

Analecta Husserliana

The Yearbook of
Phenomenological Research

Volume CXVII



Phenomenology of Space and Time

The Forces of the Cosmos and the Ontopoietic
Genesis of Life: Book Two

Edited by

Anna-Teresa Tymieniecka



Springer

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ANALECTA HUSSERLIANA
THE YEARBOOK OF PHENOMENOLOGICAL RESEARCH
VOLUME CXVII

Founder and Editor-in-Chief:

ANNA - TERESA TYMIENIECKA

*The World Institute for Advanced Phenomenological Research and Learning
Hanover, New Hampshire, USA*

Published under the auspices of
The World Institute for Advanced Phenomenological Research and Learning
A-T. Tymieniecka, President

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Editor

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The Forces of the Cosmos
and the Ontopoietic Genesis
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ISBN 978-3-319-02038-9 ISBN 978-3-319-02039-6 (eBook)
DOI 10.1007/978-3-319-02039-6
Springer Cham Heidelberg New York Dordrecht London

Library of Congress Control Number: 2014930023

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Acknowledgment

In presenting to the scholarly public this collection, the second of two volumes gathering work from the World Phenomenology Institute’s 62nd International Congress, “The Forces of the Cosmos and the Ontopoietic Genesis of Life,” held in Paris, August 8–10, 2012, at Lucernaire Centre National d’Art et d’Essai, I wish to thank all who made this marvelous congress possible. Most importantly, I thank the Institute’s Vice President, Daniela Verducci, who ran the conference expertly in my absence. Alessia Vitale, Mina Sehdev, Stefano Polenta, and Claire Hill deserve thanks for attending to the many essential details of a large conference. We all thank the staff of Lucernaire for making sure our rooms were comfortable and suitable to our needs. And, of course, I thank the authors, whose enthusiasm and expertise made the congress, and now this volume, a great success.

I am also grateful to Jeffrey T. Hurlburt and Louis Tymieniecki Houthakker for their assistance in preparing and editing this volume.

Anna-Teresa Tymieniecka

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Part I

Communicative Virtues of A-T. Tymieniecka's Phenomenology of Life

Daniela Verducci

*To the memory of my dear friend and talented scholar
Romana Martorelli Vico†*

Abstract It did not seem truly possible that Nietzsche's expectations could be met: that being and becoming could converge in one λόγος/*logos* and that the latter in turn, freed from both the confines of monism and the reductionism of dualism, could unfold in the previously unknown metamorphic form, which is able to draw together (=λέγειν/*legein*) the entities that change and become, in the infinite multi-formity of their states, passages, forms and conditions. Yet this is precisely what the phenomenology of life is able to announce: the search for the principle of all things has been reanimated and has begun again to dare to know, according to the Kantian motto: "Sapere aude!". Between the animate and inanimate, the human and non-human, and the numerous polarities that have crystallized in the modern course

Translated by Serena Rossi

† Romana Martorelli Vico was teaching History of Medieval Philosophy at the University of Urbino (Italy). She focused her studies and research interests on the medical aspects of Medieval thinking, giving editions of texts like: Mondini de Leuciis, *Expositio super capitulum De Generatione embrionis Canonis Avicennae* (Rome 1993); *Aegidii Romani Opera omnia* II. 13. *De formatione humani corporis in utero* (Firenze 2008). As a member of "The World Phenomenology Institute", she published: *L'apport de la Scolastique à l'élaboration d'une philosophie de la vie*, in «Actes du 35ème Colloque International de Phénoménologie», Paris 7–9 October 1994, «Analecta Husserliana», L (1997), pp. 131–142 and *Phenomenological points of departure in medieval thought: reflections for study*, in *Phenomenological Inquiry*, The World Phenomenology Institute, Belmont (Mass.) 2001, pp. 58–60. In addition to various essays on Italian and foreign journals, she published the volume: *Medicina e filosofia. Per una storia dell'embriologia medievale nel XIII e XIV secolo* (Milan 2002). She was a member of the Italian Scientific Commission for editing "The Medical School of Salerno".

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of thought, the new ontological hermeneutics made possible by the onto-poiesis of life is building new logoc bridges that open Post-Modernity to a new Enlightenment. The work of intuitive re-sowing of the terrain of Husserlian phenomenology that A-T. Tymieniecka has carried out for 40 years, and which culminates in the development of the phenomenology of life, has in fact manifested the metamorphic *logos* in the creative acts of the individual living human being; it presides over every inorganic, organic and conscious make-being. From this communicative discovery the precious possibility of a new inquiry of *philosophia prima* arises.

Beyond Ontological Incommunicability

Although the phenomenon of «exchange/interrelation» (*Wechsel*) concerns not only the human and living's environment but also the whole cosmos, as Max Scheler demonstrated (Scheler 1954, pp. 475–476), the pulsating heart of “a communication universe” (Klyukanov 2010) appears inaccessible to us who acknowledge to be hermeneutically confined in the so-called “standard theory of communication” (Shannon – Weaver 1949) and moreover jammed in the bronzed chains of a metaphysics which does not want to deal with «the abundance and variety that our present state of human experience reveals, to say nothing of the expanding perspectives on our horizons» (Tymieniecka 2009, p. xxvi). For this reason, as A-T. Tymieniecka observes, «the most concretely felt concern emergent at the present, and this is universally so, is with ‘communication’» (Tymieniecka et al. 2009, p. xxv).

The Ancients attributed this pulsating heart to the life of being itself and its spontaneously communicative generative capability, as Hans Jonas teaches (Jonas 1966, p. 7). For this reason they could – although ingenuously – rely on the fact that virtue communicated itself in the simple human living together, and they could also entrust the generation and transmission of the fruits of the highest theoretical activity to the community of life. Philippe Hadot well highlighted how much the whole ancient philosophy “ethically” understand itself as «way of life» and «living action» (Hadot 1996).

But Modernity damaged the ancient certainty of the living communicative unity among the different levels and forms of being, and since its late medieval beginning, with the advent of the theory of double truth – which divided truth in two incommunicating levels, theoretical and practical (Landucci 2006) – it deprived the communicating flow of life of being in human experience of its natural spontaneity; this fact led to dis-communicative ontologies – dualistic, such as the Cartesian one, which opposes *res cogitans* against *res extensa*, or monistic ontologies such as the materialistic reductionism or the spiritualistic one – to be established on both the primitive panvitalism and the later philosophy of being. The so-called dis-communicative ontologies of Modernity, have been highlighted – apart from some significant exceptions like Leibniz – for the tendency to position in the sphere of abstract speculation, so as to consider all experiences which did not possess the pre-established standards as illusionary.

After all, metaphysics, which teaching went on until the *Schulphilosophie* of German Enlightenment (Wundt 1964), was transferred to Modernity not as living and evermore updating research of the principle of all things, but rather in the “dead” and dis-communicative way of a discipline objectivized in the manuals produced by the Second-Scholastic for a didactical purpose (Courtine 1990).

It was noticed too late that the surprising scientific and technological progress, which still occurs nowadays with a higher increase in the field of communication, could have developed only because it relied on that mysteriously given but efficient communicative spontaneity of being, which ancient-medieval traditional philosophy was able to understand and safeguard in its historical flow, in a way that even the rationalistically Modern reductionism could profit from it.

Only in the late Enlightenment Kant was able to acknowledge that the “metaphysic” but not scientific «to unify the manifold of concepts by means of ideas» for a *focus imaginarius* by reason (*Vernunft*), had «an excellent, and indeed indispensably necessary, regulative employment» for the build-up and progress of science (Kant 2007, p. 533); and it was also acknowledged that this synthesizing process intrinsically depended on a natural, spontaneous and «irresistible» (*unhauhaltig*) force/disposition of the reason itself to metaphysics, called by Kant *metaphysica naturalis* (Kant 2007, p. 56).

In this way it became evident that Modern people deprived themselves of the edifying enjoyment of spontaneous flow of vital/communicative being with their own hands: they wanted to apply on the corrosive criticism and the rationalization of life, surrendering to their compulsive enthusiasm of “rebuilding” the whole natural being according to what they presumed to be the true *logos*, which instead produced even more sectorialization. In fact they established on being the only logic of «instrumental rationality» (*Zweckrationalität*), as Max Weber called it (Weber 1978, p. 24), that is a purposive-rationality/means-end rationality; it is teleological only in a subjective sense (*telos* in an objective sense=*Ziel*) and thus it results voluntaristically not truthfully imposed to the being; therefore dis-communication, a growing fragmentation and dis-synergy were produced everywhere: knowledge and actions began more and more incapable to grasp life, that in turn was perceived as uncontrollable, or with a contemporary expression: “liquid”, (Baumann 2005) thus leading to the anthropological “disenchantment” (*Entzauberung*) (Weber 2004, p.13), to decadence and nihilism of meaning, as F. Nietzsche first foresaw for the Europeans of XX and XXI centuries (Nietzsche 1968, Preface § 2) and as J. Habermas recently underlined and stigmatized in relation to the uncontrolled power of Niklas Luhmann’s systemic theory of society and culture (Habermas 2010; Id., 1990, pp. 368–385).

