Scientifically and Philosophically About the Category of Pleasure(s)

Ana BAZAC

In memoriam Evanghelos Moutsopoulos (1930-2021), leading Greek philosopher, refined phenomenologist opening paths in the understanding of man in *kosmos*, of music and of *kairos*, member of the Academy of Athens, honorary member of the Romanian Academy: his deep sense of awareness, his shrewd holism, his spirit of justice and beauty as a way of life.

Abstract

Challenged by the concept of pleasure(s), considered by Evanghelos Moutsopoulos as expressing one of the most important criteria and values of the human life, the paper deploys an analysis of pleasures as conditions of the (human) Being and also as "more-than-being". Since the pleasures are feelings, these ones are caught as relationships of the consciousness with its internal and external environment. Therefore, the levels and dimensions of the consciousness light how and why the human consciousness creates meanings, articulated and transmissible, and how only accompanied by pleasures these meanings are produced in a solid way, the only one that assures the existence and development of the human being.

Keywords: pleasure(s), feelings, affects, rhythm, consciousness, sentience, aura, non-living and living systems, individual and society.

Contents

Captatio benevolentiae

We could see pleasure as a *category*[1]: in the Aristotelian *linguistic* meaning of the concept of category, pleasure is the *expression* of an attribute, or predicate, of the human existence. The meanings[2] of the human existence themselves are expressed through the many predicates man discovers in his experience of life. The notions themselves are predicates, and the categories are the *most general* notions: what can be said about existence can be ordered according to the most general notions, because otherwise the enunciation would remain ephemeral (and the things expressed – "accidental"[3]) and could not be communicated to those who are not present in the time of enunciation. The categories are ordering *frames* of notions and *criteria* to differentiate the individual predications. Appropriately, in the expression of a predicate we can grasp the superposing levels of the general, the particular, and the predicate of the predicate: in "Socrates is man" we discern that: "man" is a category, "man" is the predicate of the individual Socrates, and that "man" has its predicate "animal".

Then, although in Aristotle pleasure is not a category, it may be subsumed to two categories, each of them polar: *action* and *passion*. Actually, the acting and the suffering – as two ends of a relation – can be seen as the genera of the feelings they involve, pleasure and displeasure. And as both action and passion admit degrees and contraries[4], so the pleasure does. If action and passion occur in the course of relations, need time to develop and thus involve change, pleasures too deploy in this way[5].

But all the Aristotelian categories have both a linguistic and an ontological meaning. From this standpoint, the pleasures are things measurable with the temporal "before" and "after", as well as "simultaneity", as well as with the "six species of movement". Pleasures are events which born, are destroyed, increase, decrease, alter and shift, i.e. pass from one cause to another one on a scale of priority towards other pleasures or displeasures. All of these situations require a non-reductive

[1] For the role of categories in metaphysics, see Abraham Edel, "Aristotle's Categories and the Nature of Categorial Theory", *The Review of Metaphysics*, Vol. 29, No 1, 1975, pp. 45-65.

[2] Aristotle, *Metaphysics*, in *Aristotle in 23 Volumes*, Vols.17, 18, translated by Hugh Tredennick. Cambridge, MA, Harvard University Press; London, William Heinemann Ltd. 1933, 1989, V, 7, 1017a: "(2.) The senses of essential being are those which are indicated by the figures of predication; for 'being' has as many senses as there are ways of predication".

[3] *Ibidem*.

[4] J. L. Ackrill, Aristotle, *Categories*, and *De interpretatione* (1963), Oxford University Press, 1974, 9, 11b1-2, p. 30.

[5] For an ontological standpoint, see Ludger Jansen, "Aristotle's Categories", *Topoi*, 26, 2007, pp. 153–158.

way to understand them from different perspectives, and this obviously involves the concreteness of situations and not their abstract concepts.

In this respect, the following analysis does help.

Introduction

The common parlance has borrowed the image about pleasures from Epicurus: they are goals of life, but reason must govern on them[6]. This common view is *ethical* and the European history of thinking has glossed long time about the place of pleasures in the moral decisions of the human being.

However, the contemporary philosophy has outrun the priority of the ethical focus, by connecting the scientific research of pleasures to philosophical interpretations. One of the philosophical schools of these up-to-date interpretations is *phenomenology*. It is plausible to think that it ensued as a reaction to Kantian constructivism, i.e. to the apparently too subjective knowledge of the world. Actually, neither the Kant's epistemology is psychology and nor phenomenology is deprived by an implicit development that is full of suggestions concerning the causality of objective and subjective processes and concerning the consequences these processes entail.

Anyway, the analysis presented here follows the deep insight of the concept of pleasure(s) by the phenomenological *and* analytical view of E. Moutsopoulos, as he liked putting his first name only as a capital letter. This insight was and is developed and confirmed by the scientific research of the last decades.

First of all, the better topic is *pleasures*[7] at plural, because the concept at plural sends to the idea of *heterogeneity* of pleasures, manifested on the different existential levels of the human person (somatic, affective, communicative, intellectual, of communion/social) and according to different degrees of

[6] Diogenes Laërtios, *The Lives and Opinions of Eminent Philosophers*, Translated by K. D. Yonge, 1915, Project Gutenberg, Book X, XXXI, 5, p. 474.

[7] Ε. Μουτσοπουλου, Αι Ηδοναί. Φαινομενολογική έρευνα ενίων προνομιούχν συειδησιακών κατστάσεων[*The Pleasures. Phenomenological research of some singular privileged states of consciousness*] (1967), second edition still in Greek, 1975. Unfortunately, the book was not yet translated into a language of universal circulation. But it was translated into Romanian (the second edition) by Claudiu Sfirschi-Lăudat, Bucureşti, Omonia, 2005.
Other papers were written by E. Moutsopoulos directly in French – his second language – and English; we mention only *Le problème du beau chez Petros Vrailas-Armenis*, Aix-en-Provence, Éditions Ophrys 1960; *La conscience de l'espace*, Aix-en-Provence, Orphys, Institutions philosophiques réunies; 1997; *Le problème de l'imaginaire chez Plotin* (1980), Paris, Vrin, 1980, 2000; *La structure de l'imaginaire dans la philosophie de Proclus*, 1985), Paris, L'Harmattan, 2006; *Structure, présence et fonction du kairos chez Proclus*, Académie d'Athènes, Centre de Recherche sur la Philosophie Grecque, 2003; *La musique dans l'oeuvre de Platon*, Paris, P.U.F., (1959) 1989; *Kairos. La mise et l'enjeu*, Paris, Vrin, 1991; *Kairicité et liberté, Académie d'Athènes, Centre de Recherche sur la Philosophie Grecque, 2007; Reflets et résonances du kairos, Académie d'Athènes, Centre de Recherche sur la Philosophie Grecque*, 2010; *Variations sur le thème du kairos: De Socrate à Denys*, Paris, Vrin, 2002; *L'univers des valeurs, univers de l'homme: Recherches axiologiques*, Académie d'Athènes, Centre de Recherche sur la Philosophie Grecque, 2005; his last book, *La conscience intentionnée*, Académie d'Athènes, Centre de Recherche sur la Philosophie Grecque, 2016; and articles from which I mention: "Esthétique et philosophie de l'art", *Diotima*, 14, 1986, pp. 41-58; "Aesthetics: Art as a Pragmatic Axiology of Man", *Philosophia*, 17-18, 1987-1988, pp. 120-152; "L'idée de kalokagathia et sa fonction éthique et esthétique en Occident, Les enjeux actuels de l'éthique", *Entretiens I.I.P.*, de Tokyo, Centre Internat. pour l'Étude Comparée de la Philosophie et de l'Esthétique, 1995, pp. 21-34.

intensity, thus involving concrete data generating concrete results. Just this heterogeneity avoids the reduction to an abstract unity seen only ethically. Actually, the ethical "measurement" is but gaining from the analysis of the scientific tackling of pleasures.

Then, the importance of pleasures became a scientific problem at the extent philosophy had pointed their aspects and after it did this: this importance was and is highlighted by physiology, psychology, sociology. Phenomenologically, E. Moutsopoulos has demonstrated that the *states of consciousness* have a *privileged* level since they are *intensified* by pleasures. Thus, the privileged level of consciousness is at stake.

The structural explanation of the frame

The biological rhythms

E. Moutsopoulos started from philosophical concepts as they were revealed by art[8], the utmost Greek emblem of a practice enjoyed in the leisure time and the social life[9]. One of these concepts is *rhythm*, and it opened up the semantic analysis of pleasures, namely, the different degrees of pleasant feelings named by different words, in their progression. And although these words/notions were more important in signalling the degrees of feelings than the concept serving as a framing for the play of degrees of feelings, the present paper considers it a key for the understanding of the biological ground of feelings.

The first phenomenological cognisance about living structures is their functioning in a rhythmical manner. In the whole biological level – and indeed, in the whole system of consciousness – there are *rhythms* of activities having "positive" and "negative" phases, alternating each other and generating results which tend to impose a *balance* in the functioning of the systems they act within. The phases themselves involve and generate oscillations around the necessary balance to the functioning of systems. In its turn, the balance signals the dialectical unity and necessary reciprocal limiting of "order" and "disorder" in each part of the organism and in the organism as such. The necessary "order" must not be thought in an absolute manner, and only at the extent it reflects and assures the coherent dynamic of the system it is good, as the "disorder" is not necessarily the absolute opposite to "order" and when it is necessary to the system it is good. Therefore, the phases of the rhythms tend to *compensate* each other, but this is only a tendency. In fact, as the biological systems are inserted in larger biological systems, having a relative autonomy but subordinated to the unitary system encapsulating them – as in the Russian dolls model – so the rhythms of each of them generate *emergent* responses specific to each system but having a relative, actually conditioned, power to radically transform the unitary system.

The biological rhythms are*bivalent*; we see this bivalency in the *bottom-up* influence of fundamental chemical reactions at the level of cells, in the influence of physical forces through the medium of chemical reactions and linking the rhythms of cells into rhythmical behaviour of groups of cells, and of organs, in the influence of biochemical reactions between organs, but also in the *top-down* influence of integrative forces of the organism on organs, groups of cells and cells. Thus, the excitement of every cell within systems of cells, in the internal organs as well as in the sense organs, takes place as reaction / oscillation of each component of the cell (each sub-system of the cell) in its connections with internal and external excitement factors. According to these factors, each component of the cell,

[8] E. Moutsopoulos, —em La musique dans l'oeuvre de Platon, Paris, P.U.F., 1959.
[9] C. M. Bowra, *The Greek Experience*, Cleveland and New York, The World Publishing Company, 1957, esp. pp. 73, 76, 90

as well as the cell itself, oscillates so as the result being a balancing state of both the sub-systems and the system of cell. But the whole process of balancing by the instrumentality of rhythmical oscillations in the matter-energy-information exchange at the level of each sub-system and each system of the organism is manifesting also at the level of the organism: as both 1) external impulses reception from the sense organs and these impulses' processing in every sub-system and every system in order to control the balance in these sub-systems and systems, and 2) the internal messaging from the consciousness that represents the whole organism: to at least groups of cells and organs, and to the organism in its wholeness.

The action-reaction and the non-living systems

Before arriving to the feeling that is always related to a conscious process, let's mention the *action-reaction* couple[10] without which the movement itself of the non-living systems is not conceivable. The model of living systems (*res vivens*) – at the level of electrical chemical informational basis of molecules – was already producing wonder in scientific communities, since they faced the "sentient" quality of protein molecules which purposefully change their conformation to allow in and out ions, or which change following the ligatures with other molecules[11]. But is there not a similar process, involving action-reaction, in non-living systems? And could we not explain the reactive process at the level of atomic and quantum?

It is not the place to elaborate on the intermingling and superposition of physical forces, chemical rules, magnetic and electrical binds[12]. The "sentience" of apparently amorphous matter was underlined philosophically: as "senses" felt by/emanated from the *matter-information unity* at the level of the depth of the Being or profound matter, we may say "sub-quantum". The sense is typically the result of the consciousness in its relation with the world: it is the *meaning* developed in the exercise of knowing, both *before* the ordered structural approach – as *intuition* and pre-image of the phenomena – and *during* and *after* knowing, sometimes as *that which remains* when the logic and details of the structural approach are no longer present.

The Romanian electronics engineer Mihai Drăgănescu, really feeling the need to interpret philosophically the insertion of information in the material world, has considered that the matter-information unity at the depth of Being[13] would give the fundamental senses, called ortho-senses: the ortho-sense *of existence*, that *of movement*, of *coupling-decoupling*, of *interaction, integration* in living, of *information* and electrical loads. The physical objects are, in the model of Mihai Drăgănescu, even "observers" of the material world, since they respond to this world following the information assimilated and assumed that the world exists and that (as they exist) they must answer. Mihai Drăgănescu's model is complex: it is *circular*, because it shows that the intentionality of consciousness comes from deep unity between matter and information, from the permanent messages of this

[10] This fundamental relation of action-reaction in the physical-chemical world, under the name of *interaction*, was opposed to *communication*, specific to living systems, as behaviour-variable relation. See Erich Hamberger and Herbert Pietschmann, *Quantenphysik und Kommunicationswissenschaft: Auf dem Weg zu einer allgemeinen Theorie der Kommunication*, Mit einem Beitrag von Jörg von Hagen, Freiburg/München, Verlag Karl Alber, 2016.

