Paolo Augusto Masullo

ANTHROPOGENESIS AND TECHNOPATHY[1]

Table of Contents: *1. Introduction to anthropogenesis; 2. Introduction to technopathty; 3. Anthropogenesis; 4. Technopathy.*

Life is no argument
F. Nietzsche, *Die fröhliche Wissenschaft*, 121

1. Introduction to anthropogenesis

The first part of this paper looks at the genesis of the human, *anthropogenesis*, with the human understood as the unique expression of life possessing "higher-order consciousness". Anthropogenesis begins with the emergence of the vital and the development of its different modes, from the primary affective processes and psychological drives to fully-formed feelings – the central argument here being that the affective is the very foundation of life. It is, then, the affective spectrum that awakes matter from its silence, by giving rise to the self-relationship within the relation-to, i.e. by giving rise to the self. The self is thus generated in the passage from inert to living matter, from the crystal to the cell, the cell having been brought into being through the constitution of the cellular membrane, defined by biologist Bruce Lipton as «a crystal semiconductor with gates and channels» [Lipton 2005, 90]. In this way, the cellular membrane is defined as the boundary, albeit permeable, between the internal and the external. It is then this cellular development which forms the basis of the complex homeostatic activity that is fundamental to life, described for the first time by the

[1] Translation by Bethan Bowett.

North American physiologist W. B. Cannon [1932]. The phenomenon of homeostatic activity has since been conceptually integrated into the term "homeostatic imperative" by Antonio Damasio. The homeostatic imperative represents the original and functional thread within the bond that links the different levels of affectivity existing in elementary life to fully-formed feelings. Indeed, it is from this elementary affectivity that feelings draw their power at the mental/cerebral level [Damasio 2018, 269-73] and build – over the course of evolution and by means of progressive and innumerable instances of the breaking through of "thresholds" – the various gradations of what was defined by Max Scheler as the coincidence between the psychic and the living, at the start of the 20th century [Scheler 1927; 2008].

The establishment of this coincidence allows us to form a conception of the "psychicity (*Psychizität*) of life", i.e. to form a provisional definition of consciousness as manifest expression that both has its roots and extends its highest branches in the evolutive dimension of "the affective",[2] coming eventually to assume the form and mode particular to «higher-order consciousness» [Edelman 1992]. This higher-order consciousness likely represents the highest – the most complex and interconnected – level of the totality of existing manifestations of the vital, understood as the totality of the vital as affectivity, and is today the subject of empirical investigation in the field of the philosophy of neuroscience, a line of inquiry that was anticipated in particular (though not exclusively) by the late 19th and early 20th century philosophical anthropologies of Friedrich Nietzsche, Max Scheler, and Viktor von Weizsäcker.

The framework put forward here firmly rejects any recourse to "vitalistic" arguments, preferring instead an engagement with the theory of «biocentricism» [Lanza & Berman 2009; 2016].

At the same time, in opposition to methodological determinism, the article proposes an understanding of the "internal" (not only cerebral) biological structures as in a constant circular, thus reciprocal, relation

[2] The term *affective* expresses, in a very general sense, the basic emotional character of all vital phenomena. It therefore encompasses within it a broad spectrum of differing degrees, intensities and qualities, each with their own labels, e.g.: *impulses, drives, sensations, passions, affects, emotions, sentiments,* etc.

with "external" (natural environment) biological structures, each conditioning the other in a continual redefinition of vital expression and of the behavioural forms arising from the process.

2. Introduction to technopathy

The second part of this paper, *Technopathy*, looks at the modern-day pathological "neo-development" of the self, viewed as a progressive distancing of the self from its vital plane, i.e. from the affective. This distancing is generated by an insatiable craving for cognitive consciousness (calculating/quantitative), "animated" by the only passion that it seems to have retained: the passion for technology. Such distancing is pathological in the sense that it results in the regression and erosion of the "animal" passions and affects expressed by the living body, leading potentially to their total eradication. In the age of technology, this passion called "technopathy" which is monocratic and endowed with a rigidly «unipathic» structure [Scheler 1913-1923, 29-47] in its regressive counter-movement tends to become a psychopathological "death drive", that is, a drive to eliminate the affective and hence to eliminate the origin. At stake is therefore the original self; the self that was generated by the affective and became human. Guided now by the "technological imperative", it is drawn towards becoming "purely" cognitive consciousness. In such basic terms the danger is perhaps not immediately apparent, but when we take into account the fact that all affective dimensions are in decay we see clearly that the idea of a purely cognitive consciousness is a senseless paradox. Consciousness is necessarily "affective/emotional", precisely because it is cognitive activity. Indeed, this is the central argument of the first part of this paper. Without emotions, without affect, without feelings, everything becomes calculable but *nothing* can be experienced and so *nothing* is knowable.

3. Antropogenesis

The argument advanced in this paper rests on the assumption that the origin of life culminating in the "expression" of consciousness is rep-

resented by the passage from the *ontic* (the plane of being of inanimate things) to the *pathic* (the plane of being of living things).[3] This assumption rests on the related postulate of an "affective" origin of the living whereby living beings evolve along a non-linear path of "affective gradualism". According to this thesis, even consciousness itself – as with all manifestations of the living, though this varies greatly in form and degree – is defined by the progressive emergence of a manifestation characterised from the outset as "expressivity" with a predominantly, though not exclusively, "affective/emotional" structure.

Hence anthropogenesis represents here the idea that affects and feelings – developed according to a sequential order which can summarily be laid out as: drives ⇢ passions ⇢ affects ⇢ emotions ⇢ reflective emotions ⇢ feelings ⇢ consciousness, and where the category of consciousness can in turn be broken down into the "primary," "secondary" and "tertiary" consciousness applicable to the animal kingdom, corresponding respectively to the degrees of "consciousness" defined by the experimental psycho-neurobiologist Jaak Panksepp as *anoetic, noetic and autonoetic consciousness* [Panksepp *et al*. 2012] – shows the evolutionary origin of the gradual passage away from the "animal", i.e. from "elementary affective states", which develop and evolve into ever more complex neural neo-structures through gradual build up or successive breaking down of "thresholds", until they reach the point where new *cerebral* structures appear and where they can be described as approximating the "apical" affective state due to their constant interconnection and according to ascendant and descendant components. It is this apical affective state that exhibits the emergence of the truly human, provisionally definable as a «higher-order consciousness» [Edelman 1992, 193-212]. This state of consciousness does not eclipse what has come before but rather encompasses each of the previous levels in the manner of a "bio-*Aufhebung*". This elevated state (rigorously fluctuating and procedural) is therefore characterised by the entire affective spectrum evolved thus far, and predominantly by highly re-flective, *noetic* and *auto-noetic* emotions and feelings (*sensus-mentis*), though *anoetic* affective states also remain present.

[3] On the fundamental difference in the meaning of these terms adopted here, see: Weizsäcker 1946/1987, 41-89. See it. trans., Weizsäcker 1990, 175-215. In addition see: Masullo 2014.

The human cerebral structure, which manifests "higher-order consciousness", can therefore also be defined as a structure expressing a "higher-order affective state". However, it may be useful to reiterate that this condition preserves all of the structures and all of the levels of affectivity from which it has "originated" by means of successive evolutionary integrations, conserving them in a unitarily operating interconnection between the "interior" and "exterior" world, i.e. between the interior world of the brain-as-organ and the external environment; affects – from the simplest to the most complex ones – "serve" thereby as the connection. Thus, to use Northoff's words, «no emotional feelings [means] no connection to the world» [Northoff 2016, 116]. "Affective states" therefore represent the primary expression of life and as such they allow access to the original dimension, that is to say to the affective drives that belong to all living beings on differing levels, traditionally termed "animal passions" (the various "affective states" of living beings).