Beyond the inter-subjective level, incommunicableness affects many other levels of both being and experience, as demonstrated by the spreading relativistic multiculturalism, the epistemological and practical specialism, the growing diffusion of macro- and micro-conflicts. Human subjects find a growing difficulty to conceive themselves as intrinsically being-in-communication with the flow of being or the flux of cosmic meaning, which riverbed actually every new experience immediately enters.

To Resume Ontological Communication

All the things said above show that a serious «debilitation of the I» occurred: it expresses through the existential difficulty of present man in experiencing the true ontological and ultra-rationalistic richness of reality, insofar as it is «proceeding by a mysterious foundation» with which he is however «involved in a constitutive relation [...] through his own being within reality» itself (Prades 2007, pp. 62–63). In fact the typical post-industrial society's man appears as *anima technica vacua* (=empty technical soul) (von Balthasar 2004, p. 3), inasmuch as his meta-technical capacities of knowing the meaning of the world, of other men and himself are weakened and also as he is forgetful of the specie-specific communicative-of-being quality, which makes him a universal operator of development with an increasing/decreasing effect on the real world. The loss of man's «ontological security», in the benefit of an almost exclusive trust in the so-called “expert systems”, as asserted by A. Giddens (Giddens 1990, p. 92), seems to confirm that a potentially lethal *vulnus* for humanity was produced in that communicative ultra-sociality which enhances being and in which the identity of the human living being consists, given that it supported the anthropological philogenesis and it is still supporting the ontogenesis of human individuals, as clearly documented by M. Tomasello (Tomasello 1999).

In order to adequately answer to the criticalnesses arisen from the universe of communication it is thus necessary to deal with men and their unique natural skill which makes them able to λέγειν that is «to collect/to select», according to the happy ambiguity of the root <leg> in Homer which seems to suggest for that action the polysemic meaning of a sort of “creatively bringing λόγος to light”, which grasps and gets-in-communication the world's potentialities, which progressively are revealed by the historic glance matured in intra-subjective relations (Fattal 2001; Heidegger 2000), so as to converge them toward the result of an increase of the overall being.

Nevertheless we have to go back to men's logico capabilities relativizing the metaphysical abstraction of subject, which dominated Modernity with the Cartesian dualism and the polarizing practices occurring not only between leading *élites*/rulers and overmastered categories/workers, but also and moreover between spirit and life, as A. Touraine underlines (Touraine 2006). The anthropological identity has been so invaded by such a modern polarization of spirit and life, that the same coming out of human free cultural capabilities was considered a mark of discommunication. For example Ernst Cassirer affirmed that man is an *animal symbolicum*: man is endowed with an active freedom of creating his own socio-cultural world through relationships, communication, interaction and division of work, thus he is capable of going beyond the boundaries of biological needs and practical interests of animal life. Yet, according to Cassirer, exactly for having such a cultural capability, man continuously experiments (Cassirer 2005a, pp. 393–394, 415–416, 474–475) both the struggling separation from “natural life” and the loss of “immanence in reality” (Cassirer 2005b, pp. 185–186). Moreover he fears of being

defeated by the self-destructive tendencies of spirit which, contrarily to life, is a critical force of self-negation always fighting against itself. According to Cassirer, from the distancing and emancipating process of symbolization the «tragic mark of the entire cultural development» emerges, being it influenced by the tragic psychological experience for which it seems that the movement of the “I” breaks “on its own creations” and its original vital flow blows over as the extent and power of this creation grow (Cassirer 2005b, p. 172).

Communicative Virtues of the Phenomenology of Life

On the contrary the phenomenology of life found out that the function of logicoic creation and ciphering/symbolization does not belong to the spirit of man in spite of his organic dimension and in dis-communication with it; rather, the creative human condition appears at a certain stage of cosmic evolution and it crowns the deterministic autopoietic constructivism of life with the ontopoiesis which “generates being” according to the freedom of *imaginatio creatrix* but at the same time it maintains a strict cosmic immanence (Tymieniecka 1988a, p. 28). As Tymieniecka unveils surprisingly:

«the elementary condition of man – the same one through which Husserl and Ingarden attempted in vain to open a breach, extending the expansion of its intentional nexuses and at the same time turning to ante-reduction scientific data – appears to be constituted by the blind element of nature, and yet at the same time this element shows itself to have virtualities for individualization on the vital level and, what is more important, for a specifically human individualization. The latter virtualities we could call ‘subliminal spontaneities’» (Tymieniecka, 1988, p. 28).

Thus man is represented as a «micro-cosmos» not just statically specular and analogous to macro-cosmos, rather as “ontopoietic living being”, which by his enactions «expands life into possible worlds of life» (Tymieniecka 1988a, p. 6) and therefore is creative/diffusive of being at a cosmic level; according to A-T. Tymieniecka, man is the «vortex of the universal sense», (Tymieniecka 1986, p. 10) inasmuch as he is active in the heart of «turmoil of a generating progress [...] of the immensurable stream of life» and his dynamism is consistent with the unique onto-poietic *logos* of being which, thanks to its metamorphic capacity, presides over every stage of development: from the inorganic to the organic one, from the natural living being to the free one, from the natural being to the supernatural one.

The stress on these new unknown evolutionary transitions of being, which put in touch within the conscious experience epistemologically different worlds as metaphysics and anthropology, is the result of the exercise of communicative virtues of phenomenology of life improved by Anna-Teresa Tymieniecka during her last 40 years of research. Through her analysis the communication between being and becoming has involved again all the levels of experience; it was already longed for by F. Nietzsche as he asserted that: «To impose upon becoming the character of being--that is the supreme will to power» (Nietzsche 1968, § 617).

New Communicative Connections Among Consciousness, Body and Life

The winning move of A-T. Tymieniecka was accepting the challenge of creating a more radical phenomenological criticism than the mostly gnoseologic one based on Kant by Husserl and also by many of his followers; one of them was E. Fink, who in his *Sixth Cartesian Meditation*, approved by Husserl himself, almost compulsively tended to pursue «a ‘last’ transcendental reduction of transcendental, of transcendental constitution as such» (Tymieniecka 2005, p. xiv).

Yet, this setting based only on «intentional/cognitive rationality» (Tymieniecka 2005, p. xiii) did not give the expected results and the numerous phenomena described lacked a logico support which could protect them against dispersion: but “saving the phenomena” was still required by philosophy which was originally meant to be the research of the principle of all things, as well as phenomenology itself was (Verducci 2007, p. 11). Even in the conferences of Prague and Wien, Husserl complained – as reported in the § 53 of *The Crisis of European Sciences and the Transcendental Phenomenology*, where those conferences were collected – the persistent and unsolved discommunication expressed by the «paradox of human subjectivity: being a subject for the world and at the same time being an object in the world» (Husserl 1970, p. 178). For this reason, rather than proceeding with one more effort to interpret phenomenology through its own method, according to the Husserlian proposal of a self-critique of phenomenology upon its very own transcendental/subjective assumptions (Tymieniecka 2005, p. xv), Anna-Teresa Tymieniecka sets out to achieve an «enlarged inquiry that will advance in virtue of rationalities that are not identical with constitutive/cognitive/intentional transcendental», but express a further and more originary «talent/disposition of consciousness» (*Uranlage des Bewusstsein*) (Tymieniecka 1971, § 1, pp. 4–7). In this A-T. Tymieniecka seconded the tendency present in the late Husserl to break with «the early theoretic-methodological restrictions that his focus on intentionality [had] imposed on him» (Tymieniecka 2002, p. 685a). In addition she relied upon the results of the most recent phenomenological psychiatry (Ey, ed. by, 1966) according to which constituent transcendental consciousness is not closed in its absoluteness, but engages a fruitful relationship with forming spontaneity (*bildende Spontanität*) of normal and pathological conscious living that develops beyond the system of constitution, for example, in the typical elementary formations of the collective imagination or in states of dreaming or mental confusion (Tymieniecka 1971, § 1, pp. 4–7). Furthermore, since developments in the natural sciences have overturned the assertion of corporeality as the zero-point (*Nullpunkt*) (Husserl 1989, § 41, p. 165) of the transcendental constitution of the life-world, revealing that “what is conscious” (*das Bewusste*) is rooted in “what is corporeal-natural” (*in dem “Leiblich-natürlichen”*), it is possible to ascertain that consciousness possesses a peculiar modality of “embodiment” (*Verleibung*), where, through the living experiences of the psychic processes in general, their succession, interweaving, and motivation, it comes into the entire spectrum of nature (*Naturgefüge*), in turn understood as autonomous (Tymieniecka 1971, pp. 2–3).