[11] Ladislav Kovàč, "Life, chemistry and cognition: Conceiving life as knowledge embodied in sentient chemical systems might provide new insights into the nature of cognition", *EMBO Reports*, 2006, June, 7 (6), pp. 562-566.

[12] See only the explanation of the consciousness with quantum states, Stuart Hameroff and Roger Penrose, "Conscious Events as Orchestrated Spacetime Selections", *Journal of Consciousness Studies*, 3, 1996, pp. 36-53.

[13] He preferred the concept of Being for inorganic matter, while for the living one the concept of Existence.

unity in which consciousness bathes[14]. So, the sense created by human consciousness is transposed into the depth of matter and then the fundamental senses reverberate as human meanings. The senses are only intuition of the appearance of things, so of phenomena, they are different from the ordered knowledge of the structures, as it is deployed in science: the senses correspond rather to philosophy.

Therefore, from the causal relationships in the matter-information unity, structured in multi levels spaces and studied by the "structural" sciences, Mihai Drăgănescu designed a philosophical ontology centred on the capacity of the consciousness to feel senses and transposed these senses at the level of fundamental matter as fundamental senses.

But are these fundamental senses feelings of the quantum world? Are the fundamental physical forces – rather from the electromagnetic and the strong force – which cause / explain the holding together of matter at atomic level etc., felt? Does a feeling correspond to the information that doubles the fundamental matter, or even information would be a feeling? Well, we do not (yet) know. What is known is that the model of superior, living systems was taken over in order to imagine a philosophical ontology of the non-living fundamental matter. This taking over – starting from the superior level in order to better understand the inferior ones, though the inferior is the root of the superior – is always interesting, including because by reversing the knowing road from top to bottom, this apparently anti-intuitive technique extrapolates notions specific to the acme of a complex of systems to its bottom.

What does an animal feeling suggest?

The living system is the original locus of feelings. Their realm is the animal life, and rather the contradictory pinnacle of animal life, the human one. Letting aside the philosophical speculation, nowadays we conceive of the feeling as only *instinctual* in animals and the new-born human child, but that develops at the level of consciousness as the infants acquire experience and constitute as humans.

Why this? In order to understand what an instinctual feeling does mean, we remind two approaches.

1. Beyond the scientific neuronal explanation of instincts – that includes also the components of the neuronal level – we again arrive to the *meta*, philosophical questioning and philosophical sketching of answers.

In the ancient thinking, we find some paths which, all of them suggested the derivation of concrete instinctual feelings (as need to eat etc.) from what was called since modernity, "instinct of life". This first inclination or vital impulse – indeed, something *instinctual*[15] – was that to *persist*, to exist

[14] Beingness generates (human) awareness, Mihai Drăgănescu, *The Depth of Existence* (1979), `https://www.racai.ro/external/static/doe/toc.html`, Chapter 7.

[15] Or something that *is not consciously chosen by man in virtue of his reason.* Epictetus emphasised the difference between reason and thus capacity to choose and do (or not do) different things – a natural faculty of humans, allowing the conclusion that they do *two kinds* of things: some ones being *in their exclusive* power to reason, deliberate, choose, strain their efforts to consciously do (or not do) something, and things which are *not* the result of reason etc., but are given by nature. The difference highlighted by Epictetus – see Franco Scalenghe, *Synopsis of all the passages containing the terms 'Proairesis', 'Proairetic' and 'Aproairetic' in the works of Epictetus*, `https://web.archive.org/web/20150210224944/%20http://epitteto.com/Sinossi%20PRO.PRO.APRO.ENG.html` – between acts resulted from conscious will and acts inscribed in the natural composition of the human mind-body unity, so resulted from instincts if we use this modern word, is not tantamount to the later observation of Leibniz that the human freedom is according to what a human can choose from his own will, not forced by others.

in one's own individuality[16]. In the quote from the footnote we observe both the natural impulse to exist and, intertwined, the natural impulse to be *conscious of* the individual existence, as well as their proof in the natural attraction of living beings to things which assure the impulse to persist, or their natural repulsion of things jeopardising the individual existence

And, the Stoics continue, this doesn't mean that the first impulse would be toward pleasures, because the pleasures are only "accessories" – or, in modern language, signs – through which nature facilitates the vital inclination[17].

According to the notions used by the ancients, the instinct of life was related to the impulse of the soul toward material things men yearn for and toward immaterial things as vice, virtue, the beautiful, the good, the bad[18]. This impulse was/is thus proved in the desire of the soul, and is not in the structure of reason: though reason can conduct some desires, at least to some extent, reason is a faculty of humans, and the mastering of instincts is not fully and exclusively a question of this faculty[19].

The idea of primary vital impulse as a fundamental feeling was taken over later by Spinoza and Leibniz as *conatus*, under the Latin translation of the Stoics, reverberating also in modern times both in philosophy (Bergson, Camus) and the biology of the vital force[20]. It's important to note that the natural vital impulse had in antiquity a methodological content: the impulse to persist meant at the same time: the already mentioned awareness of one's own existence and the fact of "feeling good" in one's own existence[21]. To persist meant to feel "at home" (*oikeiosis*) in one's own

[16] The Stoics "say that the first inclination which an animal has is to protect itself, as nature brings herself to take an interest in it from the beginning, as Chrysippus affirms in the first book of his treatise *On Ends*; where he says, that the first and dearest object to every animal is its own existence, and *its consciousness of that existence*. For that it is not natural for any animal to be alienated from itself, or even to be brought into such a state as to be indifferent to itself, being neither alienated from nor interested in itself. It remains, therefore, that we must assert that nature has bound the animal to itself by the greatest unanimity and affection; for by that means it repels all that is injurious, and attracts all that is akin to it and desirable", Diogenes Laërtios, *The Lives and Opinions of Eminent Philosophers*, same edition, Book VII, LII, 85, pp. 290-91 (I underlined, A. Bazac).

[17] "... pleasure, if there be any such thing at all, is an accessory only, which, nature, having sought it out by itself, as well as those things which are adapted to its constitution, receives incidentally in the same manner as animals are pleased, and plants made to flourish.
Moreover, say they, nature makes no difference between animals and plants, when she regulates them so as to leave them without voluntary motion or sense; and some things too take place in ourselves in the same manner as in plants. But, as inclination in animals tends chiefly to the point of *making them pursue what is appropriate* **to** *them*, we may say that their inclinations are regulated by nature. And as reason is given to rational animals according to a more perfect principle, it follows, that to live correctly according to reason, is properly predicated of those who live according to nature. For nature is as it were the artist who produces the inclination", *ibidem*.

[18] Franco Scalenghe's translation in Italian of *Stoicorum Veterum Fragmenta* (ed. Hans von Arnim, Vol. I-III, Leipzig, Teubner, 1903-1905), as *Tutti i frammenti greci*, Libro III, referring to Stabaeus in SVF III, (p. 169, "the usual impulsive posture of the soul", on which the impulses to something second – food etc. – are forged (AB, this can be considered a prefiguring of Bolzano's intentionality), to Clemens of Alexandria in SVF III, p. 176, again to Clemens of Alexandria in SVF III, p. 151 (vice and virtue are not natural things, so there is no natural impulse to them, the humans choose them) etc.

[19] If we use the term of Epictetus, the mastering of instincts is not fully and exclusively a question of proairesis, of reasonable human power.

[20] See Ana Bazac, "Conatus and the worth of life in a time of crisis", in *Philosophy and Crisis: Responding to Challenges to Ways of Life in the Contemporary World*, 2013 Conference Proceedings, G. Maggini, H. Karabatzaki, V. Solomou-Papanikolaou and J.Vila-Chã (Eds.), vol. II, Washington D.C., Council for Research in Values and Philosophy, book series IV: "Cultural Heritage and Contemporary Change", vol. 11, November 2018, pp. 137-152.

[21] Anthony A. Long, "Hierokles on Oikeiosis and Self-Perception", in *Hellenistic Philosophy*, Volume I,

existence. In this respect, when an animal, say, a dog, is hurt, it does no longer feel good "in its skin" and its vital impulse pushes it to re-balance its parts and functions, and it continually licks its injured paw even if this one does not hurt much. And all of these: as *natural* instincts. In man these instincts are covered by *cultural* acquisitions: ideas – carried by words – motives, values, ideal goals and formulations, sometimes even transcending and opposing the direct vital purposes. Thus, the vital impulse to persist and the above cultural acquisitions do not superpose: both elements have a mutual relative autonomy. Anyway, through culture the animal adaptive processes in order to survive *and in as good condition as possible* receive new "vital forces": they are the impetus that competes with instincts, sometimes concurrent with them and sometimes diverging from them.

Scientifically, we can observe three aspects.

First, the vital impulse is the metaphorical description of a first manifestation of life, the *copying* of matter by itself. It is about the RNA *hypothesis*: before the DNA able to encode proteins, there were RNA molecules, acting as catalysts for chemical reactions but also being able to store genetic information in the form of sequences of the nucleotides A, C, G and U. The RNA strands copied themselves and competed with other RNA strands. In this process, the RNA enzymes built proteins and also transferred the above-mentioned genetic information into a more stable DNA[22].

Second, the vital impulse has emerged from a "cognitive impulse" manifesting at the level of living molecules, and this "cognitive impulse" has generated a process of *autopoiesis*, of construction of more complex structures which in their turn gave rise to more complex structures and so on (Humberto Maturana). This *autopoiesis* has manifested as vital impulse / generated it, but the vital impulse as such is not the result of a neutral internal complexification of the living structures (although it is "stored" in the genes), but the genes themselves and the vital impulse are formed in an "ontogenic-phenotype/ontogenic-niche *relation*, and not in the conservation of a particular genotype" because "although nothing can happen in the life history of a living system that is not permitted by its total genotype, whatever happens in it arises in an *epigenetic* manner, and it is not possible to properly claim that any features that arises in the life history of an organism is genetically determined"; thus, "it is behaviour what guides the course of the history of living systems, not genetics"[23].

Then and accordingly, the vital impulse is a principle of coherence generation in/of nature as such, in/of all the species which, just in order to strengthen their structural stability as a basis of their capacity to persist, *harmonise* the vital impulse of every one of them/all of them. In this respect, at least at the level of mammals, the instincts involve a certain pleasure. This once more contributes to what is of greatest importance for the understanding of harmonisation, mostly being cooperation, to the creation of new, more complex structures just as a result of the cooperation itself. These complex structures better preserve their stability. (This is the reason why a new physics supporting

Edited by K.J. Boudouris, Athens, International Center for Greek Philosophy and Culture, 1993, pp. 93-104.

[22] Felix Müller et al., "A prebiotically plausible scenario of an RNA–peptide world", *Nature*, Vol. 605, 2022, pp. 279-284.

[23] Humberto Maturana-Romesin and Jorge Mpodosis, "The origin of species by means of natural drift", *Revista chilena de historia natural*, v. 73, n.2, 2000, (consulted 5 July 2022).
"Behaviour" means here the response of the organism to its environment, i.e. the power of experience in environment; the organism's experience is codified in genes. For example, K. Tambets et al., "Genes reveal traces of common recent demographic history for most of the Uralic speaking populations", Genome Biology, 19, 2018. Or, in a joking tone, not the pedigree ("genes") determines the behaviour of dogs, but their experience in environment, including the cultural selection made by humans, Kathleen Morrill et al., "Ancestry-inclusive dog genomics challenges popular breed stereotypes", *Science*, 376, 475 , 2022, pp. 1-17.

the process of emergence of complex systems is coined with the Greek prefix eu (εὖ) meaning good)[24]. See the empirical research that emphasises the interspecies cooperation[25].

2. However, beyond the philosophical intuitions, the present science integrates the *behaviours* which *express* the action-reaction pattern of living beings, inscribed into the constitutive genetic structure of species.

The scientific tackling of behaviours, inherently having its basis in neurophysiology that manifests as psychology, focuses on the appearance of reactive systems that links their natural basis (the instincts with their neuronal and molecular origin) with the *concrete experience* of living beings and with the cultural/social "second nature" of man. The animal psychology has disclosed marvellous phenomena of human-animal similarity in sensitivity and behaviours[26], and has emphasised dimensions of the states of consciousness varying between species (perceptual richness, evaluative richness, integration at a time, integration across time, and self-consciousness)[27]. But methodologically, the research of the results – easier because these ones are more visible – calls for the research of their causes. The complexity of behaviours' causes and their intertwining has led to the development of psychology and to what is euphemistically called *neurosciences* (actually, mostly neurophysiology and neuropsychology), with their euphemistic pendant *philosophy of mind*, discussing and demonstrating the neuronal origin and correspondence of states of mind and suggesting a necessary synthesis about a synthesis of these states and their basis.