These "animal passions" evolved to become true affects (emotions) and then feelings, understood as "reflective affective states", that is, those experiential conditions which in their *reflectivity* generate the dynamic, self-related flux which we usually call consciousness, or rather a "higher-order affective state" defined by its "reflective" character, possible even in an *anoetic* state but overt in both *noetic* and, above all, *autonoetic* states [Panksepp *et al.* 2012].

"Affective states" thus emerge and develop, stratifying and structuring their functional articulation in ever more complex ways, eventually becoming fully and specifically "reflective" and arriving at the point of being an expression of *extended* consciousness. This indicates that these are more than merely biochemical states; they are also, if only in a certain sense and within the explicative limits of a semiological model,[4] representational and are thus describable as «biosemiotic» [Barbieri 2008; Cusinato 2018].

Such processes present themselves gradually, basing themselves on the structure of the genetic code (which can also be interpreted in a "symbolic-discursive" manner), and represent the highest point of the

[4] On the biological critique of the "biosemiotics" model, see: Gazzaniga 2018, chapter 7.

expression of consciousness. This is the highest level, or at least a fully complex level, and is entirely particular to the current state of affective organisation achieved by the life system, understood as expressive affective activity, having emerged over the course of time, extending from its first appearance across all of its gradual historical evolution. Being as they are an *aposteriori* evolutionary potential, these states thus form the base and in a certain sense coincide with "higher-order consciousness", i.e. with the expressive affective form of the human lifeform's "highest" and most full life.

For this reason, in reference to the human, we call here this consciousness the "higher-order affective state". It is a state that has emerged out of certain conditions, developing, after having already reached a certain evolutive level, from a «fluctuating central state» [Vincent 1986], i.e. from the original condition attributable certainly to the emergence of the nervous system and potentially to the formation of systems prior to that, protected by the level reached by the doubly significant form of the "homeostatic *apriori*".[5] At the first level, this form, the homeostatic *apriori,* represents the condition necessary to guarantee the basic biochemical expressive functions and processes that work alongside all of the affects up to fully-formed feelings which then, at the second level, represent the modulating function within the plane of psychic functions [Damasio 2018]. These modes exist at all levels, including the highest levels of organisation, being as they are "modes" proper to living material processes. It is then these "modes" that become the most complex form of living material – the human brain – in its characteristic and necessary "intentional" relation (maximally reflective), or, in other words, in what is probably the highest form of "agreement" with the external environment that intrinsically represents the constitutive moment of the *relational* pole of every living organism from the most simplistic upwards [Northoff 2016].

As this speculative argument cannot be fully developed here and is

[5] The term *homeostatic apriori* is intended to mean the necessary precondition, though not in and of itself sufficient, for living structures to create operative arrangements allowing for the constant maintenance of an individual organic unity, a unity that nevertheless remains in flux, in "relative" relation to the processes of change – within certain limits – in the environmental conditions.

laid out in only summary fashion, this paper will begin with an outline of the genesis of the human, the anthropogenesis – whereby the term *human* is understood to mean the starting point and development of what has been termed "higher-order consciousness" or "higher-order affective state", a concept – still today difficult to explain in precise terms – which represents the most advanced knowledge of our anthropological condition.

In accordance with the presuppositions and the objective outlined above, the theoretical grounding of the argument presented here is therefore constituted by a philosophical and anthropological horizon attributed to three "decisive" thinkers of fundamental importance who not only metaphorically but also literally represent the pathfinders of an epistemic, of scientific-philosophic origins, of the developments that are the subject of this essay. All these three thinkers proposed the theory of anthropogenesis from which was generated the mature theoretical proposal of the affective constitution of all life forms and of human consciousness.

The first of these decisive thinkers is Friedrich Nietzsche, who developed a "philosophy of affects" in the last part of the 19th century. The philosophy of affects, in brief terms, can be ascribed to the ethics of the *Übermensch*.

From the perspective of this paper, the theory/metaphor of the *Übermensch* (Overman or Superman) elaborated by Nietzsche in 1883 represents the earnest, urgent and "tragic" proposal for the foundation of a realist, empirical anthropology. In his anthropology, Nietzsche starts from the idea of a development of a "philosophy of affects" understood as effort – in the necessary transformative destiny of the entity that is man – to bring to "evolutionary" maturity a new conceivable condition and expression of the *human*. A central theme in Nietzsche was thus the "enhancement of the affects", which he defined as the moment corresponding to a hoped-for «phase where the conscious becomes modest» (FP 1884, 24 [16]) [Nietzsche 1881-1887/2006]. Within the Nietzschean world view, the modern subject's "Reason" has an egoistic and presumptuous character in relation to its affective means, and most of all to its pretences to domination over the living totality of the body. According to Nietzsche, consciousness – as an expression of rationali-

ty, and being only «the last and latest development of the organic, and consequently also the most unfinished and least powerful of these developments» (*Die fröhliche Wissenschaft* 1882/1886, aph. 11) [Nietzsche 1964-] – must retreat from its pretences to exclusive "government" in the face of the complexity of the unperceived processes of bodily cerebral physiology, processes which, when put in motion, propel our living activities through the analysis and integration of the organic-corporal totality, first and foremost in relation to the cerebral stratification, which is currently the subject of important breakthroughs in scientific knowledge. This integration is essentially based on the affective modality of total vital strengthening, allowing for provisory conservation while at the same time necessary transformation. «Könnten wir uns aber mit der Mücke verständigen, so würden wir vernehmen, daß auch sie mit diesem Pathos durch die Luft schwimmt und in sich das fliegende Zentrum dieser Welt fühlt»[6] [Nietzsche 1873/2007, 141]. Nietzsche is therefore thinking of a human liberated from the nihilist presumptuous, pretentious and self-explanatory idealisation belonging to European "modernity" and which he understands as a historical pathological arc running through the development of Western philosophy [Nietzsche 1881-1887/2006]. In his view, Western philosophy's anti-vital hypertrophy consigns it to a destiny of inexorable and premature decline. The nihilist model of Western thought has conceived and developed the idea of "Reason" as something idealistically separate from the biological-material body, a truly isolated and "anti-corporal" development which has its basis in conventional modernity, i.e. from the 17th century onwards and its primary matrix in the dualistic and mechanistic anthropological thought of René Descartes. This disembodying, dualistic and separative shift in thinking about the body then finds its highest expression, *on the one hand*, in the powerful and innovative Kantian attempt to establish an impossible theory of "pure reason" – a theory in which, albeit concurrently to an attempt to discern its limits, "Reason" as the organ of consciousness is represented as an object whose structure can be conceived of in isolation and only from a logical perspective – and, *on the*

[6] «But if we could communicate with the mosquito, we would learn that he floats through the air with this same *pathos*, feeling within himself the flying centre of the world».

other, in the claim to have reduced the complexity of the biological process, irreducible to mere causal chain, to a simple mechanic-machinic functioning in accordance with the naturalist model of "skin-and-bones causality" that is typical of 18th century European positivism and its mechanistic Cartesian-Newtonian matrix. Nietzsche, however, strives for an "enhancement of the affects", shifting the centre of his anthropological-philosophical and epistemological interests in an anti-reductionist direction towards the material dimension of the vital-corporal by means of von Helmholtz's "law of conservation of energy", Virchow's "cell theory", Roux's "principle of self-regulation" (*Selbstregulierung*), Pflüger's theory of "sensory system decentralisation", and Haeckel's theory of "organic memory". From a philosophic-anthropologic basis, Nietzsche thus paved the way for profound paradigmatic shifts away from the old models drawn from modern conceptions of the meanings of life, organism and man, definitively reintegrating the human within the natural dimension, in opposition to the prevailing *physicalist naturalism*.[7] Physicalist naturalism, as Nietzsche wrote in his reflections on Western thought, «is a *secret fury* against the conditions of life» [Nietzsche 1881-1887/2006, 309]. This conviction lead Nietzsche, at the precocious age of 34 when he wrote *Menschliches, Allzumenschliches* (1878-79), to declare that from that point on he had «done literally nothing else than study physiology, medicine, and natural science» [*Ecce homo*, 1888/2015, *Menschliches, Allzumenschliches*, Chapter 3].