The Husserlian theoretical inheritance is thus assumed by Tymieniecka, not just speculatively but more deeply, through empathy, according to the new way of ideas' living genesis already introduced by W. Dilthey and borrowed both from Edith Stein and Max Scheler. Empathy was also considered by Husserl as the fundamental enigma of intra-subjective relationships (Verducci 2010).

Anna-Teresa Tymieniecka wanted to come into contact with «the seminal virtualities engendered by [husserlian] thought». She believed that making “live again” (*nacherleben*) in herself the founder's theoretical intentions, as intentions from which to start out and carry forward in a theoretical continuation with organic breadth, even the *logos* which presided over their living deployment would have emerged thus reestablishing the organic connection between «the historical body of phenomenological learning» and «the horizons for future programs» (Tymieniecka 2002b, p. 685a). In this way A-T. Tymieniecka supported the growing of the germ of *mathesis universalis*, that was sowed at Gottinga's time. So she originally intended

«to follow the progress of the method in order to inquire into its very *logos* and its yieldings [...] to learn, from the strengths and the weaknesses of the specifically phenomenological rationalities, the nature of the universal rationality that is involved in the emergence and run of our reality that subtends its genesis – the *logos* reaching beyond it and yet essentially engaged in the constitution of ourselves within our lifeworld and its horizons» (Tymieniecka 2005, p. xv).

It is precisely with an application to phenomenology as a historical living body (*Leib*) working to a new “phenomenology of phenomenology”, that the inquiry on the *logos* of what manifests itself gains a new and wider horizon of exploration: it is the horizon of life and its self-individualizing dynamics. Therefore Tymieniecka's philosophy can be now defined as phenomenology of life, which communicative virtualities soon become evident.

The story of «integral Husserl» (Tymieniecka 2002a, p. 2b) contextualized in the perspective of phenomenology of life manifests itself under a new light, which reveals connections where there was only dis-communication. For instance: Husserl's disciples of Munich and Göttingen were quite astonished when, after his moving to Freiburg, their teacher turned from upholding the absolute objectivity of the essential structure of things to an exclusive focus on their constitution in subjectivity (Tymieniecka 2002a, p. 2a). They didn't understand that by doing so Husserl simply made his thoughts follow a unifying *logos* which surprisingly is not speculative at all. Husserl «follows an analysis to an obvious end and then takes up deeper questions», because «each stage of his thought seems to have been for him a springboard for inquiry in a more profound direction». Husserl, Tymieniecka continues,

«might call the regional ontologies 'naive' as they stand alone, but he never disclaimed the eidetic insight through which we distinguish objects. He tacitly included it in the ascending noetic steps in the process of originating and forming the ideal structures of beings as they are constituted in the subjective transcendental processes of the intellect. And then he immersed the singular mind with its set of constitutive procedures within the intersubjective lifeworld. The concatenations of the lifeworld open yet another field of investigation, but the nature of the constitutive process in the singular individual mind remains valid,

however much apprehension of the reality of the lifeworld modifies the appreciation of it» (Tymieniecka 2002a, p. 3a).

Husserl didn't provide to this developmental sequence any apparent links among its phases but, Tymieniecka observes, «the planes of the human reality are intrinsically legitimated in that sequence, for Husserl adjusted his assumptions as he went without dismissing any set of them» (Tymieniecka 2002a, p. 3a). By doing so he positioned himself at «the core» of the project of phenomenology which aim is to be «an attempt to make reality foundational and thought immediate» and therefore it is «the better to focus and rites sites, to see reality in the round». Through such a conformity to life phenomenological inquiry «may the entire horizon of human interrogation and reflection on the world, life and the human place and role in it find legitimate ground and be linked» (Tymieniecka 2002a, p. 1b). It is not about a mere speculation, since what is described here is «the specific dynamism of the constructive logos of the real as it deploys itself», producing real transformations in individual, social and cosmic life; in fact, «in this natural onward flow of consciousness, logos' constructive acts bring forth their very own dynamisms and forces. Reason/logos is not a mere structuring line of construction, it is simultaneously its prompting force» (Tymieniecka 2002a, p. 4a).

This very close communication of being and becoming, of which the human living is an effective agent, thanks to his capacity to make being something which is not yet, was thematized even by Husserl in his so-called “philosophical last will”, *Teleologie in der Philosophiegeschichte* (in three chapters, the first two dated June/July 1937 and the last the end of August, 1936) (Husserl 1993, pp. 362–420). Here Husserl outlines the phenomenological meaning of philosophy as an infinite «teleological movement toward reason» (Volontè 1997, p. 143) achieved through cooperative effort by those who practice the craft or the profession (*Beruf*) of philosopher. The idea of philosophy as a task has broken into European history through an “originary foundation” (*Urstiftung*) laid by the first philosophers, men who first conceived the completely new “intention” (*Vorhabe*) of Philosophy and whose realization became their “primary mission” (*Lebensberuf*). They determined its “reproduction” (*Fortpflanzung*) in the social community through succeeding generations. Of course, for the new profession (*Beruf*) of philosopher to be handed down through history, it had to retain, unaltered in time, its “ideal aim” (*Zweckidee*) which has always defined it beyond all single philosophical expressions linked to specific ages and personalities (Husserl 1993, p. 363). Equally indispensable, however, for the historical transmission of the craft of philosopher has been the circumstance that real individuals internalize the *telos* “philosophy” as their task (*Aufgabe*), that is both a purpose of their own habitually constant will (*habituell verharrende Willensziele*) (Husserl 1993, p. 364) and a purpose for its concrete realization (*Vorhabe zu einer Werk*). The *telos* “philosophy” is so rooted in an “I”, in which just this *telos* assumes its place in an effective existence, that is to say it finds a practical, apodictic driving force that leads it to realization (*Ich, in dem eben dieses Telos eine Stätte wirklichen Daseins, praktischer apodiktischer Richtkraft hat*) (Husserl 1993, p. 411).

Thus: since, the history of philosophy, as produced by the work of philosophers, is ruled by a teleology analogous to that which is active in other crafts and since philosophy's perennial task is to reveal the «originary foundation» (*Urstiftung*) of

every human experience, an extraordinary possibility arises. Through the phenomenological self-reflection (*Selbst-Besinnen*) we may reach an awareness of the dynamics of the very living «reproduction» (*Fortpflanzung*) and of its logicity. Specially we can understand the *logos* according to which the special form of the final ideas, present in the assignments of the crafts, may be transmitted intersubjectively, entering/penetrating the lives of human individuals so profoundly that they are able to determine a new concrete historical level, produced by the praxis of their «professional humanity» (*Berufsmenschheit*) (Husserl 1993, p. 363).

Therefore J. Habermas found its mark as he found out the origin of the lasting vitality of phenomenology, its being «permeated with existential topicality», through its capability of running together a broad anthropologizing and a deep ontologizing (Habermas 1998, p. 4); but this capacity derives from the fact that methodologically phenomenology has to draw on the living experience (*Erlebnis*), as unexhaustible human resource and basis of every fruitful speculation.

Husserl, as well as R. Ingarden and M. Merleau-Ponty «sought vainly to bring nature, body, soul and spirit under the aegis of transcendental intentionality» (Tymieniecka 1988a, p. 4), because – as Tymieniecka perceptively observes- «in the focus either on the givenness of the human factor or on the ways in which the givenness is established, the crucial point has been overlooked»: in other words, despite phenomenologists extremely deepened the description of life, lately they did not consider that man «constitutes an inextricable segment within the unity-of-everything-there-is-alive» and consequently his givenness «is only in its virtual state and is suspended in its actualisation upon the entire complex in which it is existentially woven» (Tymieniecka 1988a, p. 5).