The awareness of feelings

The synthesis of states of mind which are, ultimately, expressed by behaviours, is what Locke has named *consciousness*. It was described by phenomenology (Merleau-Ponty[28]) and psychiatry and psychoanalysis, inherently interpreted from without (as philosophy) (in Henry Ey[29]), as a field, an organised structure of the individual's experience, namely, of *actualisation of its experience* and trans-actualisation of the subject as Self. The feelings, generated by the encounter of the individual with its environment, are only at the extent they are conscious, i.e. present for the person. They are *represented* as present, the self-consciousness of the Self being, *inter alia*, just the mirroring of the feelings which have a generation and trajectory in a lower level of mind, in what Aristotle considered

[24] Paulo Castro, Jose Ramalho Croca, Rui Moreira, Mario Gatta, "On the Foundations of Eurhythmic Physics: A Brief Non Technical Survey", *International Journal of Philosophy*, Vol. 5, No. 6, 2017, pp. 50-53.

[25] Marilyn L. Fogel, and Noreeen Tuross, "Transformation of plant biochemicals to geological macromolecules during early diagenesis", *Oecologia*, 120, 1999, pp. 336-346; Marilyn L. Fogel et al., "Unusually negative nitrogen isotopic compositions of mangroves and lichens in an oligotrophic, microbially-influenced ecosystem", *Biogeosciences*, 5, 2007, pp. 1639-1704; Stefan Schouten, Ellen C. Hopmans, J.S. Sinninghe-Damste, "The organic geochemistry of glycerol dialkyl glycerol tetraether lipids: A review", *Organic Geochemistry*, 54, 2013, pp. 19-61. Etc.

[26] Ana Bazac, review of Georges Chapouthier, *Kant et le chimpanzé. Essai sur l'être humain, la morale et l'art*, Paris, Belin, 2009, *Studia Universitatis Babeş-Bolyai, Philosophia*, Volume 62 (LXII), 1/2017, pp. 183-190; Georges Chapouthier, *Sauver l'homme par l'animal: retrouver nos émotions animales*, Paris, Odile Jacob, 2020, and Ana Bazac, the review in *Noema* 2021, pp. 159-172, for the references.

[27] Jonathan Birch, Alexandra K. Schnell, Nicola S. Clayton, "Dimensions of Animal Consciousness", *Trends in Cognitive Sciences*, Vol. 24, Issue 10, October 2020, pp. 789-801.

[28] Maurice Merleau-Ponty, *La structure du comportement*, Paris, Presses Universitaires de France, 1942; *Phénoménologie de la perception*, Paris, Gallimard, 1945.

[29] Henry Ey, *La conscience*, Paris, Presses Universitaires de France, 1963.

a "vegetative soul", a part of the soul or rather an ability of the complex, i.e. intellective soul[30]. If the consciousness has a pathology that depletes its organisation of the presence of the Self in the world and its capacity of actualisation of feelings, then the peculiarity of consciousness is better grasped.

Therefore, consciousness means the *organisation of the presence of the Self within the organisation of representations of the lived experience*. It is self-organisation, generated by the multi- strata and inter- strata interactions between all of the elements of the consciousness, increasing its order and decreasing its entropy but, obviously, not annulling it and uncertainty. But defined in this manner, consciousness is/involves *mindfulness*, quality of being aware of both the actual experience and the Self[31].

From the above it's difficult to oppose the *intentionality* of the consciousness – the famous idea usually retained from the Brentano-Husserl tradition in phenomenology – to its executive power of *representation*. Neither Husserl – when he described the *hyletic* part, the sensory data stored in consciousness and thus being unintentional, and the noetic/forms constitution part of the consciousness, always intentional – did oppose intentionality and representation. Because the sensory data (*qualia*), only perceived, involve their unique flashing ephemeral impression, in no way intentional, but interpreted as meanings only in/after intentional focuses[32], and interpreted in the consciousness with the help of fragments of representations and images, of symbols (even in forms of *Urphänomenen*, in Goethe's term); and for this reason they are *immanent* to the consciousness, but they are brought to life by intentional animating *morphe*, or within intentional processes. While these processes involve more than the *qualia*: *representations* and *images* (they themselves being complex results of the processing of the information they as well their external origin carry), different kinds of *symbols* – even abstract, formal, as the representations of written or spoken words – and *ideas* in different degrees of abstraction as symbolising the meanings[33] which are interesting for the listener and to which he/she answers. These representations, images, symbols and ideas are formed in the human mind, but they constitute an *external* realm to the intentional processes of actualisation: they are the *noema* constituted in the process of *noesis*, of knowledge formation: and always in the interaction of the consciousness and the world.

But to oppose the *intentionality* of the consciousness to its constitution through representations is difficult not only because to feel a feeling is or can be a very strong intention. When we can feel a certain emotion, we focus/our consciousness focuses on it – concretely on its elements, its causes as we suppose or imagine them – on its combustion and results. Actually, even the intentionality is interdependent with representation. We intend to interact with something not only because we see it in front of us – in fact, we do not aim only at what is visible, palpable – but rather because we have different types of representations of that something *or* of what we consider interesting (possible) to give a certain something. For example, we intend to see reality from an absolutely new viewpoint. We do not know the new point of view neither the reality it would be useful, and obviously nor the

[30] See Stanislas Cantin, "L'âme et ses puissances selon Aristote", *Laval théologique et philosophique*, 2(1), 1946, pp. 184–205.

[31] The therapeutic role of mindfulness cannot be neglected. See Sebastian Sauer, Siobhan Lynch, Harald Walach, and Niko Kohls, "Dialectics of mindfulness: implications for western medicine", *Philosophy, Ethics, and Humanities in Medicine*, 6:10, 2011, pp. 1-7.

[32] See the useful analysis of Kenneth Williford, "Husserl's hyletic data and phenomenal consciousness", *Phenomenology and Cognitive Sciences*, 2013, pp. 1-19.

[33] Although this is not the place to elaborate, it is important to understand that the *clarity of meanings* – ultimately, their goal and reason to be – is chiselled in the environment of concrete and abstract notions, and of different degrees of concreteness and abstraction, and thus involves the mind's discipline and endeavour *to not confuse* the concrete and the abstract and their different degrees. The mindfulness itself is related to the clarity of meanings.

new theory we intend to construct. But our consciousness does not see/understand this "something" only by focusing on (on what?) – although it longs for it – and thus it begins to review the known interesting aspects possibly related to our intentional object. Of course it brackets the existing theories about these aspects: it wants to consider that it longs for with a fresh look, but it does this just because it represents them, and later combines different representations, analyses them and sketches different alternative representations. In fact, observation and raw description start from the always unique human experience, but they are expressed, even in the solitary human mind, with words which cannot remain at the level of the individual, because even the individual notions suppose and suggest general foundations. Differently put, we begin to know when we focus on something interesting for us – knowledge begins with the intentionality of consciousness – but the process of knowing involves the processing of representations[34] in the human mind, including the constitution of new representations.

The states of mind, like the feelings, are also the object of the intentionality of consciousness. Thus, when we feel good there are two aspects: one is our well-being as such, the result at the level of organism of the combination of different states of somatic equilibriums in the many functions of organs, and the awareness of this well-being. The first aspect sends to our mind the signals of well-being, but only when our consciousness had processed the totality/most part/the most intense signals and unites this processing being interested to characterise it, so having the intention to characterise it, we say/know that we feel good.

Letting aside the almost simultaneity of the two aspects, the feelings are felt because we are aware of them: of simple sensations (of pain, of well-being) and of complex states as pleasures, happiness and unhappiness. And, once more, our awareness is not expressed at/only at an unarticulated level but also and rather on the level of articulation of representations.

Sentience and consciousness

Consciousness as intersection of levels and dimensions

The awareness of feelings unveils a constitutive *hierarchy* of the consciousness: as the functions of the consciousness have been constituted, a basic level/function is that of instrument of *knowing* the external world[35] – thus, the level of access consciousness to the world – its *reflective* efficiency[36]. But this is not at all the only aspect that would say something about consciousness. Consciousness is not only a set of responding procedures to the world, this one and perhaps the imperfect character of procedures alone being guilty for the results of the consciousness. And even though it is clear that the *phenomenal* consciousness of the feelings experienced by the humans[37] helps the access consciousness – if we distinguish these feelings from what is external to the focused awareness – in fact, these two levels are intertwined[38], this phenomenal consciousness warns not only about the richness of phenomenal reactions in the world (richness that challenges our capacity to know it) but also about the *constructive* efficiency of the consciousness, about the level of self-enhancing

[34] See David Marr, Vision: *A Computational Investigation into the Human Representation and Processing of Visual Information* (1982), The MIT Press, 2010.

[35] External to the level of awareness, i.e. of the specific intentionality of consciousness; thus, the internal states, the feelings are or can be seen as external, too.

[36] "It's cold, warm etc.; so I will...".

[37] "I feel good etc.".

[38] Uriah Kriegel, "The Concept of Consciousness in the Cognitive Sciences: Phenomenal Consciousness, Access Consciousness, and Scientific Practice", in P. Thagard (Ed.), *Handbook of Philosophy of Psychology and Cognitive Science*, Amsterdam, North Holland, 2006, pp. 195-217.

construction of representations as the newest and superior level of consciousness that supports the previous levels.

In the activity of the brain, to the above access consciousness "areas that are specialised for sensory and motor functions (such as processing sound, visual and movement information)" correspond. While to both the phenomenological and the next mentioned *evaluative* levels synergistic information processing, i.e. integration of information of "complex signals from across different brain networks" from the whole brain, is specific. And just the weigh of the synergy-heavy area, its expansion and transformation, is that which differentiates the humans from even superior animals[39].

Actually, the complexification of the human brain in its functions and material capacity is the result of the evolution of humans and their more and more complex *experience* in an always new and complex environment. The human consciousness has developed in a *social/cultural* frame, and thus the *representative* consciousness is and reflects social/cultural experiences, social/cultural human relations. That's why the consciousness as such involves the representations of *values* as criteria of the organisation of the reflective and phenomenal representations. Clearer: the organisation[40] of reflective and phenomenal representations cannot be taking place/cannot exist without their *evaluation*[41] within the human mind (and obviously with words). In this respect, the evaluative process is another level of consciousness that assures the constancy in the evolution of individual consciousness.

This constancy doesn't mean conservatism or psychical rigidity, it does not refer to the concrete contents of values but to their function and capacity to being criteria in a pattern of analysis of sensations, perceptions, representations: states of mind related, inherently, to the multi-dimensional human experience. This "methodological" pattern responds to the diachronic constitution of the human consciousness, i.e. through the actualisation of the human experience and confronting it.

In other words, the constancy governs the *diachronic* dimension of consciousness, intersecting with the synchronic/*actualisation* dimension that gives the peculiarity of the consciousness as such. The field of consciousness is the intersection of these dimensions. And obviously, actualisation itself is not tantamount to a cutting off of the present from its relations with the past and the future, to a *carpe diem* view, ignoring everything that would not have meanings for the simple living, the simple existence in present. Actualisation doesn't mean "to live in present", but to be aware of the lived experience. It is also a "methodological" pattern of the consciousness. It has space and time dimensions and the present lasts as long as it is structured in an act. E. Moutsopoulos' insistence on *kairos* revealed not only a temporal moment, fugitive in the dialectical play of "not yet", "already", "too early", "too late", but an action moment, because the *kairos*, as every temporal instance, is/are only as *contents*, as actions (intentions, deliberations, choices, actualisations).

This state of awareness sent to the understanding of the consciousness as more than *sentience* of experience, including of having mental states which signal to the individual animal that the experience is not only asking its reaction but also that it is good/bad for its being –. Yes, by this sentience, the animals have a self-actualisation, they act and react from the standpoint of each one's feeling of individuality. And all of these legitimate the careful – let say, human – treatment of

[39] Andrea I. Lupi et al., "A synergistic core for human brain evolution and cognition", *Nature Neuroscience*, 2022.

[40] To the organisation of mental representations (generally, states of mind) the organisation of behaviours corresponds. For a non-mechanical understanding of the concept of organisation, see A.R. Luria, *The Nature of Human Conflicts, Or Emotion, Conflict and Will: An Objective Study of Disorganisation and Control of Human Behaviour* (1930), Translated by W. Horsley Gantt, With a foreword by Adolf Meyer, New York, Grove Press, 1932, esp. pp. 6-9.

[41] E. Μουτσοπουλου, Φαινομενολογία των αξιών(1967), also translated only in Romanian, by the same publishing house, in the same year, also by Claudiu Sfirschi-Lăudat, with a preface by Christos Dedes.

animals. But this argument about the natural state of animals, i.e. about the object of the attitude, is not the only one, it obviously concerns the subject, the human being. And the argument from its viewpoint is related to *moral* sentiments, something absolutely specific to humans.

Pity, refrain from cruelty, image of the human dignity itself when one produces suffering to not only another human but also to all beings which are helpless, dependent, weak, defenceless: all of these sentiments exist not because they arose from the biological ability of humans to sense, by a molecular mechanism of neurons, the intentions of others[42] – actually, this ability is common in animals, primates and birds – so from a molecular coding of information[43] generating superposed feelings about both new "objects" which are living (and which are members of the same species), so because the above sentiments issue and lead to a clearer difference between the "I" being and the other ones (from the same species or not). But because these sentiments develop *only in the web of social relations* where the humans understand the others as intentional agents and learn to share intentions[44], this learning process itself developing the use of symbols with both reflective and normative dimensions. In this way, the *meanings* have appeared, created and polished in the *Mitwelt* or the world of living together. And the above sentiments have been the first embodying[45] the social interdependence, obviously developing with the evolution of the human society.