The second thinker decisive to our argument is the German philosopher Max Scheler, who was most active between the 1920s-1930s. Scheler deployed an "onto-phenomenological" methodological perspective in his last unfinished work of 1927, *Die Stellung des Menschen im Kosmos* (The Human Place in the Cosmos), the inaugural work of a new discipline called philosophical anthropology (*Philosophische Anthropologie*), which proposes the idea of a *psychicity* of the living entity in general, since «Was die Grenze des Psychischen betrifft, so fällt sie mit der Grenze des Lebendigen überhaupt zusammen»[8] [Scheler 1927, 12].

[7] See: Rosciglione 2005; Stiegler 2001. One the "philosophy of the affects" in Nietzsche see also: Vozza 2006.

[8] «The boundaries of the psychic come to coincide exactly with the boundaries of the living».

As such, Scheler proposes an idea of man that is entirely reintegrative in relation to living nature, against all previous dualism. It is a way of understanding man that conceives consciousness as coinciding with the realm of the living *tout court*, though variating qualitatively according to levels of functionality and on the bases of differing levels of organisation, taking as its starting point – and moving within the unbridgeable discrepancy between the inanimate and the animate – the original «primordial impulse of vital affection» (*Gefühlsdrang*). This impulse articulates and informs the entire vital process in different degrees, gradually dissolving itself as a "primary power", destined to realise *ordo amoris*. This idea allows for the formulation of a necessarily relational conception, encompassing the relation between consciousness and life, which finally reunites the reality of "human-consciousness" and "life" and which at the same time sustains the basic idea of emotional life as having «eine metaphysisch kognitive Funktion» [Scheler 1926, 141 and n.1], further reinforcing the idea of a natural totality which, as organic affective *psychicity*, can be defined as "living thought, thinking life". To conclude, building on Nietzsche's reflections, Scheler's thinking works through the "insertion of biology *in* the subject".

The third decisive thinker is Viktor von Weizsäcker, doctor, neurophysiologist and philosophical anthropologist, who developed his thinking for the most part between the 1920s-1950s. Weizsäcker elaborates a systematic conception of the living being founded on the explicit idea of an obscured (*Verborgen*) "fundamental relation" (*Grund-Verhältnis*). This conception which encompasses all living entities and as such includes the living-man who has always been in the flux of life – a conception which incidentally allows for the ancient life/death opposition to be surpassed and transformed into "life *and* death" – is articulated as the relation between a plane of things and a plane of living life with its mobile and transformative equilibriums or, as Weizsäcker put it, between the ontic (*Ontisch*) and the pathic (*Pathisch*). This fundamental distinction allows for the construction of a theory of the living-man defined as a «medical anthropology» (*medizinische Anthropologie*) or as «pathosophy» [Weizsäcker 1956/2005]. Weizsäcker's theory essentially represents the elaboration of a psychopathology of the affects which, in the living in general and in the living man in particular, is

metaphorically constructed from the five modal verbs (*Dürfen, Müssen, Wollen, Sollen, Können*) that characterise the active expression of the affective dimension defined as the «pathic pentagramme» (*pathisches Pentagramm*) [Weizsäcker 1956/2005, 67-97]. This "pathosophy" is developed as a systematic study of psychic-physical disturbance seen as being regulated by the harmonic or disharmonic relationship between the five modal verbs that serve as a "measure" of the psycho-physical organism's state of equilibrium and wellbeing, for they are indicators both of the precarious equilibrium understood as a natural homeostatic oscillation of life's living conditions and of the affective expression of the health or illness status of every living man. It is an equilibrium that is always at risk of being lost, of being disturbed by some serious fracture in the fundamental relationship between the living-man and its "world-environment" (*Umwelt*). As such, in Weizsäcker's worldview, it is the affective, the "pathic", which "decides" primarily what action will be taken, guiding action toward the functioning of a harmonious or disharmonious relationship (*Verhältnis*) that forms between the different levels of its categories in the "text" of the pentagramme through the relation *with* and *between* its conditions of possibility for success in the world.

As such, in Weizsäcker's words «Sie [Die Psychologie der Triebe] zeigt, daß (wie schon Nietzsche entdeckt hatte) der Trieb nicht das Sinnlose schlechthin ist gegenüber unseren Vorstellungen, Handlungen und Gedanken, sondern daß umgekehrt der Sinn dieser Vorstellungen, Handlungen und Gedanken gerade der Trieb sei: *er* hat sie determiniert» [Weizsäcker 1926/1987, 73].[9] With Weizsäcker, therefore, the framework for the recomposition of the unity of life/thought is brought to completion through «the insertion of the subject *into* biology» (*die Einführung des Subjektes in die Biologie*) [Weizsäcker 1940/1997, 83-85].

The "lesson" we take from these three "decisive" thinkers, whose ideas have been summarised here only very broadly and only in rela-

[9] «we see that (as Nietzsche had already showed) [and Scheler confirmed] the [affective] impulse is not simply the absence of sense in the face of our representations and actions, and of our thoughts, but on the contrary that the sense of these representations and actions, and of these thoughts, is the impulse itself: it is the impulse that determines them».

tion to the basic elements relevant to our argument, appears today to be perfectly in line with the direction of neurofunctional sciences and with the experimental neuro-philosophies that could in many senses be considered the heirs of the theoretical approach to empirical inquiry held by Nietzsche, Scheler and Weizsäcker, among others, in terms of anthropological-epistemological research. Their theoretical-empirical approach has been taken up by scholars we would now define as "new humanists". New humanism represents a "third culture" which has left behind the dichotomic vision – outlined in Snow's celebrated essay on the two separate cultures of humanism and science – and which sees the need for "humanist" research and thus for a possible philosophy of the human based on the empirical method and reasoned scientific evidence and on the philosophical-anthropological principles and concepts that can be drawn from such research.

This "third culture" is incarnated by «those scientists and other thinkers in the empirical world who, through their work and expository writing, have taken the place of the traditional intellectual in rendering visible the deeper meanings of our lives, redefining who and what we are» [Brockman 2003, 1-2].