On the other hand, this «first awareness- self-awareness- of beingness, which carries all the virtualities of its entire unfolding» comes last to the reflective awareness of the mind and an entire phenomenological course until Tymieniecka was necessary in order to make it manifest. Nevertheless, the success of this new procedure of investigation will make revealed – Tymieniecka underlines – «the way in which philosophy is called upon to perform its fundamental task» (Tymieniecka 1988a, pp. xxiii–xxiv).

A New Solidarity Between Logos and Life

Activating this new intuitive level, directed at living humanity, that is carrier of consciousness, Anna-Teresa Tymieniecka frees herself from the hobbles that limited Husserlian phenomenology, which, submitting «to the sovereign rule of intentionality», limited the field of inquiry, concentrating on «a misleading focus: human consciousness». At the same time, she also takes the step out of the dominion of rationalistic despotism, inherited from Modernity, but does not lose its achievements, neither from the point of view of consciousness, nor from that of reason. If anything, she integrates both, contextualizing them in the vaster sphere of investigation constituted by the «universe of human existence» (Tymieniecka 1971, p. 6) «within the unity-of-everything-there-is-alive» (Tymieniecka 1971, p. 4); she also radicalised

their interrogation, giving rise to an inquiry that can engage the metaphysical question regarding the «origin of forms of this [new] involvement, that is, of life itself» (Tymieniecka 1971, p. 6), according to its *logos*.

By doing so, Tymieniecka conducted an intuitive descent to the most primitive level of being, that which precedes the very act of asking any philosophical or scientific questions, and in which, therefore, both philosophy and science find their authentic and common root; she attained therefore the pre-ontological position of being, that in which being generates itself and regenerates. From this point of view, she has been able to untangle the *logos*, which presides over the evolution of the life of being, indicating it with a term of her own coinage as «ontopoiesis», that is, «production/creation of being». Going back to Aristotle's *Poetics*, the «ontopoiesis» of life indicates the becoming of life as a 'poietic' process of self-individualization (Kronegger and Tymieniecka 1996, p. 15). This term includes both the natural constructivism of life and its freely creative increase which occurs when the level of «human condition» appears, where life achieves a stage of individualization so that both it gains self-consciousness and it performs as capacity of self and hetero-modeling (Verducci 2004, p. 6).

Therefore, while in the past we focused upon «the structure of things and beings», now we may follow «the POIEIN, the making, the becoming, the unfolding of these structures themselves in their circumambient context of resources, forces, intergenerative energies in their basic self-individualization-in existence»; *logos* of life itself, inasmuch as *vis vitale*, pushes them along this road, promoting their unfolding and controlling their course (Tymieniecka, 2007b, p. 8). The absoluteness of the constituting transcendental dimension of consciousness is therefore rooted in the vision of Tymieniecka in a more «intimate operating, as place from which *eidōs* and fact simultaneously flow» (Tymieniecka 1986, p. 3). Also from within the human condition, in fact, there radiates, grafted on the natural self-individualizing flow of life itself, a dynamic of creative vital expansion, upon which every intellectual dimension is based (Tymieniecka 1988a, p. 392). For this, the cognitive act, which points to the structures of beings and things, in order to give rise to static ontologies, must give way to the creative act, during which man manifests the same *vis vitale*, at work in the becoming of beings (Tymieniecka 2007b, p. 8): establishing ourselves at the level of creativity, it is possible to follow the *poiēin* of those same essential structures that knowledge identifies, isolating them.

In this way for the Modern rationalistic subjectivity the first post-modern overcoming of dis-communication unfolds: no more subjectivity appears as a hyper-uranic self-referential, abstract entity with no history, but it is rather alive and vital because it is never separated from a human living beingness! (Tymieniecka 2006, p.xii). Beyond the «ossified view of things, beings», which mostly proceeds from the «so-called "ontology"», or from the «path usually called "epistemology"» or, at last, from the same «highly elevated sphere of spiritual speculation», consciousness sees now «a more fundamental grounding, a firmer and more indicative point of departure» in «life itself», as «undeniable primal state of living beingness», for which «to be means to be alive». This state cannot be identified with any experience and yet it underlines all experiences (Tymieniecka 2007a, pp. 15–16), because «it is

not reason that brings order into life». On the contrary, «it is life which brings forth the multiplicity of ratios, rationalities, and reasons in order to unfold its constructive course» (Tymieniecka 1988b, p. 195).

Going back to the Logos of Life as «filum Ariadnae» (Tymieniecka 2007b, p. 17), which determines «the dianoiac thread» (Tymieniecka 1988b, p. 181) and the productive order of evolutionary energy, discovered at the basis of rationalistic reason/*ratio* and transcendental consciousness, as their propulsive source, Anna-Teresa Tymieniecka has thus isolated «the spark of life» as the event of its manifestation in reality. It «radiates from the coalescence of the propitious factors of life that favour dynamic consolidation in self-individualization». Starting from it «the living being recognizes itself as “himself” or “herself”, not by a cognitive act but by “being alive”» that is both: «by experiencing oneself within one's milieu of beingness, directing one's instincts and appetites, recognizing the element of circumambient world in their vital relatedness to oneself» and lastly, but mostly,

«by recognizing oneself as the acting center of the universe of existence, as self-sustaining agent who directs within this universe of existence through experience, observation, reflection and deliberation his or her own course and who, finally, endows that course with moral and aesthetics values, and upon the wings of the spirit seeks to understand the reasons of it all and soars to the metaphysical and spiritual realm above, carrying within a thoroughly felt self aware conviction that to be is to be alive» (Tymieniecka 2007b, p. 16).

From the new theoretical position acquired, which has its starting point in «life poignant evidence of the self», we are able «to delineate life's course, retracing in the work of the mind the dynamic vital/existential lineaments of the logos of life» (Tymieniecka 2007b, p. 17). The intent of Anna-Teresa Tymieniecka of proceeding beyond the essential «givenness» of genesis constituting objectivity, in the seek of its «inner workings as the locus whence *eidōs* and fact simultaneously spring», had its success and the new graft of constitutive intentionality on «constructive advance of life, which carries it» brought us to the metaphysical way, on which the first principles of all things can be revealed again (Tymieniecka 1986, p. 3).

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Towards a Phenomenology of Life and the Invisible: Generativity and Sonship in the Thought of Michel Henry

Giovanna Costanzo

Abstract The philosophical reflection of the Twentieth century has drawn fruitful inspiration from Husserl's lesson on phenomenology, whose originality lies in the intentionality of consciousness. The possibility of observing the conscience reversed from inside out, aside itself, defined by objects of intent and not by our awareness of intentionalising them, has in fact worn-down the relationship between consciousness and self-awareness, paving the way towards a new philosophy of being and relating in the world. In particular, Michel Henry traces a pathway that leads from the superficial "outer" appearance, the exterior of the phenomenon to the discovery the invisible law of the life itself. The radical opposition between the phenomenality of the world and the phenomenality of life is thematized within the horizon of meaning offered by Christianity, where God manifests himself in giving life, in the Incarnation of the Word into flesh. Regaining our status as Sons allows us to achieve an ethical horizon in which the care and concern for others allows us to discover not foreigners but brothers, since we are sons of one Father in Christ. In this sense Generativity and Sonship become an indication to follow the path of sharing and joint participation, in pain and pleasure, in love and respect for that only Life, worthy to be honoured and defended in every respect.