The peculiarity of the human consciousness

Therefore, consciousness evolved only in the social frame that required and developed the *meanings* through the articulated language that preserves them beyond the present moment[46] – articulated language that is a mediated form of communication, related to the *mediated* form of security of existence (through tools using processes) and where language "has not only its semantic function: function of categorization of impressions, but its pragmatic or regulatory (or controlling) functions as well. By using language man overcomes the direct influences of environment, and his behavior becomes no more field-linked, but is goal- or plan-linked"[47], the consciousness is also a *circumscribing of the human individual – as a person – as a Self.*

The common to humans and animals "neuroanatomical, neurochemical, and neurophysiological substrates of conscious states" and the animals' "capacity to exhibit intentional behaviours"[48] do not annul the uniqueness of the human consciousness. The actualisation mechanism is included in the

[42] Vittorio Gallese, "The 'shared manifold' hypothesis. From mirror neurons to empathy", *Journal of Consciousness Studies*, Volume 8, Numbers 5-7, 1 May 2001, pp. 33-50.

[43] Robert R. Trail, "Thinking by Molecule, Synapse, or Both? From Piaget's Schema to the Selecting/Editing of ncRNA" (2005), *The General Science Journal*, no. 2, 2008, pp. 1-34.

[44] Michael Tomasello, *The Cultural Origins of Human Cognition*, Harvard University Press, 1999, and Michael Tomasello and Hannes Rakotzy, "What Makes Human Cognition Unique? From Individual to Shared to Collective Intentionality", *Mind & Language*, Vol. 18, Issue 2, April 2003, pp. 121-147.

[45] Christopher Boehm et al., "Egalitarian Behavior and Reverse Dominance Hierarchy [and Comments and Reply]", *Current Anthropology*, 34 (3), 1993, pp. 227–254; Christopher Boehm, "The natural selection of altruistic traits", *Human Nature*, 10, 1999, pp. 205–252; Christopher Boehm, "The moral consequences of social selection", *Behaviour*, 151(2-3), 2014, pp. 167-183.

[46] See one of the first moments of the history of the human communication: before the electrical oscillations of the electrical potential of neurons – as a way of communication between them and along the nervous system – there are electrical oscillations of fungi as their language; see Andrew Adamatzky, "Language of fungi derived from their electrical spiking activity", *Royal Society Open Science*, 9, 2022, art. 211926.

[47] A. R. Luria, "Metaprinciples in neuropsychology", *Skolepsykologi*, Argang 8, Nr. 6, 1971 (Denmark), pp. 407-408.

[48] Five years of the Cambridge Declaration on Consciousness, 7 Jul 2017, `https://www.animal-ethics.org/five-years-of-the-cambridge-declaration-on-consciousness/`.

meta look on one's own states[49] and its synthesis as the unitary Self. The consciousness is the *meta* look/ the knowledge on/rather about the knowledge and feelings of the human in its unitary personhood. Thus, the consciousness is self-*consciousness*[50]. Not only for Descartes, self-consciousness is self-knowledge and therefore, the basis of knowledge as such. And just the unitary Self – without which there is no knowledge at all – allows the top-down deployment of causality from the integrity of the organism/person to the functions and equilibrium power of organs etc.: although limited, just the consciousness of the unitary Self has the capacity to control or retard the local disequilibria of organs etc., in order to preserve the unique person.

Consequently, the verification realised by the consciousness concerns not only the accuracy of access and responses, including of feelings, but also the internal coherence of the criteria and judgements/*meta* look the consciousness is able to have about its own decisions. In this, the consciousness is the most transparent: it cannot hide to itself its own exploits: not the others are the most intransigent judges of its behaviour, but itself.

What is specific to the human consciousness is its capacity to create *meanings* at the level of the individual consciousness and to *express* them:

- so as they be the basis of the self-organisation and capacity of emergence (creation of new meanings) and development of the individual psychical life, and
- so as they be the bricks of the emergence and development of the collective psychical life.

The creation of articulately expressed meanings distinguishes the human psychical life from that of animals, regulated mostly by instincts which hoard the eras' access to the external and the internal phenomenal world.

Consciousness as aura

Finally, the field of consciousness is unitary because it is not an amorphous collection of the psychical life (we are aware in reflection, knowledge, sensitivity, attention, perception, memory, self-perception), but the *organisation* of the different psychical phenomena from the standpoint of the unitary Self. In this respect, we may hazard to consider this field an "aura of ideas"[51]:

[49] Anastasia Efklides, Plousia Misailidi (Eds.), Trends and Prospects in Metacognition Research, New York, Springer, 2010; Asher Koriat, "The Feeling of Knowing: Some Metatheoretical Implications for Consciousness and Control", *Consciousness and Cognition*, 9, 2000, pp. 149–171.

[50] Wayne M. Martin, Stoic Self-Consciousness, Self-Comprehension and Orientation in the Stoic Theory of *Oikeiosis*, 2006, pp. 1-24. Available at: `http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.405.2438&rep=rep1&type=pdf`. .

[51] I used *aura* as a synonym for a *halo*, a space surrounding the brain and full of its fruits as representations/"holograms"/meanings, a space formed as an *atmosphere* [as the ancient ατμίς(steam, exhalation, breath, smoke)] of sensation, energy, vibration. From this standpoint, the aura is unique, as a brain/human organism is, if we do not forget Walter Benjamin's meaning of the aura (*The Work of Art in the Era of Mechanical Reproduction*, 1936), and at the same time it is as it would be at a "distance" from the brain: the world of ideas is something absolutely different from the trivial material clew that seems to be rather part of the substance body.
The entire comparison with aura is taken from Ana Bazac, *The intentionality of the consciousness: from phenomenology to neurosciences and back. The attitude of Evanghelos Moutsopoulos towards the phenomenology of the consciousness*, Postface (in English, pp. 103-158, and its translation into Romanian, pp. 159-207) in the Romanian translation (by Ana Bazac, București, Omonia, 2017) of E. Moutsopoulos, *La conscience intentionnée*, Académie d'Athènes, Centre de Recherche sur la Philosophie Grecque, 2016.

- *ideas* which are coherent transposition in words of different images or representations of the objects of the human's intentionality in all the forms of psychical life, and
- *aura* because it is the collection of the psychical life, and this collection is a kind of colloid where the magnetic fields around axons and the electro-magnetic fields generated by synapses, together with the complex, superposed chemical (and electro-chemical and biochemical)[52] reactions of the doubling and high plasticity of bio-chemical basic structures (cells/neurons

[52] But the chemical interactions emphasise the physical laws, as for example those of thermodynamics. For this reason, the chemical interactions – specific to the inanimate world – are deterministic, thus predictable, with all the apparently exotic phenomena as the accumulation of energy in a piece of matter.
In contrast, the biochemical relations suppose something more than chemical determinism, a qualitative new level of existence, that when there are functions (and not only physical forces and energy) and *"ends"* to assure the functioning of the systems based on functions; and thus, when *information* and its transfer and clash are used for those functions and ends;
this level of existence, *life*, occurs when the *information* related to energy and energy imbalance/lack in a defined situation realises "the 'rectification' of microscopic fluctuations" in order to arrive to free/optimal energy, i.e. when this information "is 'inherently' reproducible and thus able to start an unlimited process of adaptation towards optimum function", or information is a "replicative or metabolic machinery" (Manfred Eigen, *From Strange Simplicity to Complex Familiarity: A Treatise on Matter, Information, Life and Thought*, Oxford, Oxford University Press, 2013, pp. 231–234, 494, 575); in its turn, information – *meaning* "semantic information" or meaning – is the result of the movements of matter in discrete information space (where these movements means a change of meaning), and where matter manifests as differentials of energy/potential gradients in order to both *transmit* to other matter recipients clouds of possible situations so as these recipients/rather some possible situations to last and to receive from the inputs of potential gradients selective functions so as these recipients/rather some possible situations to last;
therefore, information means that a process of *goal-directed activity* is in course of establishing, that this process allows and generates the transition from chemical to biological, and that "in the biological the target structure is initially indeterminate and only takes shape during the evolutionary process", when many reproductions and errors in the reproductions of the possible situations occur (and just these reproductions/copies arriving in different points of the information space assure their reception and, ultimately, their selection). Thus, the "conditional readiness" of biological structures is forged, and the meaningful informational process does not take place if both its two extremities do not exist. More: just because of the many possible situations and the complexification of biological structures, the informational process which aims at the simplest ways to match the states of energy with the material structures, becomes more and more complex because this process comes in biological/living structures, *op. cit.*, pp. 437, 404, 438, 446, 405, 443;
life means "sentience – the capacity to exhibit a variety of potential internal states, which respond to the immediate state of the environment", therefore ability of auto-transformation [Ladislav Kovác, "Life, chemistry and cognition: Conceiving life as knowledge embodied in sentient chemical systems might provide new insights into the nature of cognition", *Embo Reports*, 2006, June, 7 (6), pp. 562–566 (p. 565), already quoted].
But life lies in a natural physical space, so it "must satisfy thermodynamics and must be materially and energetically open" [H. R. Maturana, "Autopoiesis". In: Zeleny M. (ed.), *Autopoiesis: A theory of the living organization.* Westview Press, Boulder CO., 1981, pp. 21–33 (p. 22)], i.e.: since, according to the thermodynamic demonstrations, the transition toward low entropy/low disorder weakening/even destroying the internal energy able to produce work takes place in a close system, it results that a living system aiming to maintaining itself must be materially and energetically open. "Even though – Maturana specifies – they are necessarily closed in their dynamics of states".
In fact, life – that means the *most complex molecules / the most complex matter in the universe* – is "a closed network of molecular productions that recursively produces the same network of molecular productions that produced it and specifies its boundaries, while remaining open to the flow of matter through it, is an autopoietic system, and a molecular autopoietic system is a living system" [H. R. Maturana, "Autopoiesis, structural coupling and cognition: A history of these and other notions in the biology of cognition", —em Cybernetics & Human Knowing, 2002, 9 (3–4), pp. 5–34 (p. 10)]. "Autopoiesis occurs only in the molecular domain". "Molecules interact with other molecules in a way

with their internal components, groups of cells, synapses and axons), thus a colloid where the exchange of matter, energy and information[53] through these structures is in a dynamic but

in which the result of their interactions does not participate at any moment in the genesis of that result. The notion of autopoiesis, as a characterization of the organization that makes a molecular system a living system, is an abstraction of what an observer sees as a continuous result of the spontaneous operation of the molecular dynamic architecture that constitutes the living system through processes that are structurally congruent yet blind to the consequences to which they give rise" (p. 13).
If so, and the molecules as such/as chemical matter not having any internal purpose, life still occurs whenever and wherever the conditions for the existence of the above molecular processes exist: "a living system will arise and be conserved in any part of the cosmos where the molecular conditions that make it possible take place: a living system as a molecular system occurs as a closed dynamic molecular architecture that in its continuous transformation through thermal agitation continuously gives rise to itself" (p. 11). The only requirements are the (law of) "conservation of organization (autopoiesis in the case of living systems) and the law of conservation of adaptation, that is operational congruence, with the medium in which a system (a living system in our case) exists" (p. 15).
Life is characterised by *autopoiesis* because "organic molecules are immensely complex. They consist of thousands of atoms that can be arranged in billions of ways. Simply knowing the chemical ingredients of a protein does not tell us much about its structure. Extremely long chains of amino acids are folded up into a compact bundle so that the hot spots – the active sites of the protein – are held on the outside at just the right position. Folding a protein is similar to the task of pushing a mile-long stretch of string marked in blue at six points, and trying to fold the string up into a bundle so that the six points of blue all land on different outside faces of the bundle. There are uncountable ways you could proceed, of which only a very few would work. And usually you wouldn't know which sequence was even close until you had completed most of it. There is not enough time in the universe to try all of the variations", Kevin Kelly, *Out of Control: The New Biology of Machines, Social Systems, and the Economic World* (1995), Chapter 15: Artificial Evolution, on line.
An example of natural construction of organic molecules is the antibody/immunoglobulin, a protein produced by plasma cells in order to neutralise pathogens. But first, see the four macromolecules of life: the Ribonucleic (RNA) and Dezoxiribonucleic (DNA) acids, the protein and the carbohydrate, the last two in many forms.
The variations of living molecules are explained through the creation/learning of (the most suitable) algorithms and their *parallel* (and not in sequence) running. Therefore, the living systems – and not only the human consciousness – are characterised by learning and *changing*, these processes making the living systems more and more complex, i.e. maintaining them through circular processes between the superior and inferior levels of organisation, and adaptation of structures according to rules; see Alvaro Moreno, Kepa Ruiz-Mirazo and Xabier Barandiaran, "The Impact of the Paradigm of Complexity on the Foundational Frameworks of Biology and Cognitive Science", pp. 311–333, in *Handbook of the Philosophy of Science*. Volume 10: Philosophy of Complex Systems, Volume editor: Cliff Hooker, Amsterdam, Elsevier, 2011: "only when the network theory toolkit became available to explore the intricate and emergent structure-function mappings in metabolic, neural, ecological, developmental, behavioural and other types of phenomena, did the true complexity of life and cognition begin to be fully acknowledged and the old foundational framework progressively transformed, substituting its traditional simplifying assumptions by more encompassing and realistic ones" (p. 321); "the organization of living systems consists in different nested and interconnected levels which, being somewhat self-organized in their local dynamics, depend globally one upon the others. This means that both the components and the sub-networks contribute to the existence, maintenance and propagation of the global organizations to which they belong. And, in turn, those global organizations contribute to the production, maintenance and propagation of (at least some of) their constitutive components" (p. 322); "what really matters in biological evolution is not so much the generation of complexity, but its functional and selective control" (*ibid.*).
But all of these processes show "the expansion of life" in matter/universe (as said Vladimir Vernadsky, *La biosphère* (1926), Paris, Félix Alcan, 1929), highly possible (Freeman J. Dyson, "Time Wihout End: Physics and Biology in an Open Universe", *Reviews of Modern Physics*, Vol. 51, No. 3, July 1979, pp. 447–460): though this expansion – that seems to annul/reduce entropy – is not possible without death and the entropy process.