If, therefore, a great part of the 20th century can be defined as the century that confronted – with renewed determination – the anthropological question from a philosophical perspective, starting from the assumption of the vital-affective dimension as the "root" of our being, ushering in a gradual phenomenological epistemic shift away from the ideal to the empirical dimension, then the new (third) millennium conversely saw an explosion in knowledge, following the enormous developments in integrated scientific research in the fields of psychology, neurology, endocrinology and immunology (PNEI) and additionally favoured by significant developments in technologies of visual analysis (CAT, PET, MRI) that have revealed evidence of continual mutations in the cerebral-functional state over the course of every affective experience, mutations that model or govern our actions and understanding. The conceptual orientations derived from this new knowledge, taking their lead from the ever clearer determination of the *decisive* role of biochemical processes and of the cerebral layers they travel through, processes which can be imagined as little combs with teeth that become

finer and finer, refining from the bottom upwards and deciding the final expression of animal or human action and behaviour in accordance with the level of complexity. The establishment of the existence of these processes would seem to confirm, and indeed build on, the intuitions of the classical authors mentioned here. They would also seem to uniformly lend credit to the thesis supported in this paper, which holds that the human "modality" (as is also the case with the animal modality) is prevalently, if not exclusively, derived from a plane of original affective expression, evolving from this origin up to the level in which consciousness is present. This plane develops – from its first stages up to the last level at which consciousness exists, currently represented by the complex insular system of activities, understood as functional multiplicities, that are predominantly affective, highly integrated and definable as an affective and signifying unity – over an affective-emotional evolutionary path. The discovery of this "system" leads us to a conclusion, albeit provisory, that living life should be defined as affective expression *tout court*.

This argument has reinforced itself over time thanks to the constant developments in the fields of neuroscience, of psychology and of neuro-philosophy, carried forward by respected scientists and researchers. We refer in particular to the research produced by three contemporary scholars working within the field of empirical, cerebral and psycho-neuro-scientific philosophy that seems to attest the thematic or conceptual strands that run through the three "anthropologist-philosophers" – Nietzsche, Scheler, and von Weizsäcker – here posited as "decisive" in guiding the speculative line of thought of the 20th century that sought to confirm the argument that all vital expression has an affective origin, from its elementary forms up to the highest stages of its development represented by consciousness. These are the psycho-biologist and neuroscientist Jaak Panksepp, the neuro-philosopher and psychiatrist Georg Northoff, and the celebrated neuroscientist, psychologist and philosopher Antonio Damasio.

That these three researchers reached similar conclusions in line with the presuppositions of the philosophers mentioned above and supported by the argument made in this paper is of great significance. At the same time, there are important differences in their approaches and

methodologies.

Jaak Panksepp and his team set out to investigate animal affects and emotions, looking at mammals in particular in order to draw conclusions about the higher stages of human emotions, from a basis of anatomical and physiological study of both the cerebral organ and its procedural and reticular functioning, described by Panksepp as an organ constituted by seven affective systems forming the core of emotive expression. Panksepp conducts his inquiry from a perspective strongly influenced by psychobiology.

The "organs" identified by Panksepp exist in the archaic subcortical regions of the brains of mammals. They contain at least seven basic affective systems: *research* (anticipation, desire), *fear* (anxiety), *anger* (rage), *sexual desire* (sexual arousal), *caring* (nurturing), *panic*/*suffering* (sadness), *play* (social joy). The study of these seven constitutive emotive/affective systems demonstrates that the evolutionary anthropo-genetic process is founded in affects and that their regulated and highly interconnected functional expression is strongly implicated in the pathologies of connection that manifest themselves in psychiatric disturbances.

Georg Northoff, on the other hand, along with other important contributors such as Eric Kandel [Kandel 2018] uses a neuro-philosophical methodological approach and takes his cue from an understanding of the psychiatric pathologies as manifestations of cerebral pathologies that alter the articulation of the arc of fundamental relations – specific-self ⇢ related-self ⇢ self-environment – in their interceptive/exteroceptive significance. As with Panksepp, Northoff's work demonstrates the essential character of the affective dimension as an indispensable interface between the body and its environment in the neural elaboration of the brain [Northoff 2016].

Lastly, Antonio Damasio, who adopts the empirical-hermeneutic research methodology of the "classical philosophy" of the neurosciences, focuses on a philosophical hermeneutic of the cultural event, described and analysed in its principle forms, with the objective of demonstrating the elements of decisive biocultural continuity between transformative processes and bioregulatory affective cerebral processes. These processes form the foundation of the *homeostatic imperative* [Damasio,

2018] and appear to evolve in the direction of, or at least be strongly guided by, the symbolic cultural dimension and the construction of the cultural mind precisely from this affective basis.

The critical importance of these inquiries, aimed at demonstrating the determining character of the empirical existence of affects in the vital plane, comes from the criticism of the "philosophy of the mind" tradition's interpretation of the emotions. Jaak Panksepp, through his systematic empirical study of the psychobiology of animal emotions, demonstrates that affects are not classifiable as cognitive re-readings of the bodily organism's physiological modifications and that, to the contrary, they originate in the deepest "non-cognitive", i.e. non-cortical, layers of the cerebral structures. These are cerebral structure that do not in fact require any cognitive, so cortical, feedback to be turned into "experiences".

For this reason, affects are present in many animals, certainly in all mammals and many birds, and it can indeed be hypothesised that they are present in all animals, though it is difficult to empirically study their manifestations [Panksepp *et al.* 2012]. The numerousness of the different complex biochemical responses that take place in different deep- (third-level) and middling- (second-level) level subcortical areas in comparison with those that take place in first-level or superficial areas show that affective activity is present, even in the case of "lived experiences", for example, with cognitive or learning content in animals (rats) that have been decorticated (for the purposes of experimental investigation). Even in such cases the test animals' behaviour shows a capacity to learn, according to the logic of preference or avoidance, and displays unequivocal progressive cognition and a tendency towards acting in response to the environment, even in the absence of the cerebral cortex. As such, this behaviour can be defined as both affective behaviour (from the Latin *affectus* which comes from *afficere*, "to be touched or impressed", or from *ad ficere*, "to do something for/toward someone") and, at the same time, cognitive behaviour. Indeed, such behaviour expresses a new "tendency" in the test-animals, consequential to having "been impressed", thus modified, and as such to having been "set in motion towards" something (emotion = *ex moveo* in Latin) that has not previously been "experienced" and which is successively either

repeated, looked-for, shunned or avoided.

In sum, all affective states as original expressions of the vital possess a certain level, even if minimal, of reflectivity, without which they could not be cognitive.

Affective experiences therefore have a depth and an autonomy, as well as a level of reflectivity, that means that in a certain sense they function regardless of cortical ability to represent them. This proposition thus marks a departure from the position of many authoritative philosophers of the mind, who still today assert that it is only via cortical feedback that this reflectivity renders affective experiences aware and cognitive, and so fundamental for understanding the nature of the mind.

Taking it further, we could even say that cognitive science is not necessary for knowledge based on affect. In short, against all the traditional schools of thought, it seems possible to assert that there is no difference between "having an emotion" and "feeling an emotion" [Panksepp 1998] – a correction to the position maintained up until very recently even by Damasio, who nevertheless remains a pioneer of the rehabilitation of the emotions. Damasio had believed that there was a difference between the two emotional dimensions and that as such there was a necessity to mediate, *through feedback*, between "having had" an emotion (subcortical level) and "feeling" the emotion (cognitive cortical level). In his recent *The Strange Order of Things* [Damasio 2018], however, where he argued the existence of a "continuity" in the construction of the cultural mind between the biological affective homeostatic plane and the affective plane, this equivalence is finally acknowledged through a further valorisation of the essential and cognitive significance of the affective dimension, even at the pre-cortical level – and even in the absence of cortical feedback – «because basic homeostasis remains aligned to some extent, with negative or positive affect» [Damasio 2018, 106] and, above all, «[t]he complete absence of feelings would spell a suspension of being, but even a less radical removal of feeling would compromise human nature» [Damasio 2018, 101]. Therefore, in their original, constitutive and procedural being, much more than being considered "states" of the "body/brain/mind/environment", affects and *emotional feelings* are *relations* and «can be characterized neither as the domain of the body nor of the environment» [Northoff 2016, 135-136].