1. The interest brought up by the experiments of young researchers at CERN on *the God particle* 'or *the Higgs Boson*, held responsible for the mass of all existing bodies, or the clamor over the possible knowledge of the entire sequence of the DNA code, indicate how the desire to grasp the unfathomable mystery of life, its hidden links and complex patterns have always not only interested scientists and researchers, but Man of all times, or simply thought. Of course, whenever the combination

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of power-knowledge has led human capacity towards the intelligibility of nature or better towards the hidden patterns which make up its vital system, modern science has fatally interrupted, as Adorno and Horkheimer¹ would say, the vital and virtuous circularity between man and nature, living beings and the life cycle. Matter has been reduced to its quantitative and mathematical aspects and every natural element has been bent to justify the ends and goals dictated by a ruthless logic of domination and exploitation. For this reason many nineteenth century thinkers have vigorously and forcefully asked themselves how to return to question the deepest well-springs of life, not only in the light of a reborn thought with an ecological vocation, that is, a philosophy which makes responsibilities the sum of its actions in the cosmos; but in light of a thought which attempts to re-examine the role of man in creation since the crisis of the Cartesian image ego cogito, understood as the principle of all certainty and truth. In particular, philosophical reflection has drawn fruitful inspiration from Husserl's lesson on phenomenology, whose originality, according to many interpreters, lies in the intentionality of consciousness, and in its opportunity to offer a critique of the Cartesian consciousness. The possibility of observing the conscience reversed from inside out, aside itself, defined by objects of intent and not by our awareness of intentionalising them, has in fact worn-down the relationship between consciousness and self-awareness, paving the way towards a new philosophy of being and relating in the world, "which has become the need to go beyond the safe limits set by the essential consciousness and its reality",² in order to help retrace the logos which guides the development of the existence, as according to the Polish Anna-Teresa-Tymieniecka, whose work this conference pays homage to-; or in order to reveal the immanent principle which gives life to all beings, as according to the Frenchman Michel Henry's course of philosophical studies. Even if at different stages and in different ways, both thinkers, in fact, have dedicated "all of their research beyond the level of ideas, in search of the primordial propulsive energy of the phenomenological movement itself. They have thereby initiated a rethinking of critical consciousness, precisely of Husserl's method – re-elaborated on the constituent level in order to grasp that element of life, that creative and creating movement which is part of the life of every living thing".³ This need to reopen the innate consciousness to its vital dimension, this common interest in going beyond the given phenomenon towards vital energy or towards the immanent principle which makes any event possible, seems to be motivated not only by the need to get out of the doldrums of a thought limited to a logical and idealistic process, a thought which failed to grasp the profound connection between spiritual and material, between the world/nature and spiritual man, and the need to go beyond the limits with which science and biology claim to investigate existence. In fact, the image of a life

¹Max Horkheimer, Thodor. W. Adorno, *Dialectic of Enlightenment; Dialettica dell'Illuminismo*, Biblioteca Einaudi, Torino [Turin] 1966.

²Daniela Verducci, *The issue of development in perspective ontopoietica; La questione dello sviluppo in prospettiva ontopoietica*, «Etica ed Economia», Semestrale di Nemetria, 1 (2007), FrancoAngeli, Milano [Milan] 2007, p. 45.

³*Ivi*, p. 47.

analyzed through the lens of a microscope, often hides the conviction, in the words of Francois Jacob, “that biology does not consist in life but in algorithms”.⁴ Scientific interest tends to address the chemical and biochemical links rather than the fulfillment and amazement towards a Life which has been gifted by Others. Particularly interesting is Michel Henry’s phenomenological study in which he criticizes the dominant and widespread reduction of man to a ‘manifestation of the world’; scientific and technological thought has come to remove the interest in intuitive and original knowledge, the *knowledge of the bowels* as Maria Zambrano⁵ would say, while at the same time a widespread aesthetic culture has made us increasingly incapable of building authentic ethical bonds.

2. In order to achieve this, -and this seems to be the ethical inspiration which Henry’s entire phenomenological studies are based on, we need to trace an alternative route to those which Western philosophy offers, a pathway that leads from the superficial “outer” appearance, the exterior of the phenomenon, to the discovery of the invisible law of the universe and, therefore, of existence itself. If it is true, that life is phenomenized through a mass of cells, which is precisely what biologists study in the laboratory, we cannot have access to life through thought; we cannot explain life through the compelling logic of rational, reductionistic and deterministic thinking⁶:

Whether it concerns neurons, electric current, acid chains, cells, chemical properties or their end components – material particles, biology is characterized by the fact that it is foreign to phenomenology. Indeed, all of these physical, chemical or biological factors represent phenomena or refer to phenomena, because otherwise science would be powerless to discovery. Nevertheless, it is precisely these various phenomena that do not obtain their ability to reveal themselves to us, their phenomenality, from themselves. *The ability to reveal themselves and become objects of possible knowledge* is thanks to a power of revelation unknown to them, *they being blind in themselves*.⁷

To the philosopher from Montpellier, the “blindness” of such physical or chemical elements signifies that they do not possess the reasons behind their phenomenality in their appearance, but in something else which, however, is not visible. The idea, in fact, that the “truth of things must appear and be revealed” is a postulated product of Western thought, which from Plato to Kant and Husserl, has interpreted “truth as manifestation”, as that which appears on the mundane horizon of visibility. According to this classical conception, reflecting on the phenomenality of natural phenomenon means “that the world does not consist in the totality of things or bodies but in the horizon of light in which things appear as phenomena”⁸ and thus

⁴Michel Henry, *C’est moi la Vérité. Pour une philosophie du christianisme*, Seuil, Paris 1996; *I am the truth. Toward a Philosophy of Christianity*; trans. *Io sono la verità. Per una filosofia del cristianesimo*, Queriniana, Brescia [Brescia] 1997, p. 58.

⁵Cfr. Maria Zambrano, *Clear Forest; Chiari del bosco*, Bruno Mondadori, Milano [Milan] 2004.

⁶Cfr. Edgar Moren, *The Challenge of Complexity; La sfida della complessità*, a cura di A. Anselmo, G. Gembillo, Le Lettere, Firenze [Florence] 2011.

⁷Michel Henry, *I am the truth. Toward a Philosophy of Christianity*; trans. *Io sono la verità. Per una filosofia del cristianesimo*, cit., p. 54.

⁸*Ivi*, p. 33.

“the truth of the world is not only indifferent to what it appears to be but more importantly, focuses its attention to what it receives from its truth which is “true” only insofar as it reveals itself”.⁹ And this is what occurred in the

philosophies which place consciousness at the foundation of truth -defined as an active transcendence or the projection of the horizon in which the object becomes visible, beyond the object. Placing the entity in the condition of object or “frontally”, thus as phenomenon, is only made possible by producing a horizon of visibility, which is the world itself. The world therefore *is not*; it never ceases to occur, just as a horizon that continues to take shape, under the condition of a power that never ceases to plan it. In Kant, this power is called transcendental imagination – the placement into image of a world, which is nothing other than this placement into image. It is in this placement of image, in turn an imaginary place, where every entity appears to us as image, representation, object, placed frontally, phenomenon.¹⁰

If the “truth of the world is nothing but the self-production of the exterior as the horizon of visibility, in which and for which everything can become visible and therefore phenomenon for us”,¹¹ according to Henry what thought has obliterated and forgotten in its long journey of research, is the *why*, and not only the *how* phenomenon occurs; the “truth” of its manifestation, the truth of its existence is hidden *inside*, within the immanence of its existence, in the heart of its vital essence. In doing so, and only in this sense the “truth of the world”, projected towards the exteriority of phenomenality, (*phenomenality of the world*) is opposed to the “truth of life” (*phenomenality of life*). For this reason “truth” and “life” must become inseparable in a form of thought for which good and truth are not “ideas to be contemplated and searched for far and wide,” as Agnes Heller¹² would say, mimicking the platonic progress towards ideas. In fact, such “phenomenology of life” professes that life is not contemplated in theory, but is lived and suffered, because life is pathos and affection, and only through living and suffering can it become an object of thought: “it is always life to make its objectification possible in thought, that is to say, as a condition within it and its object”,¹³ and “whoever has access to life only in and through life, implies a crucial precondition: it is Life itself which comes to itself”.¹⁴

Life is thus understood as a process of self-generation in which it senses itself. For this reason its self-revealing form does not belong to the speculative or objectifying order. On the contrary, the way in which phenomenality is phenomenalized is

⁹ *Ivi*, p. 35.

¹⁰ *Ivi*, pp. 35–36.

¹¹ *Ivi* p. 36.

¹² Agnes Heller, *Philosophie des linken radicalismus*, BSA-verlag, Amburgo, 1978; *Radical Philosophy*, Basil Blackwell, 1984, tr.it. e cura di L. Boella, *Filosofia radicale*, Il Saggiatore, Milano [Milan]1979.

¹³ Michel Henry, *Incarnation. Une philosophie de della carne*, Seuil, Paris 2000; *Incarnation. A philosophy of the Flesh*; trans. *Incarnazione. Una filosofia della carne*, SEI, Torino [Turin] 2001, p. 110.