[53] The unity of matter-energy-information has a complex dialectic only mentioned here. On the one hand, there are matter-energy exchanges at the level of quanta which are specific only to this level (the weak

coherent state of suspension and dispersion. The *coherence* is given just by the unitary Self,

interaction; the strong interaction); then there are matter-energy exchanges which transcend the level of quanta, or rather bound it with the one of atoms and molecules (electromagnetic forces and field, responsible for the chemical processes); then there are matter-energy exchanges which transcend these levels and relate them with the *mezzo* and macro ones (gravitation). Therefore, on the one hand, each level of interaction is specific and cannot be reduced to/substituted with another one; so, it seems the material levels do not communicate. On the other hand, there are communication processes between them, at least because of the existence of fields (electromagnetic, gravitational). And at the level of the living, this dialectic is more interesting. All of these suggest the possibility of emergence of the new (representations, feelings, ideas), and the old extreme viewpoints about the origin of emergence from bellow or from the superior system of the organism are surpassed, also through the play of constraints created by both the internal mechanism of the various sub-systems of the organism and consciousness and of the organism as such and the consciousness at all the levels. See Terrence Deacon, Tyrone Cashman, "Eliminativism, Complexity, and Emergence", in *The Routledge Companion to Religion and Science*, Edited by James. W. Haag, Gregory R. Peterson, Michael L. Spezio, Routledge, 2012, pp. 193-205.
[Therefore, where is here the information? Probably, it occurs through the communication process that, however, is only to be fully understood. We can remind here only an aspect indirectly highlighted by E. Moutsopoulos, *La conscience intentionnée*, p. 15: as the cosmic creation in Neo-Platonism consisted of both the emergence/(progressio) phase of the movement of creation by the One (the Soul), emergence of nature, cosmos and the individual souls of humans, and the phase of conversion/(*conversio*) when the One is already transfigured within the individual souls, but these souls keep the memory of their origin, as information and the consciousness, the more they are used the more they develop; or the more the information created by and in the consciousness expands, the more it develops, preserving a dialectic of the new and the old, and of discontinuity and memory and continuity].
The present reduction of information to computing – though necessary and fruitful; in fact, only in this manner can information be processed – does not fully explain information.
More than 30 years ago, Maturana (H. R. Maturana, "Autopoiesis". In: Zeleny M. (ed.) *Autopoiesis: A theory of the living organization*. Westview Press, Boulder CO., 1981, pp. 21–33) could say that "I have not used such notions as coding, message, information, or transmission of information" because "They refer to relations in a metadomain of descriptions, and do not determine relations of contiguity between the components of the composite unity described"; therefore, information would be a concept/manner of understanding the complex systems. Nowadays we know that information is something more.
Anyway, information as a component of the *consciousness* – and not only of the brain – is indispensable to understand that it (information) functions as the observer in micro-physical experiments. In other words, it allows not only the constitution of representations and ideas – as if this constitution could be without the "supervisor" level of awareness about the representations, ideas and their constitution – but also the (rational and affective) controller of this constitution. In fact, this process as such involves two levels of informational dynamics: one is that of the "controller's" level that takes place as if the world of the consciousness would be a classical/macro/mezzo object world and thus where the information is free, i.e. affordable as by humans in their classical mezzo world, while the other informational level is that of the "observers"/information embedded in the matter-energy dynamics and thus a "virtual" and probabilistic result, depending on the concrete matter-energy dynamics which in turn is depending too, on various environmental conditions. I made this suggestion through an analogy with the process of quantum mechanics in relation with (through measurements) the observer, see Chris Fields, "If Physics is an Information, What is an Observer?", *Information*, 3, 2012, pp. 92–103, doi:10.3390/info3010092. Clearer: if the information at the level of matter-energy dynamics is a question of "computational" effort, information at the level of the meanings /the "controller" is not free, it depends on the level of matter-energy-information dynamics.
Obviously, we need the concept of information in order to arrive to the meanings resulted from all the matter-energy exchange processes in the brain, so to the ideas born in the consciousness. These meanings result from the consciousness' previous experiencing of the correspondence of these meanings – i.e. mental contents – with the world; this experience/correspondence led to "valuable information" and also to a specific one: that of the *logic of things* (that there are always a succession of effects from causes, and that *the logic of the mind is correspondent to the logic of the world*). This information about the logic of things has constituted through/as patterns. (The above aspect of the correspondence between the human logic and the logic of the world was grasped by the ancients: the Greeks marveled about the matching of the human logos to the logos of the *kosmos*).

> i.e. the unique and unitary awareness of the world. The ideas converging to the meaning of unitary Self *organise* the entire aura from the standpoint of the unitary Self, the unitary Self-consciousness. And we may hazard that the ideas – constituted on the basis of mental images and representations, and from that complex and scintillating, sparkling aura of psychical states – come into presence, become objects of the consciousness only when a direction of intentionality is determined by the Self and world interaction.

We may presume that the aura can be/describe a certain autonomy of the information carried by the electrical oscillations towards their material basis, autonomy generated just by the living organism's tendency to persist, and which tendency is assured just by the brain and its complexification. The aura could be to constitute starting from the need of associativity and memory.

We may presume that the matter-energy-information reactions/ exchanges create *virtual models* constituted from information and acting as feedbacks within the above reactions/exchanges. We only presume and begin to demonstrate at neurophysiologic level that these models have a changing "basis" (different trajectories between molecules etc.) and that they must avoid both *inefficiency* and waste: for example, and as in the decision of the consciousness, the decision of neurons to transmit to which other neurons their information needs a balance between too much choice and too much "methodological" limits/constraints of these excessive possibilities, as well as it needs a rapid – learned – evaluation, so as no neuron be without function and, at the same time, no neuron faces too much message-passing. The above-mentioned virtual models constitute the "aura" of the brain, aura that eventually may be grasped with specific instruments. But what is important is its "content"[54], i.e. the contents of the virtual models, or that which is the "physical bearer" of consciousness apart from the first bearer (the brain), or even the consciousness as such. In fact, —em consciousness is both its states and its results (the *contents forming the aura: ideas, feelings*).

I used the metaphor of the aura because – influenced also by Popper's "worlds" – it suggests the *externalisation* of projections resulted from the multiple relations/connections of various "contents"/information in the brain (and stored in different types of memory), including those of patterns of different connections. This externalisation seems "normal" since the connections and information produced in the brain are infinite; the old pictures of different personages having an aura around their head illustrate this conception. On the other handed, *the externalisation may not exist at all*: because information is not worn out when it is used, and because, though physical, information is not matter as such. In the brain there are both *types of relations/connections* which change rapidly with the change of contents, and *types of patterns of* relations/connections: all these types are related each other and emphasise the organised character of the living structures. Anyway, these relations form projections, information stored at the same time as contents, patterns (types of connections between contents), and models.

The virtual projections are information on the basis of which people act, or ideas, and people are aware of these information or ideas. The awareness of all of these is stored too, separated from the projections of ideas as such. In other words, both a specific content and the awareness of/about this content are stored. Thus, consciousness cannot be separated from its operations (which thinkers

As a result of the meanings formed in that manner, people could grasp the logic of things and this logic seemed to them so wonderful that they could arrive at the conclusion (Galileo) that the world may be understood in mathematical language. It is obvious that the spring of computer sciences is the follow-up of this conclusion.

[54] Wilhelm Wundt has used this word, as mental content of the psychic relations, for example as in one of the four laws/explanatory principles in psychology: "the principle of connecting relations (every mental content is related to others from which it receives its meaning)", in Martin Kusch, *Psychologism: A Case Study in the Sociology of Philosophical Knowledge* (1995), London and New York, Routledge, 2005, p. 132.

tackle at psychological, logical and epistemological level). And there is a mutual dependence of the consciousness and its projections: the first is the background warning about the ideas/projections produced inside.

But that internal mutual dependence is also depending on the exterior environment experienced by the consciousness and without which the organism and thus the Self cannot exist/persist. Obviously, there is a fundamental difference between the relations of non-living systems with their exterior environment and the relations of the living systems with their environment. The latter systems use the matter-energy-information exchange with the environment in order to repair any degree of their internal organisational degradation, just opposite to the non-living systems (excluding the artificial, created ones) which rather waste the external matter-energy-information[55].

Emphasising the pleasures

Preamble

The ideas – which are, ultimately, *representations of meanings*, revealed by the instrumentality of the information theory and philosophy as capacity to provide reference and to process information[56] just in order to light meanings in all their structural and positional forms[57] – are more than contents, models and patterns. They are also vectors and triggers of *feelings*. Between these feelings – of *desires, needs, aims, of power* and *powerlessness*, of *knowledge* and *ignorance*, of *awareness*, of *well-being* and *suffering*, of *love* and *hate*, of *dispositions*, of *freedom* and *lack of freedom*, of *will to manifesting oneself*/one's own abilities and of the *sense of plenitude*, of the *sense of obstacles* and the *sense of emptiness*, of *the time in front of us*/of the length of life, and of the *sense of the end* – our topic concerns, following E. Moutsopoulos, the *pleasures* (as negation of pains).

The organism, that is to say promoted by the unitary composition of all the sub-systems and systems of the organism, experiences different states as a result of the degree of balance (or homeostasis) at the level of every system and also at the level of the organism as a whole. The biological rhythms

[55] See Terrence W. Deacon and Tyrone Cashman, "Steps to Metaphysics of Incompleteness", *Theology and Science*, Vol. 14, No. 4, 2016, pp. 401-429 (416).

[56] The fact that "natures computes"/every living system computes, thus the fact of ubiquity of computation, means information processing everywhere, thus the above-mentioned matter-energy-information unity. But if life needs information processing, information processing no needs life, Gordana Dodig-Crnkovic and Rickard von Haugwitz, "Reality Construction in Cognitive Agents Through Processes of Infocomputation", in Gordana Dodig-Crnkovic and Raffaela Giovagnoli (Eds.), *Representation and Reality in Humans, Other Living Organisms and Intelligent Machines*, Springer, 2017, others from which it receives its meaning)", in Martin Kusch, *Psychologism: A Case Study in the Sociology of Philosophical Knowledge* (1995), London and New York, Routledge, 2005, p. 132.
See Terrence W. Deacon and Tyrone Cashman, "Steps to Metaphysics of Incompleteness", *Theology and Science*, Vol. 14, No. 4, 2016, pp. 401-429 (416).
The fact that "natures computes"/every living system computes, thus the fact of ubiquity of computation, means *information* processing everywhere, thus the above-mentioned matter-energy-information unity. But if life needs information processing, information processing no needs life, Gordana Dodig-Crnkovic and Rickard von Haugwitz, "Reality Construction in Cognitive Agents Through Processes of Infocomputation", in Gordana Dodig-Crnkovic and pp. 211-232 (225).

[57] See Gordana Dodig-Crnkovic and Raffaela Giovagnoli (Eds.), *Representation and Reality in Humans, Other Living Organisms and Intelligent Machines*, Springer, 2017.

are of "lowering and ascending, of straining and relaxing", said E. Moutsopoulos[58]. They are *felt* as *pleasant* and *unpleasant* psycho-somatic states, in their various degrees and mixing. From the standpoint of unitary sensing of these states, in humans, but also in some animals, there are in *crescendo* and also in *various* forms: *good mood* and *bad mood, contentment* and *dissatisfaction, pleasure* and *displeasure, gladness* and *delight, happiness* and *infelicity*.

The *feeling* of all of these states at the level of organism – feeling that results from the composition of electro-chemical reactions at all the "subordinated" levels of cell components, cells, groups of cells, organs, with the synthetic psychical reactions they themselves manifesting as cognition and emotion – signals the above-suggested *tendency to persistence*, i.e. to balance at all of these levels, including that of the organism, and thus the tendency to resume vital oscillations. The tendency to persistence is visible as *persistent processes* without which the living systems with all of their component sub-systems would disintegrate. It's clear that persistence is limited: actually, it is limited by the *decay processes*, resulted from gradual exhaustion of the systems (cells etc.) to carry the matter-energy-information exchange in a balanced way. Both processes are felt as pleasant or unpleasant.