On the contrary, emotional feelings «reflect the balance and continuous adjustment between the brain's neural activity (as the insula) in relation to body and environment […]. […] emotional feelings can be located neither in the brain nor in body and environment». They are therefore «our experience of this balance» [Northoff 2016, 135-136].

As far as the anthropological-philosophical implications are concerned, it seems then that within the empirical scientific debate it is becoming ever more reasonable to think of the original nature of life as affective and of consciousness as an original *relational* process with the character of «a subjective feeling about something». As such we should consider «emotions to be a foundational component of consciousness», for which cortication is not indispensable if they are to manifest themselves and be experienced [Gazzaniga 2018, 146].

The hypothesis can be taken further: «If these feelings existed before cortical tissues, then the special wiring of these subcortical networks alone must possess what is necessary to produce the feelings that accompany conscious experience» [Gazzaniga 2018, 146]. If the connection between neural, corporal (interceptive) and environmental (exteroceptive) stimuli is property of the cerebral material, «the construction of this threefold interrelation between brain, body, and environment is directly associated with emotional feelings. Emotional feelings are consequently relational» [Northoff 2016, 139].

As such, «emotional feelings provide access to the world and our existence as part of that very same world». Thus, «they ground our existence […] emotional feelings are existential» [Northoff 2016, 139].

The fracture in the relationship between the world and the brain, between the world and the mind, between the world and consciousness empirically demonstrates the failure of these equilibriums with the consequent appearance of the great psycho-neuro-cerebral-functional pathologies, such as the depressive pathologies or schizophrenia. There is, in other words, a kind of interruption or "tearing" of the homeostatic function, at all levels be that biochemical or biopsychic, paving the way for psychiatric disturbances of greater or lesser degree.

It therefore seems possible to assert that Nietzsche's "enhancement of affects"; Scheler's original "affective impulse" (*Gefühlsdrang*) that animates the *psychicity* of life; and Weizsäcker's relational anthropology

of the *Pathosophie* as the original constitutive "fundamental relation" (*Grund-Verhältnis*) of the living and as regulative activity understood as equilibrium or disequilibrium between the potentialities of the "modal verbs" or the *pathischen Kategorien* constituting *pathisches Pentagram*, were all theories aimed at critically restoring the unity of late-19th century and early-20th century anthropological-philosophical thought, in line with a conception of humanity as essentially founded "within" the vital process, understood as expression of the affects. These strands of thought are brought together in the current empirical research on the cerebral and neuro-functional structures of the brain aimed at establishing the constitutive nature of the affective processes of the vital as a dimension coincident to the psychic. The ideas of these three thinkers thus anticipated the "anthropological turn" of the 20th century, a turning point in the history of our understanding of the nature of the human.

The anthropological turn is geared towards granting new significance to the living and to the "living-man". Through empirical investigation it aims to provide understanding of the vital processes that, despite identification with the organic world of concrete affects, still have ideal worth, and so there is value in the theoretical effort to philosophically represent them in the specific character and uniqueness of their significant expression.

4.Technopathy

Starting from this premise of the affective origins of life and of "affective consciousness" as the human's apical performance, the second part of this paper on *Technopathy* will briefly consider the frequent and historically recurrent fears of an "anthropological break" represented by the triumph of technology[10] and understood as the risk or threat of

[10] It is useful to clarify the substantial difference between the terms "technique" and "technology". The term "technique" (*techné*) should be understood as that which concerns man's behaviour in regard to nature aimed at producing material goods that improve the conditions of life, something that has accompanied man since the very beginning of his existence. Technique therefore concerns the "art of producing instruments" or manufactured goods capable of bettering man's living conditions and his living environment. Technology (*techné* and *logos*), meanwhile, should be under-

"evolutionary derailment". These ideas made an early appearance in Scheler's reflections on the image of the *homo dyonisiacus* [Scheler 1926, 120-144] but were epitomised in the works of Günther Anders [Anders 1956/2002].

Technological hypertrophy – which in its "counter-affective" or "anaffective" paradigm of pure additive functional enhancement is based on the reduction of the vital to algorithmic measurability and thus renders the vital functional purely to indifferent performative data, even to the point of working towards the design of a world governed by a «definitive algorithm» [Domingos 2015] – represents the beginning of an "empty" evolutionary development and seems to give rise to a distancing of the self (understood as the original affective expression of life) through a hypertrophied "consciousness" which is conceived as purely cognitive (measuring/calculating) and paradoxically becomes saturated in an inexpressive "technopathy" destructive of passion and affects. The "technological imperative" which now counter-poses itself to the

---

stood as the *logos*, the human *ratio*, or the "cosmic order", which transforms itself into the *techné*. This should be understood as that epochal passage where, rather than "reason" creating technical instruments to expand and consolidate its presence in the world by achieving greater "habitability" for man (according to the ancient definition of the term *Ethos*), disincarnating abstraction that quantitively formalises the world, expelling any kind of quality from the world. *Techno-logy* should be therefore understood as the process by which, according to Nietzsche's definition, "reason" is no longer "a system of relations between passions and desires" of the body, but rather, as *technology*, has become the same ordering principle of the world, the *techno-cosmos*, from which bodily passions are consequently excluded: take away passion and the body disappears; once the body has disappeared "reason" also disappears. Consequently, once the body and its reasons have disappeared, man disappears. What remains is a *techno-logos*, a *logos* as technology or a *logos* that should be understood as a progressive disembodiment and de-pathicisation of the world; a negation of the origin, hence an anti-biological, anti-vital and anti-affective *logos* hypostatised as *techno-logical* and logical-formal conceptualisations – an algorithmic metaphysic. As such, the *techno-logy* should always be thought of in conjunction with the *bios* as *bio-techno-logy*, where the addition of *bios*, aside from referring to life as such, refers to life's *procedural* and *transformational* character, hence its *dynamic* and *affective* character. On the technicization of science and, in particular, on the systematic use of the term "technoscience" see the works of G. Hottois, in particular, Hottois 1990, and also Broers 2005.

aforementioned "homeostatic imperative" seems intent on superseding the affective-reflective aspects of life and thus – if we are looking at it within the theoretical framework of the "higher-order (affective) consciousness" – on tending towards becoming a psychopathological "death drive", set on the annihilation of that affective and evolutive cerebral self that became human consciousness through the obsessive pursuit of the exponential development of an exclusively cognitive consciousness, in other words, set on the pursuit of a logico-quantitative consciousness, something which seems to be a contradiction. The risk is, then, that consciousness, and so life, are condemned to death. The central argument of this paper is that consciousness as cognitive activity is necessarily "emotive" and affective. Without emotions and feelings, without the "affective-reflective state", everything is calculable but nothing can be experienced, so nothing is knowable.

Before we sit back and watch this emotional annihilation carried out to completion, it is worth recounting the regression of the affective dimension generated by the technological imperative: the transformation of *technomania* into *technopathy*. «As we rave through the all-night honeymoon party that is technological progress, it's salutary to think about the hangover – the price to be paid tomorrow, and forever» [Leonhard 2016, iv]. Cognitive engineering enhances human performance, yet the question is never posed as to the effects of the resulting affective uprooting.