¹⁴ Michel Henry, *I am the truth. Toward a Philosophy of Christianity*; trans. *Io sono la verità. Per una filosofia del cristianesimo*, cit., p. 77.

the identity between sentient and sensed, the identity of who lives life and feels it in its pathic immanence.¹⁵

In this sense, the French philosopher attempts to make his thought a very “*meditatio vitae*”,¹⁶ or a reflection on life understood as absolute immanence and revelation. This apparent contradiction is, in fact, the question of issue which our philosopher seeks to unravel in his long career and in works as *The Essence of Revelation* (1963), *I am the truth. For a philosophy of Christianity* (1996), *Incarnation. A philosophy of the Flesh* (2000), through the instruments provided by historical phenomenology, particularly by Husserl, as well as in light of what has been Revealed. The radical opposition between the phenomenality of the world (the outer, transcendence) and the phenomenality of life (which is pathic immanence) is thematized within the horizon of meaning offered by Christianity. Life is revealed beginning from itself and in itself, outside the conditions of the world and regardless of any transcendental horizon, which would end up objectifying life itself. Christianity, in fact, unlike other wide-spread religions, tends to make its focal theme a truth of life which is distinctly opposed to the truth of the world (“*I’m not of this world,*” John 17, 14): the Christian God is something more and cannot be subject to the rules which govern the phenomenality of the world. And it is yet in the Christian God that appearance and what appears to be real are one: “God is pure revelation and reveals nothing but himself. God reveals himself”.¹⁷ To say that “God reveals himself” is to say that God reveals himself in life and as life: he reveals himself as the living God, (*1 Tim 3, 15*) as the living God who gives life, and is a manifestation of life through the generation of his Son (*Jn 14.6*). Thus this self-manifestation of God does not depend a priori on ontological or anthropological events, since God manifests himself in giving life, when He comes into the life of every believer, therefore life is the very essence of His manifestation: “*Life is nothing but that which reveals itself*, and not something that would also have the property of self-revelation; it is the very fact that it is able to reveal itself, self-revelation as such. There is Life wherever such a self revelation occurs”.¹⁸ Life is not only the place where the Father reveals himself, but also the place where the Son is revealed and it is the Son in the words of the apostle John to say: “I am the Truth, the Way, and the Life” (*Jn 14.6*).

Naturally, the topic of truth recalls the long philosophical tradition which considers it a matter of exclusive competence, in the sense that understanding reality and reducing it to a concept is a matter of thought, as Hegel argued; the truth Christianity speaks of, instead, does not belong to the speculative order, it is not

¹⁵Carla Canullo, (a cura di), *Michel Henry: telling the pathos; Michel Henry: narrare il pathos* Eum, Macerata [Macerata] 2007.

¹⁶Giuseppina De Simone, *The revelation of life. Christianity and philosophy in Michel Henry; La rivelazione della vita. Cristianesimo e filosofia in Michel Henry*, Il Pozzo di Giacobbe, Trapani [Trapani] 2007, p. 46.

¹⁷Michel Henry, *I am the truth. Toward a Philosophy of Christianity*; trans. *Io sono la verità Per una filosofia del cristianesimo*, cit. p. 15.

¹⁸Ivi, p. 47.

the result of reasoning, but of a truth professed by the person of Christ in the truth of his existence.¹⁹ Of course the difficulty of this theoretical approach, which intertwines philosophy and theology together in search of a living truth as opposed to a worldly truth, lies in the fact that philosophy proceeds exactly through reasoning, while “Christianity is a religion and, as such, legitimizes itself through its very existence”²⁰; therefore the Revelation does not disclose Himself to thought; indeed, it is only when thought gives way to the gift of faith, that man is open to God’s self revelation.

What motivates Henry in his attempt to understanding Christianity on philosophical terms, is not the comparison to the theological tradition, but the strictly phenomenological investigation²¹, in the conviction of the fruitful weave which joins theology and philosophy:

Therefore how does God revealed himself to us? Here the theological question is connected to the fundamental phenomenological question and identifies with it, as theology is only possible as phenomenology. The question of phenomenology is the way things give themselves, manifest themselves, so the theme of phenomenology, is never what gives or manifests itself, but its way of giving.²²

Even if philosophy and theology are two different disciplines, they do not oppose each other. The two starting points differ; for theology it is what has been revealed in Scripture, while philosophy, a self-knowledge, does not possess a predetermined starting point identified as truth. Yet, despite this, the method is common to both disciplines and that is: “in a movement of thought which achieves results- progressive steps part of a continually evolving theory, through the development of a series of evidence and the interaction of their implications(they too evident)”.²³

The movement of thought conceived by Henry and not Husserl, is the method offered by phenomenology; the “material phenomenology”,²⁴ or the science which has as its objective the self-revelation of Life. In such thought the question of the mystery of life leads to the mystery of the eternal origins of the Son in the Father; (“In the beginning was the Word and the Word was with God and the Word was God”); as a phenomenological reading of the Prologue of John’s Gospel invites

¹⁹Giuliano Sansonetti, *The phenomenology of the invisible Michel Henry; La fenomenologia dell’invisibile di Michel Henry*, prefazione a M. Henry, *Io sono la verità Per una filosofia del cristianesimo*, cit., p. 10.

²⁰*Ivi*, p. 8.

²¹Vittorio Peregò, *The French phenomenology between metaphysics and theology; La fenomenologia francese tra metafisica e teologia*, Vita&Pensiero, Milano [Milan] 2004, p. 150.

²²Michel Henry, *Transport to the question of God: proof of being or experiencing life; Acheminement vers la question de Dieu: preuve de l’être ou éprouve de la vie*, Archivio di Filosofia 58, 1990, p. 525.

²³Michel Henry, *Incarnation. A philosophy of the Flesh*, trans *Incarnazione. Una filosofia della carne*, cit., p. 292.

²⁴Michel Henry, *Phénoménologie matérielle*, PUF, Paris 1990; *A Material Phenomenology*; trans. *Fenomenologia materiale*, Guerini Associati, Milano [Milan] 2001.

us to do²⁵: “in its absolute self-generation, Life creates He whose birth is the self-fulfilment of Life, its self-fulfilment in the form of its self-generation”.²⁶ The first living being is the Arch-Son; whose birth originates through transcendental procreation, in the sense that his birth does not have an ontic empirical status, but belongs to the same process of self-generation of life. The birth of the first living being cannot be understood “as a coming into the world”; since what is manifest to the world is alien to life “birth is not coming into the world but coming into life”²⁷: in this sense, the first living thing is “generated and not created”, as stated in the Nicene-Constantine Creed. Therefore, Christianity perceives the revelation of life in a radically new way; that of self-revelation of the Arch-Son in life. Therefore, for every Christian, access to Christ is not through his worldly qualities, but through the essence of his divine origin. “This conception of Arch-Son has opened a new perspective to traditional Christology, intended as the conceptual understanding of the nature of Christ”.²⁸ In line with the word of John, we can better understand nature according to Christ, considering Him as self-generation of life when faced with the difficulty of thought regarding the dual divine-human nature of Christ through the idea of a pre-existing nature which is added to the divine. Understanding the nature of Christ is also fully understanding man, if it is true that man is the son of God²⁹; this too is expressed as an inner moment of self-generation of life. In fact, there is one invisible life that unites the Father, the Son and other living beings: “this means that the truth of Christianity is not to be sought on the historical or cultural level, but in that series of transcendental, acosmic, invisible relationships” which originated in Life and which constantly foster Life: “the relationship between absolute Life and the First-living being, between the Father and the Son, between God and Christ, between absolute life and all living things, between Fathers and Sons; the relationship between God and men, the child and children, Christ and the living; relationships of children, the living, or men amongst each other”.³⁰

In this sole invisible life, only a careful reading of the concept of self-affection, allows us to understand the specific and different relations between people, man and God, and man and the Son. If life defines and produces the content of its affection, the internal process of self-affection of life is consistent only in God. Even though man is capable of self-affection, of being affected by his impressions, he is unable to establish the condition of this self affection. In a certain sense, man is passive before himself: “I have given unto me without having such a gift, depend

²⁵Giuliano Sansonetti, *Logos as on. The philosophical reading of John's Prologue; Logos come via. La lettura filosofica del Prologo di Giovanni*, «Filosofia e teologia», 1999, 1, pp. 112–123.

²⁶Michel Henry, *I am the truth. Toward a Philosophy of Christianity*, trans. *Io sono la verità Per una filosofia del cristianesimo*, cit., p. 79.

²⁷*Ivi*, p. 81.

²⁸Vittorio Perego, *The French phenomenology between metaphysics and theology; La fenomenologia francese tra metafisica e teologia*, cit., p.153.

²⁹*Ibidem*.

