On the one hand a new humanism will always come 'too late' – too late, since it is always preceded by the global situation which is not a neutral environment – it is a system of values, of common symbols and language, an orientation to marginalisation and domination that is already in place, doing much of what a humanism would like to do. On the other hand a new humanism will always come 'too soon' – too soon, since it could not lay out a program for an alternative humanisation without having to pre-empt conditions that it does not know, not only since the future is inherently unknowable, not only since the new humanism would like to bring a situation about that still does not exist, but since it would be contradictory to this humanism itself to impose on humans a programmed future and thus to deprive them of their openness to the future. This calls for an insistence on the provisional character and openness to plurality in a world in which the process of hominisation imposes itself. If humanism is an effort to intervene in the process of hominisation, it will, to summarise, have to have its roots in a critical assessment of what humans have been and are, what humans have been made to be, and will have to form human beings that could in future still ask this same question and answer responsibly to it.

38 In the sense developed by Régis Debray, namely as study of transmission. See especially his *Cours de médiologie générale*, (Gallimard, Paris, 1991) and *Introduction à la médiologie*, (PUF: Presses Universitaires de France, Paris, 2000).