Indeed, this pathological cognitive enhancement by means of technology (technopathy) seems to be becoming ever less sustainable in affective-emotional terms due to what we could describe as a growing emotional impasse, a phenomenon that as early as the 1950s was being described as "Promethean disparity". This "Promethean disparity" is so-called because it refers not only to Anders' assertion: «daß also nicht nur das Volumen dessen, was wir herstellen, tun oder denken können, grösser ist als das Volumen dessen, was unsere Vorstellung oder gar unser Fühlen leisten kann; sondern daß das Volumen des Machens und Denkens *ad libitum* ausdehnbar ist, während die Ausdehnbarkeit des Vorstellens ungleich geringer bleibt; und die des Fühlens im Vergleich

damit geradezu starr zu bleiben scheint»[11] [Anders 1956/2002, 270-71]. The burden of such a radical change risks *less* endangering the presumptuous idea of the domination of "classical-modern" rationality, fixated on incessant *doing* (*homo faber*) and justified by the urgency of knowledge – indeed, the Promethean disparity is merely a further form of its realisation –, and *more* the irrevocable hollowing out of the patrimony of the *cogito*. This is a *cogito* that, as argued above, is radically immersed in the affects, in *feeling* "sensitive"; it is evolved *affective reason* that promotes and orders the affects, passions and feelings original to life. If, as with Nietzsche, «every passion [possesses] its quantum of reason» and reason itself is «a state of relationship between all the various passions and desires» [Nietzsche 1881-1889/2015, chapter 387] then it is precisely that *feeling* that makes of us inter-active *people*, subjects of de-cision, lovers, de-sirers, aware and "free" erotic subjectivities.

The development over the course of the last thirty years of information technology and the internet driven by impetuous technological "progress" has quickly revealed its true face, becoming the last strategic invention of power which marks the birth of those «attitudes of thought generated by technology» [Lorenz 1983, 8]. These new technologies exist, moreover, as part of literal *psychopolitics,* as even more efficient forms of subjugation and "submission". Indeed, the human subject, «[a]s a project deeming itself free of external and alien limitations […] is now subjugating itself to internal limitations and self-constraints, which are taking the form of compulsive achievement and optimization […] [i]n so far as it willingly exploits itself without a master, it is an *absolute slave*» [Han 2014/2017, 2].

Contemporary man thus comes to be transformed into the neoliberal servant and gradually stripped of all forms of sovereignty. The "technological imperative" in its virtual and informatic nature becomes a genuine "psychopolitics" which – annihilating the affective or at least

[11] «the volume of that which we can produce, do or think [calculate] is not only superior to the volume of that which our imagination is capable of containing or, even less, of that which our feeling is capable of containing; but the volume of doing and thinking [calculating] can be expanded *ad libitum*, while the expandability of the imagination is incomparably less; the expandability of feeling, moreover, seems to even be inexistent»

reducing it to an elementary drive through the gradual replacement of the "homeostatic imperative" – has already taken over from the bio-political model the traditional form of the exercise of power in the industrial age that operates through the systems of governance of physical-material bodies: the prison, the hospital, the school, the army, etc.

In this way, the metaphorical *material panopticon* represented by Bentham's prison design is substituted by the similarly effective, yet invisible *digital panopticon*, whereby man is "used" and reduced to pure drive-driven impetuses, starting from his very intentions and emotions. Hidden behind its digital infrastructure, technology acts upon him, "re-hierarchising" his affective systems and reconstructing a new emotional order stripped down to its most basic level – do for the sake of doing, do to repeat the doing, do to depend on doing, in an insatiable obsessive-compulsive repetition that results in *functioning* rather than *existing* [Benasayag 2019]. From a social perspective, the "technopathic" man operates and works "happily" for the exploitation of himself, offering himself, through his denudation and through the "transparentisation" of all of his interiorities, to the algorithmic architectures that *re*-constitute him in a different place, profiling his identity and – in a game of feedback between the subject's virtually expressed desires and the tailored possibilities that are offered by the *pre*-disposed algorithm – *re*-structuring his affective identity according to the algorithm's objectives. At this point, the technological system reduces itself to whatever form necessary to fulfil those desires. Man for his part is progressively reduced to his unique-form, as willed by power as technical system, «under the banner of 'tolerance', with the simply liberalisation of pleasure» [Revelli 2012, 79] – a primitive pleasure, occasional and ephemeral, designed to make lived life coincide with an obsessive simulation of an non-experienced life.

Thus we arrive at a situation where human rationality is reduced to «a relation between things», starting from «the most 'vital' of relations, the erotic relation between bodies» [Revelli 2012, 84], by means of which an unusual and lethal "subterranean region" is uncovered: that of the destructive and an-affective «techno-environment», as «technology is completely nihilist when it comes to the things that are meaningful to us humans» [Leonhard 2016, 18].

Technopathy acts as the driving force of exteriorising change through a technological prothesisation characterised by a profiling algorithmic manipulation that reduces creative biological "sense-neuro-production" – based on overabundance and "waste", or rather, "redundancy" – to mere numerical and functional datum. This triumphant and threatening *dataism* then conceives of and puts into action the idea according to which «exactly the same mathematical laws apply to both biochemical and electronic algorithms. Dataism thereby collapses the barrier between animals and machines, and expects electronic algorithms to eventually decipher and outperform biochemical algorithms» [Harari 2015, 367]. It seems ever more difficult, then, to bridge the gap opened up between a biotic interiority – ever more in danger of being reduced to an emotional desert or, in the best case scenario, of being exposed to the risk of a purely drive-driven and mostly pharmacologically modulated technopathic involution – and the outside world "reduced" to techno-environment. In the current anthropological model saturated by techno-scientific "governmental power" based on big data and algorithms, we see a truly *nihilist ideology* which «gives up on any and all meaning. Data and numbers are not narrative; they are additive. Meaning, on the other hand, is based on narration» [Han 2014/2017, 59]. This marks the growing disproportion between the affects which, being evolutive, are narrative or historical, and their meanings which in their digitality are reduced to their merely additive conclusion. The dynamic effects of this dataism are exercised through silent and hidden induction and orientation – albeit with the full collaboration of the user, the internet navigator that, simply by navigating, hands over his complex affective self (his motivational and decisional deep-level dimensions) with his typed communications to a server that reduces them to a unique result, constructed, as with all algorithms, from the bare elements, on atomicity, non-ambiguity, finiteness, termination and effectiveness. As such the user/server relationship is turned on its head and becomes server/user: the user becomes servant and the server becomes utiliser. This means that, in order to be effective, the systematic applications of algorithms to the hidden world of affects have to provide *apriori* the result with its uniqueness. Far more than the algorithm's «virtually despotic character» [Zellini 2018, 13], what this reveals is the definitive coloni-

sation and reduction "to one" of man's complex psychophysical unity, with data power's total possession over, once-free, bio-psycho-affective privacy and autonomy.

Here we are lead back to the decisive argument concerning affects, passions and *feelings*. As much as they may be neglected or even opposed in the philosophical tradition, or exclusively *utilised* in the contemporary *dataist* culture as a commodity, affects, passions and feelings remain essential for being who we are. «The idea, in essence, is that cultural activity began and remains deeply embedded in feeling» [Damasio 2018, 5]. If we understand life as having as originating in the dimension of affective expression – a supposition currently in the process of greater clarification through empirical studies in the field of bio-neuro-psychic pathology [Northoff 2016; Kandel 2018] – then we can also put forward a theory of an affective root of "higher-order consciousness" in its cognitive expression and of the consequent development of human culture. Hence we can also think of technopathy as the development of pathological, or at least regressive, affective processes that associate it, e.g., with the range of "unipathic" modalities that the phenomenologist Scheler used to describe the anthropological differences between "co-feeling" (*mit-fühlen*) as a principle of an ethics of the affects, based on the recognition of the "*other than the self*", and the different variants of the "genuine unipathy" (*echte Einsfühlung*) that all display the pathological trait of confusing, either actively or passively and in various modalities, the "self" with the "*other than the self*" in an illogical identificatory and fusional pathological dimension pervaded by uniformity and indifferent indistinction [Scheler 1913-1923, 29-38].