³⁰Michel Henry, *I am the truth. Toward a Philosophy of Christianity*; trans. *Io sono la verità Per una filosofia del cristianesimo*, cit., p. 83.

on me”.³¹ So “if the single Self is self-affected, it becomes the identity of who affects and is affected, but it was not he who created that identity. *The Self affects itself insofar as Absolute Life affects itself through him*”.³² Therefore a double passivity characterizes man: he is passive with respect to impressions; he is passive with regards to that self-generation of Life which generates and constitutes man in as such life. If the existence of every living being lies solely in the process of self-generation of life, “self-affection is nonetheless impossible without generating the essential selfhood, which is implicit in every attempt and what is assumed by it. But the phenomenological effectiveness of such ipseity is a Self, which is itself phenomenologically affective [...], that is, the transcendental Arch-son begotten in the phenomenological effectuation of absolute Life”.³³

This means that nothing can establish itself as a living being or as selfhood unless an absolute selfhood already exists; a transcendental selfhood, existing from all time and created in the process of self-generation of life. Man is thus the son of God through the Arch-Son; he is the Son in the Son. It is the Son of God, the Word made flesh as stated in the Prologue of the Gospel, the beginning of all selfhood in its birth to life. Thus, Christ is a mediating figure, the prime Ipseity, in the sense that what is generated in life, only through Him and in Him becomes Selfhood, individuality and self-awareness. For this reason mediation annuls the potential risk of falling into a blind and irrational vitalism in which all individuality disappears.³⁴ After all, Christianity compared to other forms of spirituality, is characterized by the fact that:

far from meaning or implying the dissolution of individuality in each of us, absolute unity between all living Selves is the basis of such individuality. It is through the phenomenological fulfilment of life in his Word that every living being is united with itself, self-generated as an absolutely single self, irreducible to anyone other.³⁵

3. Justly, Henry’s theoretical proposal, fully part of the <Tourmant Theologique> or contemporary French phenomenology, in reality ends up being an attempt to reintroduce evident metaphysical traits, despite having origins in phenomenological issues.

It is the French scholar Janicaud who considers that this ascent to the origins coincides with the abandon of the empirical nature of experience; phenomenology is thus transformed into its opposite, namely into metaphysics and in particular in the metaphysical idealism of early Hegel³⁶: phenomenology becomes

³¹ *Ivi*, p. 133.

³² *Ibidem*.

³³ *Ivi*, pp. 136–137.

³⁴ Giuliano Sansonetti, *Introduction; Introduzione a M. Henry, Incarnazione. Per una filosofia della carne*, cit, pp. XXV–XXVI.

³⁵ Michel Henry, *Incarnation. A philosophy of the Flesh*, trans. *Incarnazione. Per una filosofia della carne*, cit., p. 354.

³⁶ Vittorio Peregò, *The French phenomenology between metaphysics and theology; La fenomenologia francese tra metafisica e teologia*, cit., p. 159.

“spokesperson for the absolute”.³⁷ In this conception, the essence of the event is the event itself. Life is invested with an absolute value which seems to place it on a par with God: life is limitless, and eternal. It is identified with the whole of reality in which the human and the divine proceed towards a single pathic unit: “With regards to this point, Henry finds the immanence of the absolute spirit in its phenomenal manifestations, despite the attempt to subject knowledge to affectivity-to life, which experiences itself”.³⁸

The material phenomenology of Henry proposes to reject the historical phenomenology of Husserl and Heidegger, since it is based on intentionality, which is nothing but the assumption that drives the Western logos and which identifies by showing the essence of phenomenality from inside out. However, in this quest for an alternative to the Greek *logos*, Henry, according to Janicaud, retraces Heideggerian gesture, without bringing up the full consequences of this action: the questioning of the essence of metaphysics and the abandonment of the phenomenological method. With regards to the essence of metaphysics, he does not follow the same thread as the German philosopher, so he is unable to understand that the eideticalization pursued by Husserl is not an error but an essential part of the very future of Western philosophy and its claim to the founding of the *episteme*. After all, the Frenchman’s dispute over Western *logos* is resolved by reclaiming a strong conceptual and metaphysical structure, “on Henry’s strange persistence in wanting to set up this research at the centre of that very philosophical discipline, where principles are formulated in rational, unifying terms, Western terms, which he intended to reject”.³⁹ “Michel Henry proceeds by sort of depriving phenomenology of its home and methodological instruments”,⁴⁰ when the founders of phenomenology never abandoned the reflection on the method the method of phenomenology has never been questioned,⁴¹ often in the name of a “theologization which becomes literal, because it is the vision of God in God”⁴²; “But one wonders if a phenomenology of the absolute is not a contradiction in terms?”⁴³ Neither Husserl nor Heidegger considered the phenomenological method suitable in describing the manifestation of the absolute. The immediate effect of Henry’s phenomenological reading of Christianity, which was no less criticized, was the renouncement of the world by concretely reabsorbing all phenomena into the structure of Divine Life. If Henry totally reinterprets the Gospel of John, in the words “My kingdom is not of this world” (*Jn 18:36*), he nonetheless, turns the entire ontic dimension of Jesus’

³⁷ Dominique Janicaud, *The Theological Turn of French Phenomenology; Le tournant théologique de la phénoménologie française*, L’Éclat, Combas 1990, p. 60.

³⁸ *Ibidem*.

³⁹ *Ivi* p. 21.

⁴⁰ *Ibidem*.

⁴¹ *Ibidem*.

⁴² Dominique Janicaud, *The phenomenology exploded; La phénoménologie éclatée*, L’Éclat, Paris 1998, p. 15.

⁴³ Michel Haar, *French philosophy between phenomenology and metaphysics; La philosophie française entre phénoménologie et métaphysique*, PUF, Paris 1999, p. 114.

life into an abstraction, thusly an abstraction of his human existence: “is it therefore irrelevant that the Arch-Son was born a Jew, became flesh in Mary’s body and died on the cross at Golgotha?”.⁴⁴ What prevails in this construction, as Tilliette Xavier accurately observes, is the “taboric” dimension, the glorious manifestation of Christ, at the expense of the precisely “kenotic” or sacrificial.⁴⁵ By judging it impossible to find traces of the divine in the world dominated by science, Henry tends to give ground to a phenomenology which seeks to give voice to God through the intimacy of life:

It is therefore an aesthetic conception of Christianity, concerned above all with celebrating the glory of divine life. Such life is based on its manifestation in the intimacy of a human sensibility sublimed by the presence of God who lives it from its birth.⁴⁶

Of course, radically, Christianity cannot simply be seen as a negation of the world and history, as Henry proposes by also following the Gnostic thought, so “man’s relationship to God is not through the world”,⁴⁷ since it is the very Incarnation of Christ to refute that claim. Perhaps for this reason, and also to respond to the criticism of his phenomenological reading of Christianity, that he developed the idea of *Incarnation. A philosophy of the flesh*, a work in which he methodically sums up his thought and in which embodied subjectivity becomes the pivotal theme.

4. The starting point of his most accomplished work is the classic Husserlian distinction between *Körper* and *Leib*, between mere material substance, natural -biological and the intentional dimension of our corporeity, and consequently the unsettled issues this well-known opposition leaves behind:

our flesh is in fact none other than what it feels, suffers, and bears of itself, and thus by experiencing joy in itself through constantly renewed impressions, it is at the same time capable of feeling the body which is exterior to it- of touching it, as well as being touched by it. This is precisely what the outer body, the inert body of the material universe, is in principle incapable of.⁴⁸

Classical phenomenology affirms that “for every body which is perceived there is another body which perceives”.⁴⁹ It is in contrast to and moves beyond the approach of the natural standpoint which coincides with a certain naive realism and

⁴⁴ Xavier Tilliette, *Crist the Philosopher; Le Crist du philosophe*, «Communio», 1996, 127, pp. 94–99.

⁴⁵ Xavier Tilliette, *Cristology philosophy in Michel Henry; La cristologie philosophique de Michel Henry* in «Gregorianum», 2, 1998; Cfr. G. Sansonetti, *Cristo verità della vita in Michel Henry*, in AA.VV. *Cristo nella filosofia contemporanea*, voll. II Da Heidegger a Levinas, a cura di S. Zucal, San Paolo, Cinisello Balsamo 2001.

⁴⁶ R. Bernet, *Cristianisme and phenomenology; Cristianisme et phenomenologie*, in AA.VV., *Michel Henry, L'épreuve de la vie* (sous la direction d'Alain David et Jean Greisch), Cerf, Paris 2001, pp. 181–201.

⁴⁷ Michel Henry, *The truth in the Gnosis; La Vérité de la Gnose*, in AA.VV. *La gnose, une question philosophique*, a cura di N. Depraz. J.F. Marquet, Les Editions du Cerf, Paris 2000, pp. 19–29.