Beyond the exhaustion of systems, the dialectical play of persistence and decay of living systems manifests because there are countless internal and external factors contributing in the vital processes; and neither the so many factors nor the vital processes are fully predictable. But the present scientific and philosophical outlook understands the complex of *both predictable reactions and unpredictability* related to both "input" factors and "output" results. The mechanistic view is not absurd: we know that the influence of substance A on the cell is such and such, and not the same as when the cell faces substance B[59]. However, the living systems confront and respond to n internal and external factors, and their composition is changing, giving birth to new states. *Persistence takes place through emergence*, apparition of the new at all of the levels of the living systems. Thus persistence is not opposed to emergence and is generated by the combination of bio-chemical reactions at all the levels of the organism *and* the feeling of the states of the organism as a whole, even though these states reflect those at all its levels.

The tendency to persistence becomes real through many different ways given just by the new results of reactions. It was called *equifinality* by Ludwig von Bertalanffy: the tendency to keep the existence of the unique organism through different paths / answers of and to the reactions of the organism as a whole and of and to its different parts and levels. Or it was called *self-organisation* of the living system and its different sub-systems, reflecting rather a blind mechanical causality at the level of these sub-systems.

Actually, the mechanical causality is proved by the calculability of the states[60] of living systems

[58] Ε. Μουτσοπουλου, Αι Ηδοναί. Φαινομενολογική έρευνα ενίων προνομιούχν συειδησιακών κατστάσεων[*The Pleasures. Phenomenological research of some singular privileged states of consciousness*] in the Romanian translation, p. 11.

[59] "The fact that every potential state in a given dynamic system, whether stable or unstable, can be mathematically calculated from its preceding state shows that a dynamic system is governed by *efficient causality*", Spyridon A. Koutroufinis, "Beyond Systems Theoretical Explanations of an Organism's Becoming: A Process Philosophical Approach", in Spyridon A. Koutroufinis (Ed.), *Life and Process: Towards a New Biophilosophy*, Berlin, Boston, De Gruyter, 2014, pp. 99-132 (p. 102).

[60] Barbara Muraca, "Teleology and the Life Sciences: Between Limit Concept and Ontological Necessity", in Spyridon A. Koutroufinis (Ed.), *Life and Process: Towards a New Biophilosophy*, Berlin, Boston, De Gruyter, 2014, pp. 37-70: "(the) internal purposiveness corresponds to a very complex reciprocal causation rather than to any model of final causation" (p. 37), and "while internal purposiveness is not linked with will or mind in any form, agency or intentionality imply 'a mental anticipation of future states', and can be ascribed exclusively to entities that can perform such anticipation" (p. 41). AB: 1) thus the AI is not excluded; 2) the author analysed in the paper does not distinguish between agency

and their sub-systems, but this is only a step in our knowledge of things, as this is only a basic feature of what is commonly understood as reality. And because this mechanical causality too was very difficult to be understood – since the ordered, mechanical causality takes place in systems, and system-environment systems, full of tensions, and any tension generates its own dialectical process of emergent structures, which at their turn generate new emergent structures seeking to control the new tension, and so on – the fathoming of mechanical causality as such was somehow hindered by alternative concepts as the vital impulse, teleology, freedom and spontaneity of construction. But until the "mechanical causality", including of the underlying physical and chemical processes, was not deciphered in its *finesse* – and not only in its "geometry", if this joke is allowed – neither the purposive, random, spontaneous, environment dependent causality of the living systems, and especially of the humans', can be understood beyond the philosophical suppositions. So, on the one hand, a progress of this research and on the other hand, the historical impatience of the critiques from the standpoint of alternatives (the well-known criticism of Newton and Descartes position) have led to the actual flowering of the integrative view with its innovation of concepts and methodology[61].

Genus proximum: the affects

The pleasures – as all the feelings – are *affects*. They affect us, our consciousness, our cognition and our awareness, our reactions to the world, our connections with the world. The *sensible experience* is that which is the consciousness' form of existence, and this form is a *pattern* for all the manifestations of the consciousness: no manifestation exists without being lived, thus felt.

The affects have a profound *origin*: in our *unconsciousness* that is itself formed of different levels, according to the ontogenetic strata of impressions/imprinting of experience. But this origin is not the single one – the other one is the *complexity of our insertion in the world* – and thus they are *complex* and affect us in a complex manner. And if we consider also the intermingling of affects – from those appetitive to those linked to both the will to persist and the will to have (beautiful) reasons to be of our existence and our deeds, and from sensations to cognition, as well as from the positive to negative affects – we once more grasp their complexity that affect us. And more or once more: the unconscious origin does not exist for the individual if it is not felt and *ultimately* is not transposed into its awareness, obviously expressed only sometimes in words. However, both the aware state of the consciousness and the unconsciousness constitute a *dynamical and contradictory unity* that results from the mutual causation and influencing by their different aspects and sides: a unity that is a crossroads, an intersection of forces and information.

The affects give worth to our sensible experience, namely, they strengthen it and generate infinity of interpretations our consciousness endeavours regarding the sensible experience. Actually, the affects *integrate* within the sensible experience and colour it: this is all the more evident through the medium of the expressing of affects. The words multiply the meanings of the sensible experience and give it symbolic contents.

The affects strengthen the awareness of the Self. What does this mean? Through affects, the *individual* is more aware of the interdependence of its feelings and that they pertain to a single entity, the Self. This one is seen as a whole, an individual *whole* – that is more than the sum of feelings and more than a certain feeling/some feelings that has/have a paroxysmal intensity.

---

that does not necessarily suppose consciousness, and consciousness that is intentional (or intentionality that means consciousness), this distinction is also distinction between different ends.

[61] See only Andreas Weber, "The 'surplus of meaning'. Biosemiotic aspects in Francisco J. Varela's philosophy of cognition", *Cybernetics & Human Knowing*, 9 (2), 2001, pp. 11-29; Matteo Mossio, Leonardo Bich, *What makes biological organisation teleological?*, Synthese, Springer Verlag (Germany), 2014; Alvaro Moreno and Matteo Mossio, *Biological Autonomy: A Philosophical and Theoretical Enquiry*, Dordrecht, Springer, 2015.

But since the affects result from and in our insertion in the world, they light not only the uniqueness of the individual Self – and the contents of its symbolic experience are in no way depending only on the biological functions of the brain and its unity with the body, but equally on the social experience and the social symbols generated by society in its social division, thus on contradictory symbols where struggling around the dominant ones which constitute the material principle and means of social control[62] – but also its appurtenance to the *whole* of the human species. Through affects, the individual is aware of being a *species being*. The whole of the human species is a meaning lived and felt, and obviously expressed, in the development of affects. This is a peculiarity of the humans: to feel parts of the whole species, to understand the meaning of the whole human species – and thus to be species beings – and to connect the own individual Self to the "species Self".

Through affects, the humans experience to belong to *two wholes*: the individual Self and the species. These wholes are not mutually excluding. The humans experience and learn that the individual Self is more than "my feeling now", no matter how intense this one, because this Self exceeds the moments, the fragments, the ephemeral, the unique or continuous feelings. But they experience also they appurtenance to a more comprising Self that defends them as individuals and gives their ultimate reason to be, but that is depending on the fulfilment of the individual Selves of *all* the humans and of every human. We cannot oppose the individual Self to the human species in a simplistic "methodological individualism": historically generated, this "methodological individualism" ignores the determinism generating group/social coagulations and reduces the individual to some behaviour schemes. But obviously, we cannot oppose the individual Self to the human species in a simplistic "methodological collectivism": if the group structures do not regard all the humans and every human when they cause social behaviours and changes, they are not legitimate to be patterns of social causality, and the practice of these group structures are only historical, transient. The species whole that surpasses us is good for us only at the extent that it supports the fulfilment of our individual Self at the level of *all* and every one of us.

For this reason, we cannot reduce consciousness (or mind, if one summarises consciousness as "ideas about") to the brain, neither the origin of the psychical life to the brain or to the unconsciousness, nor we can absolutely oppose consciousness and the unconsciousness, and we cannot explain the human person exclusively as a neurological being, depending exclusively on the functions of the brain[63]: the *integrative* approach, relating culture and the social environment to the whole individual[64], thus emphasising the role of *values* in the formation and mobilisation of the individual consciousness, is *sine qua non* for the understanding of the human person. Consequently, the affects – which, once more, are expressed or, with a medical word, have symptoms (both expressed in language and outside it) – and generally the multi- dimensions of the person's consciousness should be considered in *critically* seen theories. This methodological demand arises from the power relations structuring the environment of the human person, i.e. from the fact that no epistemological description of man can be ignorant of this objective feature of society, thus can avoid the *historical and social determinism* on theories. This determinism was proved, for example, even in the decreeing of (mental) diseases by medical authorities (see Foucault), this enabling their chemical[65] (and electrical) cures according

[62] Walter Lippmann, *Public Opinion* (1922), Mineola, New York, Dover Publications, 2004, p. 128: "the leader knows by experience that only when symbols have done their work is there a handle he can use to move a crowd. In the symbol emotion is discharged at a common target, and the idiosyncrasy of real ideas blotted out"; Stanley Milgram, *Obedience to Authority: An Experimental View*, London, Tavistock, 1974.

[63] Jan De Vos, Ed. Pluth (Eds.), *Neuroscience and Critique: Exploring the Limits of the Neurological Turn*, Routledge, 2015.

[64] As it was revealed in Eva Jablonka, Marion J. Lamb, *Evolution in Four Dimensions: Genetic, Epigenetic, Behavioral, and Symbolic Variation in the History of Life*, Revised edition, Cambridge, Mass., London, England: A Bradford Book, The MIT Press, 2014.

[65] Joanna Moncrieff, *The Myth of the Chemical Cure: A Critique of Psychiatric Drug Treatment*, London,

to "well-established" theories. If epistemology fails to view the "reality" itself considered by theories of man as an historical/cultural/social construct[66], it fails to sustain scientific theories, and efficient ones.

A strange specific difference of the human consciousness

Generally, when discussing the problem of human consciousness the presence of *rationality* is that which is emphasised. The high level of rationality, handling symbols and continuously developing at more and more abstract meanings, having logic and many superposed *meta* logics and interpretations, is obvious for every one. And, as it was mentioned, this *high level* is considered the *differentia specifica* of man, many animals sharing with this one the feeling of individuality in its clash with the environment.

What is common to man and animals is thus the *subjective experience of the world*, the fact that the world appears to the individual animal and human being having the colours and vibrations of the relationship with it, not as its absolutely objective face. Of course, for the individual man those colours and vibrations are much more intense than for the animals, because man amplifies them quantitatively and qualitatively. The world that is *for* us is not the world in front of us, although they resemble very much. And the capacity of man that consciously reacts not only to the world *in front of* it (as it appears through the medium of "the most neutral" concepts possible) but also to alternative representations imagined in a cascade of creativity once more shows how rich the human subjective experience of the world is.

The common indicator or sign of the human subjective experience of the world is the articulated language, transposing and corresponding to the self-fulfilling imaginative power of consciousness. This was assumed by the IT and AI constructors. And the IT and AI progress lies – beyond the exceeding of "less data and poor information" and beyond the capacity to solve uncertain problems[67] – precisely in the development of language, "teaching" the machines how to link symbols and meanings and how to link meanings in order to arrive to new meanings.

However, the human consciousness has a sign that is shared – at a certain extent – with animals, but not yet with AI: the pleasures.

The subjective experience means that it is *felt*. And since the AI machines have programmes concerning their "knowledge" that transposes information into verbal and written signs, they could have also programmes which create the correspondence of information and signs with feelings. A machine can be taught to say "I like" and to understand why.

But to express pleasures is not tantamount to pleasures, as to express information is not tantamount to know. This is the reason of defining the human consciousness as —em ability to feel pleasures

Palgrave Macmillan, 2008.

[66] Bruce E. Levine, *A Profession Without Reason: The Crisis of Contemporary Psychiatry—Untangled and Solved by Spinoza, Freethinking, and Radical Enlightenment*, Chico, Ca., A.K. Press, 2022, pp. 18-19: "Philosophers such as Spinoza and genuine scientists recognize that *consensus reality* is not synonymous with *reality*, and that *conventional wisdom* is not the same as wisdom...Consensus reality is the agreed upon reality by a society or community. . . Conventional wisdom refers to generally accepted beliefs about how best to navigate consensus reality. . . .In any society, consensus reality is not viewed as consensus reality, but as *reality*".

[67] These words posing the problem of solving uncertain problems with poor data and information are from Ernst Cassirer, *Substance and Function* (1910) and *Einstein's Theory of Relativity* (1920), Chicago, The Open Court Publishing Company, 1923, p. 253.
Nowadays, a basis of solving uncertain problems is grey theory, and it is suitable for modeling the interaction of scientific research and the spontaneous circumstances and rhythm it implements.