Without falling back on now obsolete technophobic and technophilic attitudes, we must nevertheless ask ourselves whether the monocratic «technological system» [Ellul 1977/1980; 1988] – whose possible consequences also force other equally relevant questions from both political and ethical perspectives – may represent a real threat to man and life, understood as having a unique and original affective root, as it could trigger a process of affective regression with the potential to culminate in a radical regression, if not the complete annihilation, of not just the human but all living expression. While discussion of technological aggression of the environment has become a frequent theme, we in fact

need only look at the human level to see signs of danger. If studies carried out on bio-neuro-psychical pathologies show clearly the key role of the affects in such pathologies and the indissoluble links between emotional drives and elementary affects, as they have also demonstrated the affective origins of life and of consciousness, these pathologies can equally be typical manifestations of technopathy. Internet Addiction Disorder (IAD), the spread of young *hikikomori*, the proliferation of cases of Internet Fatigue Syndrome (IFS), as well as ADHD, borderline personality disorder[12] and burnout syndrome (BD) [Han 2010/2015] are the principal pathologies that have materialised alongside the arrival and growth of technological interaction. Added to these are the numerically increasing manifestations of the strictly psychiatric disorders such as depression and schizophrenia which have begun to exist in intermediate as well as full-blown forms [Kandel 2018].

As such, it would be wise to question the extent to which it is possible to consider "technological mediation" as an effectively *trans*-formative synthesis, necessarily implying that it is also a means of *con*-serving the human. Does technology, in other words, permit man the conservation of himself that would be necessary to render him capable of transforming himself? Indeed, if this transformation or surpassing of oneself is intended as a *pro-ceeding*, or an *over*-taking, this necessarily implies man's conservation of himself. Were this surpassing to take place without conservation, a fracture would be opened, a glitch, a void – it would,

[12] «Borderline personality disorder is a mental illness marked by an ongoing pattern of varying moods, self-image, and behavior. These symptoms often result in impulsive actions and problems in relationships. People with borderline personality disorder may experience intense episodes of anger, depression, and anxiety that can last from a few hours to days. People with borderline personality disorder may experience mood swings and display uncertainty about how they see themselves and their role in the world. As a result, their interests and values can change quickly. People with borderline personality disorder also tend to view things in extremes, such as all good or all bad. Their opinions of other people can also change quickly. An individual who is seen as a friend one day may be considered an enemy or traitor the next. These shifting feelings can lead to intense and unstable relationships. Signs and symptoms include […] a pattern of intense and unstable relationships with family, friends, and loved ones, often swinging from extreme closeness and love (idealization) to extreme dislike or anger (devaluation) […]» [National Institute of Mental Health *n.d.*].

in short, generate a radical *other* – and what would appear within this void would be "*other*-than-human".

It is for this reason that it has become necessary to open a philosophical-anthropological investigation of ethical-critical scope into the *homo bio-technoinformaticus*. In order to conserve himself as *homo* – albeit now liberated from the "humanistic" framework, historically comprehensible but latterly revealed as presumptuous and fallacious, hence unjustifiable – man "must" *over*-take himself by means of technological science. At the same time, however, he must not "betray" himself; he must not negate himself. The "technological system" that has become *technopathic*, in that it seeks the negation of man through the progressive "dis-qualification" of his innumerable capacities through their replacement by *technology*, seems set on reducing the human to definitive *irrelevance* [Harari 2018] by leading him to the condition of functional indifference proper to the datum by means of the progressive elimination of the creative and cognitive affective horizon of the sentiments. To avoid this fate, man must be-tra-y himself, transport himself, trans-late himself, take himself *beyond*, to the point of becoming "*other*-than-human" ("even more human") and therefore no longer an anthropocentric, self-referred entity, nor an entity reduced to the inert and *sense-less* "thingness" of the datum, but a pluri-centric and other-referential affective living being, capable of constructing relationships with every *other* alterity through the enhancement of its "affective system" which is also its consciousness, or rather, living affective *psychicity*. Only thus can he become "ultra-human", *beyond*-human, and so, perhaps only in this sense *posthuman* [Masullo 2008, 41]. To preserve and transform himself, in arriving at the new condition of bio-techno-entity [Masullo 2011], the man that *is to come* needs to cultivate affects and feelings, avoiding his reduction to the "sea of data", a dead ocean where he would inevitably lose himself. Cultivating the *ocean-sea* as a total *sum* of the affective expression of the living and *feeling* his belonging to the totality of affects, he must rather continue to project himself not as a dead entity – an indifferent, executing *techno-entity* – but as a *bio-techno-entity*, a performative, sensitive and sentient being, a *living actor*, liberated from technological unipathic tyranny, once again open to multiple affects, that is, to the destiny of a "multi-pathic" self whose

encounter with technology represents a further prospective opening, an affectively motivated (*e-motivated*) occasion within the trajectory of its completely human necessity of *trans-formation*.

References

Al-Khalili, J., McFadden, J. [2015], *Life on the Edge. The Coming of Age of Quantum Biology*, New York, Crow Publishing Group.

Anders, G. [2002], *Die Antiquiertheit des Menschen*, Vol. 1. Über *die Seele im Zeitalter der zweiten industriellen Revolution*, München, Beck. (Original work published 1956)

Barbieri, M. [2008], Biosemiotics: A New Understanding of Life, in: *Naturwissenschaften* 95, 577-595.

Benasayag, M. [2015], *El cerebro aumentado, el hombre diminuido*, Buenos Aires, Paidos.

Benasayag, M. [2019], *Funzionare o esistere?*, Milano, Vita e Pensiero.

Brockman, J. [2003], *The New Humanists. Science at the Edge*, New York, Barnes & Noble.

Broers, A. [2005], *The Triumph of Technology*, Cambridge, Cambridge University Press.

Canali, S., Pani, L. [2003], *Emozioni e malattia*, Milano, Bruno Mondadori.

Cannon, W.B. [1932], *The Wisdom of the body*, New York, W.W. Norton.

Cusinato, G. [2018], *Biosemiotica e psicopatologia dell'*ordo amoris, Milano, Franco Angeli.

Damasio, A. [2018], *The Strange Order of Things*, New York, Random House Editor.

Denton, D. [2005], *Les Emotions primordiales et l'éveil de la conscience*, Paris, Flammarion.

Domingos, P. [2015], *The Master Algorithm*, New York, Basic Books.

Edelman, G.M. [1987], *Neural Darwinism: The Theory of Neuronal Group Selection*, New York, Basic Books.

Edelman, G.M. [1992], *On the Matter of the Mind*, New York, Basic Books.

Ellul, J. [1980], *The Technological System*, trans. J. Neugroschel, New York, Continuum. (Original work published 1977)

Ellul, J. [1988], *Le Bluff technologique*, Paris, Hachette.

Fabris, A. [2018], *Ethics of Informations and Communication Technologies*, Berlin, Springer.

Fry, H. [2018], *Hello World. How to Be Human in the Age of the Machine*, London, Black Swan.

Gazzaniga, M.S. [2018], *The Consciousness Instinct*, New York, Ferrar, Straus and Giroux.

Han, B.C. [2015], *The Burnout Society*, Stanford, Stanford University Press. (Original work published 2010)

Han, B.C. [2017], *Psychopolitics*, New York, Verso Books. (Original work published 2014)

Harari, Y.N. [2015], *Homo Deus. A Brief History of Tomorrow*, London, Harvill Secker.