(and displeasures). The *differentia specifica* of the human consciousness seems to be not the high degree of reason – meaning that the difference between animals and man would be only of degrees, and not of essence – but paradoxically the capacity to feel pleasures. This capacity – itself common to animals and man, also in different degrees, determined by the level of rationality and complexity of *living being-environment systems* – became visible in the comparison of man and AI. This one – at present – can transmit beautiful meanings, but "have no subjective experience of the world", have no consciousness[68].

The phenomenon of pleasures

As mentioned, the pleasures manifest in degrees. Fist of all, there is a *pleasant* state of the *organism*, reverberated both in the unconsciousness and the awareness, as a

- *good humour*, a basis for the further development of the affective sensitivity of both the organs and the organism, and the consciousness; actually, full of promises of pleasures/stronger pleasures
- then the expressions of good humour are expressions of pleasures occurred in this well-being state of the organism: *satisfaction, relaxation, joy, merriment, delight, euphoria, even happiness.*

The good humour itself gets us noticed on the *pleasant state of the organism.* Since a pleasant state arrives only when/after an unpleasant state vanishes – it's the visibility of pleasures *only in relation* with pain, as the ancients observed – and since the existence of the organism cannot be conceived of /cannot be in pain because pain/the prolonged pain signals disequilibrium, illness, thus obstruction of the organism's persistence, we can suppose that the pleasant state, as absence of pain, is the *original* one. And it is almost *permanent* – a necessary condition to development, to sustainability – manifesting in different forms and from all the biological levels of the organism as both successive and concomitant. As a result, we speak not only about the pleasant state as an original condition of the organism's existence itself, but also about the feeling of this state as an original condition of man. In humans, this feeling manifests – irrespective here of its unconscious ground – as a *state of consciousness* and, concretely, as good humour.

Therefore, the permanent state of well-being/comfort of the organism, and obviously its feeling: this is the ontogenetic basis of pleasures as *confirmation of the Being.*

But the confirmation by a pleasure is temporary; hence the existence of the organism marked by a *ceaseless* flux of pleasures, of different kinds and intensity, but not depriving the organism of at least a dominant pleasure *in every moment.* Because: the pleasures are *stimulants* of life, and without them life withers. And if so, the pleasures must always vary, in kind and intensity: otherwise they are not even felt/not felt at their meaning and stop their stimulant, mobilising function and power. Actually, pleasures repeat themselves in new circumstances but they are felt as new feelings, although related to a past pleasure – this was E. Moutsopoulos' phenomenological note –.

Obviously, the pleasures and their stimulant function reflect the multi-causality of the human organism, i.e. the social/cultural condition that frames and is imbued within the human experience. In this respect, unpleasant states of the organism may coexist with pleasures; or clearer, if there is a pleasure (let say, intellectual, or linked to social communion, to affects as love), the unpleasant physical state of the organism can be neglected for a while.

[68] See Ai-Da Robot, *The Intersection of Art and AI* — TEDxOxford, May 29, 2020, `https://www.youtube.com/watch?v=XaZJG7jiRak`.

The pleasures as feelings involve a strong *volitional* strain: they are / their increase is intentionally sought for. And the seeking is not only for the variety of pleasures but also for their permanence even though in alternations[69]. Nevertheless, the intentional strain doesn't mean that the individual is a slave of pleasures, but that the ontogenetic need of pleasures is in harmony with the human sensitive/affective, rational, judgement/axiological abilities. This was the key of ancient ethical theories: the good behaviour as end of the human reason to be, the pleasures in their relationship to the value of the human actions, are the scope. The ancients did not propose hedonism, the search for pleasures at any cost as reason to be of man and its behaviour, but eudaemonism, happiness as a result of reasonable, good deeds. Consequently, we must distinguish pleasures as *existential need* from pleasures *momentarily sought for and manifested*.

In this respect, we can observe that in the history of modern thinking the above distinction either was not made – in the name of a utilitarian ethics of pleasures as constitutive for humans – or the goal of ethics became a utilitarian search for happiness (considered as a maximising sum of maximising pleasures). However, following the tradition of Aristotle, the *social* goal and object of eudaemonism was considered the core of the pursuit of happiness[70], and the fulfilment of life itself[71]. Unfortunately, the philosophical and scientific research nowadays "discovers" too late both the truth of reasons and the truth of facts of this old achievement[72].

Pleasures of what?

Since we mentioned the "domains" of pleasures (somatic, affective, communicative, intellectual, of communion/social), we can observe their tableau that follows Maslow's structure or hierarchy of needs. In the famous psychological model of Maslow[73], the human needs are transposed into motivations, and these ones are mediated in the consciousness by values. People have not only pressing existential needs (to eat, to shelter etc.) but they value the material basis of existence (in good health). And obviously when the everyday pressing needs are met, the humans long for safety, love and belonging, esteem and self-actualisation, which they need and value.

Maslow made this hierarchy in order to focus on the pressing character of needs/motivations and on their *unity* and *permanence*. He did not intend to suggest a social hierarchy when only few people would have superior motivations linked to self-actualisation; he never conceived this hierarchy as a pyramid. He only pointed that without the pressing existential needs met – and we could think that those for love and belonging are existential – one cannot expect much exertion for subtle cultural debates and going up as a dilettante.

[69] For the understanding of the subjective well-being and its intentional background see Daniel Kahneman, Edward Diener, Norbert Schwarz (Eds.), [*Well-Being: Foundations of Hedonic Psychology*, New York, Russell Sage Foundation, 2003.

[70] John Stuart Mill, Autobiography (1873), New York, Columbia University Press, 1960, p. 100: "Those only are happy who have their minds fixed on some object other than their own happiness".

[71] Jean-Marie Guyau, *Esquisse d'une morale sans obligation ni sanction*, 1884, discussed by Moutsopoulos, but also Jordi Riba, *La morale anomique de Jean-Marie Guyau*, Paris, L'Harmattan, 1999.

[72] Iris B. Mauss, Maya Tamir et al., "Can Seeking Happiness Make People Happy? Paradoxical Effects of Valuing Happiness", *Emotion*, 11 (4), 2011, pp. 807-815; I. B. Mauss, N.S. Savino et al., "The pursuit of happiness can be lonely", *Emotion*, 12(5), 2012, pp. 908–912; Brett K. Ford et al., "Desperately Seeking Happiness: Valuing Happiness Is Associated With Symptoms and Diagnosis of Deppression", *Journal of Social and Clinical Psychology*, 33 910), 2014, pp. 890–905; E. Diener, "Subjective well-being: The science of happiness and a proposal for a national index", *American Psychologist*, 55(1), 2000, pp. 34–43.

[73] A. H. Maslow, "A Theory of Human Motivation", *Psychological Review*, 50, 1943, pp. 370-396.

The Maslow model was developed, but it remained related only to the individual and, maybe inherently, without including contents of values. But it drew attention to the multi-strata *concomitant* needs/values/motivations.

In like manner, the pleasures reveal the *unity* of feelings, related not only to physiological needs and reactions but also to values even far from the person's strict needs. As the needs are permanent and from all the categories suggested by the Maslow model, so the pleasures accompany them, including the strain to accomplish them.

Since each need is permanent – irrespective here of the successions of needs – the humans need to "taste" the fulfilment of all needs, so to enjoy their life: that is not reduced to eating and entertainment, but is magnified by pleasures of action, of thinking to the others, of having social ideals, of understanding the reason to be of the human person.

The functions of pleasures: to be privileged states of consciousness

1. The result of the degrees of enjoyment challenged by pleasures is what E. Moutsopoulos calls "privileged state of existence": because the *existence intensifies and enhances during and from pleasures*. Pleasures are the pendant of the privileged state of existence because they themselves are a tension and a culmination of existence. Through pleasures, the consciousness grasps existence in a more intense manner and projects itself – its own creations as reasoning, values, affects – in a more intense manner on existence. Through pleasures, the human existence itself enriches, augments.

2. The pleasures are determined not only by the neurophysiology of the entire body – and not only by the mechanisms within the brain – but also by the external world as it is mirrored and symbolised by the consciousness. In this respect, the pleasures are not only states of mind, i.e. parts of the consciousness causing its growth as well as of the entire organism, but also they are determined by the consciousness, namely, the ideas (representations, symbols) from the consciousness enhancing or tempering and lowering the pleasures.

Thus the pleasures are privileged states of the consciousness because they *intensify* it / they contribute to the development of the human consciousness by intensifying it.

3. Pleasures are *privileged because they enhance – feel, are aware of – the being of the Self.*

Being aware of the being of the Self is a very realistic position: it avoids and removes any illusions about the Self as autonomous from the body. This is why animals (those with nervous systems) and man share conscious self-awareness, obviously in different degrees. The pleasures signal and reinforce the human conscious self-awareness of the *unity* of body and mind/the Self.

But, because there are different kinds of pleasures, including intellectual – accompanying all kinds of knowledge and enhancing it – some of them, namely the intellectual ones, are related to the *most privileged* state of mind/consciousness, the *human reason*. Reason is the tool that produces not only awareness of the mind body unity, but also *alternative* images such as *illusions* about the separateness of mind/Self from the body and the persistence of the soul (as the Self) after the destruction of the body[74]. And the more aware the consciousness is the more the capacity of interpretations, including of different kinds of illusions, increases. In this respect, we can distinguish the *methodological* value of Descartes' dualism from its historical limits; as well as we can distinguish the historical forms

[74] Let's remind in Plato's tradition Emperor Hadrian's poetry dictated on his death bed (138 C.E.): *Animula, vagula, blandula/ Hospes comesque corporis...* (Little soul, little wanderer, peeking out from my body's cover, host and lodger...).

and limits of ideas/theories about man, evolution, essence, from their core. Only when this core is considered in a static way, outside the ontological and existential dynamics, thus in a-historical and a-social way, becomes it absurd as knowledge develops.

Reason is the most privileged state of consciousness because it creates, it constructs not only representations but also new realities. And in order for reason to deploy, the pleasures *increase* its availability and abilities. This is their contribution not only to help the animals, and between them the humans, to feel themselves and thus to persist, but also to help the humans to expand and cultivate their uniqueness.

Instead of conclusions

Though the phenomenological analysis does not need ethics, its deployment arrives to imply it; but not as starting point – as the ethical analysis does – and not as a circular explanation.

Including through pleasures, the Self inserts in the flux of communications which made the society.

Pleasures enhance the consciousness, this one is stronger to conceive of, feel and make the human life lived and pleasant to be lived. E. Moutsopoulos considered that by pleasures the consciousness arrives to a state of "more than being" (*plus-être*). What does this mean, what is more than being for the human individual? It means that the contents of life – symbolised in the consciousness – are that which gives value to life. The pleasures are not only triggers and markers of a content of life, but they directly enhance it.

And pleasures are subjective, but this is not/does not lead to solipsism: where my consciousness confirms without troubles my choices of pleasures. As every state of consciousness, the pleasures *objectify* and in this process they inherently need the *confirmation of other consciences* of my choices: just in order to increase their value and the value of my pleasures. The "more than being" they are for me depends on the "more than being" these pleasures mean to others.

Therefore, the permanence of pleasures for the *ontos* of man suggests their quality to being the main source of the fulfilment of man, or a least a main source. The "more than being" of the individual is to create, to feel fulfilled, to manifest qua human, to dare to initiate everything that is necessary for others to have a human life, with a human content, with a rich human content.

References

[1] Ackrill, J. L., Aristotle, *Categories*, and *De interpretatione* (1963), Oxford University Press, 1974.

[2] Ai-Da Robot, *The Intersection of Art and AI* — TEDxOxford, May 29, 2020, `https://www.youtube.com/watch?v=XaZJG7jiRak`.

[3] Adamatzky, Andrew. "Language of fungi derived from their electrical spiking activity", *Royal Society Open Science*, 9, 2022, art. 211926.

[4] Aristotle, *Metaphysics*, in *Aristotle in 23 Volumes*, Vols.17, 18, translated by Hugh Tredennick. Cambridge, MA, Harvard University Press; London, William Heinemann Ltd. 1933, 1989.

[5] Bazac, Ana. "Review of Georges Chapouthier, Kant et le chimpanzé. Essai sur l'être humain, la morale et l'art, Paris, Belin, 2009", *Studia Universitatis Babeş-Bolyai*, Philosophia, Volume 62 (LXII), 1/2017, pp. 183-190.

[6] Bazac, Ana. "Conatus and the worth of life in a time of crisis", in *Philosophy and Crisis: Responding to Challenges to Ways of Life in the Contemporary World, 2013 Conference Proceedings*, G. Maggini, H. Karabatzaki, V. Solomou-Papanikolaou and J.Vila-Chã (Eds.), vol. II, Washington D.C., Council for Research in Values and Philosophy, book series IV: "Cultural Heritage and Contemporary Change", vol. 11, November 2018, pp. 137-152.

[7] Birch, Jonathan, Alexandra K. Schnell, Nicola S. Clayton. "Dimensions of Animal Consciousness", *Trends in Cognitive Sciences*, Vol. 24, Issue 10, October 2020, pp. 789-801.

[8] Boehm, Christopher et al. "Egalitarian Behavior and Reverse Dominance Hierarchy [and Comments and Reply]", *Current Anthropology*, 34 (3), 1993, pp. 227–254.

[9] Boehm, Christopher. "The natural selection of altruistic traits", *Human Nature*, 10, 1999, pp. 205–252.

[10] Boehm, Christopher. "The moral consequences of social selection", *Behaviour*, 151(2-3), 2014, pp. 167-183.

[11] Bowra, C. M. *The Greek Experience*, Cleveland and New York, The World Publishing Company, 1957.

[12] Cantin, Stanislas. "L'âme et ses puissances selon Aristote', *Laval théologique et philosophique*, 2(1), 1946, pp. 184–205.

[13] Cassirer, Ernst. *Substance and Function* (1910) and *Einstein's Theory of Relativity* (1920), Chicago, The Open Court Publishing Company, 1923.

[14] Castro, Paulo, Jose Ramalho Croca, Rui Moreira, Mario Gatta. "On the Foundations of Eurhythmic Physics: A Brief Non Technical Survey", *International Journal of Philosophy*, Vol. 5, No. 6, 2017, pp. 50-53.

[15] Chapouthier, Georges. *Sauver l'homme par l'animal: retrouver nos émotions animales*, Paris, Odile Jacob, 2020, and Ana Bazac, the review in Noema 2021, pp. 159-172.

[16] De Vos, Jan, Ed. Pluth (Eds.). *Neuroscience and Critique: Exploring the Limits of the Neurological Turn*, Routledge, 2015.

[17] Diener, E. "Subjective well-being: The science of happiness and a proposal for a national index", *American Psychologist*, 55(1), 2000, pp. 34–43.

[18] Diogenes Laërtios. *The Lives and Opinions of Eminent Philosophers*, Translated by K. D. Yonge, 1915, Project Gutenberg.

[19] Dodig-Crnkovic, Gordana and Raffaela Giovagnoli (Eds.). *Representation and Reality in Humans, Other Living Organisms and Intelligent Machines*, Springer, 2017.

[20] Dodig-Crnkovic, Gordana and Rickard von Haugwitz. "Reality Construction in Cognitive Agents Through Processes of Infocomputation", in Gordana Dodig-Crnkovic and Raffaela Giovagnoli (Eds.), *Representation and Reality in Humans, Other Living Organisms and Intelligent Machines*, Springer, 2017, pp. 211-232.

[21] Drăgănescu, Mihai. *The Depth of Existence* (1979), `https://www.racai.ro/external/static/doe/toc.html`.

[22] Edel, Abraham. "Aristotle's Categories and the Nature of Categorial Theory", *The Review of Metaphysics*, Vol. 29, No 1, 1975, pp. 45-65.

[23] Efklides, Anastasia, Plousia Misailidi (Eds.). *Trends and Prospects in Metacognition Research*, New York, Springer, 2010.

[24] Ey, Henry. *La conscience*, Paris, Presses Universitaires de France, 1963.

[25] *Five years of the Cambridge Declaration on Consciousness*, 7 Jul 2017, `https://www.animal-ethics.org/five-years-of-the-cambridge-declaration-on-consciousness/`.

[26] Fogel, Marilyn L. and Noreeen Tuross. "Transformation of plant biochemicals to geological macromolecules during early diagenesis", *Oecologia*, 120, 1999, pp. 336-346.

[27] Fogel, Marilyn L. et al. "Unusually negative nitrogen isotopic compositions of mangroves and lichens in an oligotrophic, microbially-influenced ecosystem", *Biogeosciences*, 5, 2007, pp. 1639-1704.

[28] Ford, Brett K. et al. "Desperately Seeking Happiness: Valuing Happiness Is Associated With Symptoms and Diagnosis of Deppression", *Journal of Social and Clinical Psychology*, 33 910), 2014, pp. 890–905.

[29] Gallese, Vittorio. "The 'shared manifold' hypothesis. From mirror neurons to empathy", *Journal of Consciousness Studies*, Volume 8, Numbers 5-7, 1 May 2001, pp. 33-50.

[30] Hamberger, Erich and Herbert Pietschmann. *Quantenphysik und Kommunicationswissenschaft: Auf dem Weg zu einer allgemeinen Theorie der Kommunication*, Mit einem Beitrag von Jörg von Hagen, Freiburg/München, Verlag Karl Alber, 2016.

[31] Hameroff, Stuart and Roger Penrose. "Conscious Events as Orchestrated Spacetime Selections", *Journal of Consciousness Studies*, 3, 1996, pp. 36-53.

[32] Jablonka, Eva and Marion J. Lamb. *Evolution in Four Dimensions: Genetic, Epigenetic, Behavioral, and Symbolic Variation in the History of Life*, Revised edition, Cambridge, Ma., London, England: A Bradford Book, The MIT Press, 2014.

[33] Jansen, Ludger. "Aristotle's Categories", *Topoi*, 26, 2007, pp. 153–158.

[34] Kahneman, Daniel, Edward Diener, Norbert Schwarz (Eds.). *Well-Being: Foundations of Hedonic Psychology*, New York, Russell Sage Foundation, 2003.

[35] Koriat, Asher. "The Feeling of Knowing: Some Metatheoretical Implications for Consciousness and Control", *Consciousness and Cognition*, 9, 2000, pp. 149–171.

[36] Koutroufinis, Spyridon A. "Beyond Systems Theoretical Explanations of an Organism's Becoming: A Process Philosophical Approach", in Spyridon A. Koutroufinis (Ed.), *Life and Process: Towards a New Biophilosophy*, Berlin, Boston, De Gruyter, 2014, pp. 99-132.

[37] Kovàč, Ladislav. "Life, chemistry and cognition: Conceiving life as knowledge embodied in sentient chemical systems might provide new insights into the nature of cognition", *EMBO Reports*, 2006, June, 7 (6), pp. 562-566.

[38] Kriegel, Uriah. "The Concept of Consciousness in the Cognitive Sciences: Phenomenal Consciousness, Access Consciousness, and Scientific Practice", in P. Thagard (Ed.), *Handbook of Philosophy of Psychology and Cognitive Science*, Amsterdam, North Holland, 2006, pp. 195-217.

[39] Levine, Bruce E. A Profession Without Reason: The Crisis of Contemporary Psychiatry—Untangled and Solved by Spinoza, Freethinking, and Radical Enlightenment, Chico, Ca., A.K. Press, 2022.

[40] Lippmann, Walter. *Public Opinion* (1922), Mineola, New York, Dover Publications, 2004.

[41] Lupi, Andrea I. et al.,"A synergistic core for human brain evolution and cognition", *Nature Neuroscience*, 2022.

[42] Luria, A.R. *The Nature of Human Conflicts, Or Emotion, Conflict and Will: An Objective Study of Disorganisation and Control of Human Behaviour* (1930), Translated by W. Horsley Gantt, With a foreword by Adolf Meyer, New York, Grove Press, 1932.

[43] Luria, A. R. "Metaprinciples in neuropsychology", *Skolepsykologi*, Argang 8, Nr. 6, 1971 (Denmark), pp. 407-408.

[44] Long, Anthony A. "Hierokles on Oikeiosis and Self-Perception", in *Hellenistic Philosophy*, Volume I, Edited by K.J. Boudouris, Athens, International Center for Greek Philosophy and Culture, 1993, pp. 93-104.

[45] Marr, David. *Vision: A Computational Investigation into the Human Representation and Processing of Visual Information* (1982), MIT Press, 2010.

[46] Martin, Wayne M. *Stoic Self-Consciousness, Self-Comprehension and Orientation in the Stoic Theory of Oikeiosis*, 2006, pp. 1-24. Available at: `http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.405.2438&rep=rep1&type=pdf`.

[47] Maslow, A. H. "A Theory of Human Motivation", *Psychological Review*, 50, 1943, pp. 370-396.

[48] Maturana, H. R. "Autopoiesis". In: Zeleny M. (ed.) *Autopoiesis: A theory of the living organization*. Westview Press, Boulder CO., 1981, pp. 21–33.

[49] Maturana-Romesin, Humberto and Jorge Mpodosis. "The origin of species by means of natural drift", *Revista chilena de historia natural*, v. 73, n.2, 2000, (consulted 5 July 2022).

[50] Mauss, Iris B., Maya Tamir et al. "Can Seeking Happiness Make People Happy? Paradoxical Effects of Valuing Happiness", *Emotion*, 11 (4), 2011, pp. 807-815.

[51] Mauss, Iris B., N.S. Savino et al. "The pursuit of happiness can be lonely", *Emotion*, 12(5), 2012, pp. 908–912.

[52] Merleau-Ponty, Maurice. *La structure du comportement*, Paris, Presses Universitaires de France, 1942.

[53] Merleau-Ponty, Maurice. *Phénoménologie de la perception*, Paris, Gallimard, 1945.

[54] Moreno, Alvaro and Matteo Mossio. *Biological Autonomy: A Philosophical and Theoretical Enquiry*, Dordrecht, Springer, 2015.

[55] Milgram, Stanley. *Obedience to Authority: An Experimental View*, London, Tavistock, 1974.

[56] Mill, John Stuart. *Autobiography* (1873), New York, Columbia University Press, 1960.

[57] Morrill, Kathleen et al. "Ancestry-inclusive dog genomics challenges popular breed stereotypes", *Science*, 376, 475 , 2022, pp. 1-17.

[58] Mossio, Matteo, Leonardo Bich. *What makes biological organisation teleological?*, Synthese, Springer Verlag (Germany), 2014.

[59] Moncrieff, Joanna. *The Myth of the Chemical Cure: A Critique of Psychiatric Drug Treatment*, London, Palgrave Macmillan, 2008.

[60] Μουτσοπουλου, Ε. *Φαινομενολογία των αξιών* (1967), translated only into Romanian, by Omonia, 2005, by Claudiu Sfirschi-Lăudat, with a preface by Christos Dedes.

[61] Μουτσοπουλου, Ε. *Αι Ηδοναί. Φαινομενολογική έρευνα ενίων προνομιούχν συειδησιακών καταστάσεων* [The Pleasures. Phenomenological research of some singular privileged states of consciousness] (1967), second edition still in Greek, 1975. Translated only into Romanian (the second edition) by Claudiu Sfirschi-Lăudat, Bucureşti, Omonia, 2005.

[62] Moutsopoulos, E. *La musique dans l'oeuvre de Platon*, Paris, P.U.F., 1959.

[63] Müller, Felix et al. "A prebiotically plausible scenario of an RNA–peptide world", *Nature*, Vol. 605, 2022, pp. 279-284.

[64] Muraca, Barbara. "Teleology and the Life Sciences: Between Limit Concept and Ontological Necessity", in Spyridon A. Koutroufinis (Ed.), *Life and Process: Towards a New Biophilosophy*, Berlin, Boston, De Gruyter, 2014, pp. 37-70.

[65] Riba, Jordi. *La morale anomique de Jean-Marie Guyau*, Paris, L'Harmattan, 1999.

[66] Sauer, Sebastian, Siobhan Lynch, Harald Walach, and Niko Kohls. "Dialectics of mindfulness: implications for western medicine", *Philosophy, Ethics, and Humanities in Medicine*, 6:10, 2011, pp. 1-7.

[67] Scalenghe, Franco. *Synopsis of all the passages containing the terms 'Proairesis', 'Proairetic' and 'Aproairetic' in the works of Epictetus*, `https://web.archive.org/web/20150210224944/http://epitteto.com/Sinossi%20PRO.PRO.APRO.ENG.html`.

[68] Schouten, Stefan, Ellen C. Hopmans, J.S. Sinninghe-Damste. "The organic geochemistry of glycerol dialkyl glycerol tetraether lipids: A review", *Organic Geochemistry*, 54, 2013, pp. 19-61.

[69] Tambets, K. et al. "Genes reveal traces of common recent demographic history for most of the Uralic speaking populations", *Genome Biology*, 19, 2018.

[70] Tomasello, Michael. *The Cultural Origins of Human Cognition*, Harvard University Press, 1999.

[71] Tomasello, Michael and Hannes Rakotzy. "What Makes Human Cognition Unique? From Individual to Shared to Collective Intentionality", *Mind & Language*, Vol. 18, Issue 2, April 2003, pp. 121-147.

[72] *Tutti i frammenti greci*, translation in Italian of Stoicorum Veterum Fragmenta (ed. Hans von Arnim, Vol. I-III, Leipzig, Teubner, 1903-1905) by Franco Scalenghe.

[73] Trail, Robert R. "Thinking by Molecule, Synapse, or Both? From Piaget's Schema to the Selecting/Editing of ncRNA" (2005), *The General Science Journal*, no. 2, 2008, pp. 1-34.

[74] Weber, Andreas. "The 'surplus of meaning'. Biosemiotic aspects in Francisco J. Varela's philosophy of cognition", *Cybernetics & Human Knowing* 9 (2), 2001, pp. 11-29.

[75] Williford, Kenneth. "Husserl's hyletic data and phenomenal consciousness", *Phenomenology and Cognitive Sciences*, 2013, pp. 1-19.