Harari, Y.N. [2018], *21 Lessons for the 21th Century*, London, Jonathan Cape.

Hoffmann, P.M. [2012], *Life's Ratchet. How Molecular Machine Extract Order From Chaos*, New York, Basic Books.

Hottois, G. [1990], *Le paradigme bioéthique (Une éthique pour la technoscience)*, Bruxelles/Montréal, De Boeck-Erpi.

Kandel, E., [2018], *The Disordered Mind*, New York, Ferrar, Straus and Giroux.

Lanza, R., Berman, B. [2009], *Biocentrism*, Dallas, BenBella Books.

Lanza, R., Berman, B. [2016], *Beyond Biocentrism*, Dallas, BenBella Books.

Leonhard, G. [2016], *Technology vs. Humanity. The coming clash between man and machine*, Switzerland, The Futures Agency.

Lipton, B.H. [2005], *The Biology of Belief*, New York, Authors Pub Corp.

Lorenz, K. [1983], *Der Abbau des Menschlichen*, München, Piper Verlag.

Maldonato, M., Masullo, P.A. (eds.) [2017], *Posthuman. Consciousness and Pathic Engagement*, Brighton/Portland/Toronto, Sussex Academic Press.

Masullo, P.A. [2008], *L'umano in transito*, Bari, Edizioni di Pagina.

Masullo, P.A. [2011], Critica della salute bioantropotecnica, in: *Teoria* 31 (1), 81-91.

Masullo, P.A. [2014], Il patico come modo essenziale della "forma-vita", in: *Thaumazein* 2, 433-454.

Mayr, E. [1982], *The Grouth of Biological Thought. Diversity, Evolution and Inheritance*, Cambridge, Cambridge University Press.

Mayr, E. [2004], *What makes Biology Unique?*, Cambridge, Cambridge University Press.

National Institute of Mental Health [n.d.], Borderline Personality Disorder. Retrieved October 12, 2019, from https://www.nimh.nih.gov/health/topics/borderline-personality-disorder/index.shtml

Nietzsche, F. [1964-], *Opere complete*, ed. Colli-Montinari, Milano, Adelphi.

Nietzsche, F. [1881-1887/2006], *Writings from the Late Notebooks*, ed. R. Bittner, trans. K. Sturge, Cambridge, Cambridge University Press.

Nietzsche, F. [1881-1889/2015], The Will to Power, in: *Nietzsche's Complete Works*, East Sussex, Delphi Classics.

Nietzsche, F. [2007], On Truth and Lying in a Non-Moral Sense, in: *The Birth of Tragedy and Other Writings*, Cambrige, Cambridge University Press. (Original work published 1873)

Nietzsche, F. [2015], Ecce homo, in: *Nietzsche's Complete Works*, East Sussex, Delphi Classics. (Original work published 1888)

Northoff, G. [2016], *Neuro-phylosophy and the healthy mind: learning from the unwell brain*, New York, W.W. Norton & Company.

Panksepp, J., Biven, L. [2012], *The Archaeology of Mind*, New York, W.W. Norton & Company.

Panksepp, J. [1998], *Affective Neurosciences. The Foundations of Human and Animal Emotions*, Oxford University Press, New York.

Pievani, T. [2019], *Imperfezione*, Milano, Raffaello Cortina.

Revelli, M. [2012], *I demoni del potere*, Roma/Bari, Laterza.

Rosciglione, C. [2005], *Homo natura. Autoregolazione e caos nel pensiero di Nietzsche*, Pisa, ETS.

Scheler, M. [1913-1923], Wesen und Formen der Sympathie, in: Id., *GW*, Vol. 7, 7-258.

Scheler, M. [1926], Mensch und Geschichte, in: Id., *GW*, Vol. 9, 120-144.

Scheler, M. [1927], Die Stellung des Menschen im Kosmos, in: Id., *GW*, Vol. 9, 7-71.

Scheler, M. [1954-1997], *Gesammelte Werke* [*GW*], Bern, Franke.

Scheler, M. [2008], *The Human Place in the Cosmos*, Evanston (IL), Northwestern University Press.

Smail, D.L. [2008], *On Deep History and the Brain*, Oakland (CA), The Regents of University of California.

Stiegler, B. [2001], *Nietzsche et la biologie*, Paris, PUF.

Vincent, J.D. [1986], *Biologie des passions*, Paris, Odile Jacob.

Vozza, M. [2006], *Nietzsche e il mondo degli affetti*, Torino, Ananke.

Weizsäcker, V. von [1986-2005], *Gesammelte Schriften* [*GS*], Frankfurt am Main, Suhrkamp.

Weizsäcker, V. von [1987], Seelenbehandlung und Seelenführung, in: Id., *GS*, Vol. 5, 67-141; trans. P.A. Masullo, *Biologia e metafisica*, Salerno, Edizioni 10/17, 1996. (Original work published 1926)

Weizsäcker, V. von [1997], Der Gestaltkreis, in: Id., *GS*, Vol. 4, 83-338; trans. P.A.Masullo, *La struttura ciclomorfa*, ESI, Napoli, 1995. (Original work published 1940)

Weizsäcker, V. von [1987], Anonyma, in: Id., *GS*, Vol. 7, 41-89. (Original work published 1946)

Weizsäcker, V. von [2005], Pathosophie, in: Id., *GS*, Vol. 10, 11-598. (Original work published 1956)

Weizsäcker, V. von [1990], *Filosofia della medicina*, trans. T. Henkelmann, Milano, Guerini e Associati.

Zellini, P. [2010], *Numero e Logos*, Milano, Adelphi.

Zellini, P. [2018], *La dittatura del calcolo*, Milano, Adelphi.

Keywords

Anthropogenesis; Technopathy; Affects; Feelings; Pathic; Consciousness; Self; Life; Psychicity; Algorithm

Abstract

The first part of this paper takes as its starting premise the existence of what was defined by Max Scheler at the start of the 20th century as the coincidence between the psychic and the living (*The Human Place in the Cosmos*, 1927). The establishment of this coincidence allows us to form a conception of the "psychicity (*Psychizität*) of life," i.e. to form a provisional definition of consciousness as manifest expression that both has its roots and extends its highest branches in the evolutive dimension of "the affective", coming eventually to assume the form and mode particular to "higher-order consciousness". This higher-order consciousness likely represents the highest level, or the most complex and interconnected level, of the totality of existing manifestations of the vital, understood as the totality of the vital as affectivity, and is today the subject of empirical investigation in the field of the philosophy of neuroscience, a line of inquiry that was anticipated in particular (though not exclusively) by the late 19th and early 20th century philosophical anthropologies of Friedrich Nietzsche, Max Scheler and Viktor von Weizsäcker.

The second part of this article, *Technopathy*, looks at the modern-day pathological "neo-development" of the self, viewed as a progressive distancing of the self from its vital plane, i.e. from the affective. This distancing is generated by an insatiable craving for cognitive consciousness (calculating/quantitative), "animated" by the only passion that it seems to have retained: the passion for technology. Such distancing is pathological in the sense that it results in the regression and erosion of the "animal" passions and affects expressed by the living body, leading potentially to their total eradication. This trend poses a serious threat to the future of humanity.

Prof. Paolo Augusto Masullo
(Università degli Studi di Napoli "Federico II")
Professore Ordinario di Antropologia Filosofica (SSD M-FIL/03)
Dipartimento di Scienze Politiche (DiSP)
Via Leopoldo Rodinò, 22/a, 80138 NAPOLI
ITALY
E-mail: paoloaugusto.masullo@unina.it