⁴⁸ Michel Henry, *Incarnation. A philosophy of the Flesh*; trans *Incarnazione. Una filosofia della carne*, cit., p. 4.

⁴⁹ *Ivi*, p. 128.

gives credence to the existence of an independent and external reality- the world, which the body belongs to. It is, therefore, the dimension of the perceptive worldly body which takes us back to a transcendental body, that is to the condition of every experience and perception of the sensed worldly body, the *Leib*. Only phenomenological analysis has brought to light the transcendental body, the *Leib*, as a condition of being able to exercise the fundamental powers of our body, or namely to touch what is external to us, including our same objective bodies, *Körper*. Faced with this dual phenomenology, between transcendental and body-object, between the principle of experience and its object, Henry believes it is necessary to unravel the underlying ambiguity in the definition of perception; so a “sensitive body” at the same time indicates the body being touched and the body which touches it: “sensitive, simultaneously indicates the ability to sense and what it is lacking”.⁵⁰ Merleau-Ponty takes this position to extremes in *The visible and the Invisible*,⁵¹ in which he speaks of the relationship between the right and left hand, as the relation of opposition between the transcendental body capable of feeling i.e. the body which constitutes, and what is felt through it, the constituted body: a continuously reversible relationship, depending on whether the right hand touches the left, or vice versa.

The French scholar then comes to extend the relationship between touching and being touched to the whole world, a gesture, which to Henry does not resolve the ambiguity underlying sensitivity. The transformation of the hand from transcendental principle to object, in fact leads to assimilating it in the natural world; however, through such a view “sensitivity” is always what we can see on the outside; the way in which the senses exert their action is intentionality, the ability to display on the ekstatic horizon of the world.

On the contrary, in material phenomenality the transcendental possibility of the sensitive world, of the body-object, *Körper*, does reside in the intentional transcendental body, *Leib*, but this in turn refers to the original transcendental possibility of the same intentioned body, which lies in the self-giving of life . It concerns understanding the body no longer beginning from the world, but from life in its immanent self-giving. However, the distinction between *Leib* and *Körper* does not account for the pathic immanence of life, because the *Leib*, the body-subject is nothing less than an intentional body, “subject to the world in the sense that it opens us to it”.⁵² So both *Leib* and *Körper* share the external as the matrix of sensitivity, to the point that they can transform each other from principle to object of experience, from touching to touched, as Merleau-Ponty well explains. However, if the only phenomenality is external, the transcendental body, that which allows you to feel outside yourself, in turn, can only appear when it is exposed outside itself in order to be felt. Therefore, the only thing which exists is what is perceived, while the ability to perceive from one hand to another, is assumed elsewhere with respect to what appears. For Henry

⁵⁰ *Ivi*, p. 132.

⁵¹ Maurice Merleau-Ponty, *The visible and invisible; Il visibile e l'invisibile*, Bompiani, Milano 1999.

⁵² Michel Henry, *Incarnation. A philosophy of the Flesh*; trans. *Incarnazione. Una filosofia della carne*, cit., p. 136.

the opposite is true: “When the touching hand is touched, the other hand becomes a touched hand, *keeping within itself its primordial condition of flesh*, self-impressionality is touched which can only be impressed.... It is touched where it is touching”.⁵³

If primordial flesh is self-impressionism-the condition of possibly reversing touching and touched, it follows that passivity and activity coincide, in the sense that “activity and passivity are two different and opposite phenomenological activities, but both conditions of the same flesh, as their phenomenological status is the same, or namely, that of the flesh”.⁵⁴ According to this approach we no longer have to do with only two elements (constituent body and constituted body), but with three and the third is the primordial flesh, which reveals itself in the immanence of life and which evades any intentional action, because it is its foundation.

The change of perspective lies in the fact that the gateway in understanding the body no longer belongs to the outside, but to the immanent self-gift of life. Seeking to be genuine principle of experience- primordial power of manifestation, our body can neither be worldly object among other objects, nor “the intentional transcendental body (*Lieb*) which perceives itself and everything outside itself, insofar as it is the perceived body which must be eliminated.”⁵⁵

Neither the Husserlian *Körper* and *Leib* structure, nor Merleau-Ponty’s touching-touched chiasm come to understand the body in its primordiality. It can be understood only “if life is incarnated in the revelation of the body, which has no oppositional structure, intentionality or ek-stasis of sorts; in short it possesses, nothing visible”.⁵⁶ The primordial body starting from the self-giving of life and not from the world, is necessarily invisible. Our flesh is pure pathos and reveals itself in an immanent pathos by experiencing itself in the immanence: “an affective impressional flesh, whose impressionality and affectivity comes from nothing else but the impressionality and affectivity of life itself”.⁵⁷

This flesh allows us to break from the primordial Greek logos and its dualistic vision of man- divided between body and soul, where a true incarnation is unthinkable; but also from Jewish thought, in which the idea of the body created with a brute and inert matter -slime of the earth (*Gen 2.7*), is dominant and where the idea of the incarnation of God is unthinkable. Only Christianity has elevated the flesh to this primordial dimension:

the flesh of the Word never comes from the mud of the earth, but from the Word itself. In the mud of the earth there are only bodies, not flesh. Something like flesh cannot come to be and does not but come from the Word.⁵⁸

⁵³ *Ivi*, p. 186.

⁵⁴ *Ibidem*.

⁵⁵ *Ivi*, p. 139.

⁵⁶ *Ibidem*.

⁵⁷ *Ivi*, p. 140.

⁵⁸ *Ivi*, p. 27.

The flesh of Christ does not only appear to be human, but is human in the sense that it is capable of feeling and suffering. “Indeed, feeling and suffering render it flesh and not merely a body: since suffering is one of the fundamental emotional hues in which life touches bottom. The Incarnation thus understood, overcomes the typical Greek dualism of body and soul”.⁵⁹ The Genesis account can only be understood in light of the Incarnation. The spirit of life does not join a given matter from without, but transforms it from within, making it in each and every way, living matter- flesh in this sense: “every flesh comes from the Word, if it is true that through Him everything was made and without Him absolutely nothing was made”⁶⁰ and it is yet through him that man has reached salvation, condition which neither Hellenism nor Judaism share:

According to Ireneo’s intuition, Incarnation which opens the way to man’s salvation, then appears to be a *restoration*, a *restoration* of the primordial condition inasmuch as man was created *in his own image*; such a creation is none other than man’s generation in the self-generation of absolute Life in his Word, his transcendental birth.⁶¹

Only the loss of these origins has necessitated the Incarnation of the Word into flesh, which is a non-historical, non worldly process. However, it is immanent to the process of self-generation of life, thanks to which man has acknowledged his transcendental birth in divine Life: “incarnation reveals our generation in life, our transcendental birth. It reveals our condition as Sons”.⁶² For every living being, recognizing oneself in the Son, means recognizing ones’ very primordial condition as Son.⁶³ “Therefore sonship is based on a phenomenological intimacy between man and Life, or rather God himself through the mediation of the Arch-Son, generated in the generation of life itself”.⁶⁴ To be born as selfhood in the Son through the Father, means to be born not only as an individual, but to eternally recognize oneself within a vital link with the Father, a link which structures us as primordial passivity. On the contrary, the more man “worldifies” or the more his existence is expressed as a “being in the world”, as Heidegger intends, the more he disregards the fact that the invisibility of one’s interiority is inscribed not only in the origin of his existence, but in its belonging to a pre-existing Being who constitutes me in life.

The saving action of Christ consists, then, in rediscovering “Absolute Life in one’s own life, namely that which does not cease to generate life”.⁶⁵ Recognizing this invisible principle means forgetting how much narcissism and selfishness there is within each one of us, in order to open up to a broader horizon in its place, where

⁵⁹ *Ivi*, p. 187.

⁶⁰ *Ivi*, p. 331.

⁶¹ *Ivi*, p. 352.

⁶² *Ivi*, p. 297.

⁶³ Cfr. Paola Ricci Sindoni, *Gift and Sonship; Pratiche del dono e paradigma della filialità*, in AA.VV. *Oltre la società degli individui. Teorie ed etica del dono*, Bollati Boringhieri, Torino 2011, pp. 162–181.

⁶⁴ Michel Henry, *I am the truth. Toward a Philosophy of Christianity*; trans. *Io sono la verità. Per una filosofia del cristianesimo*, cit. p. 83.

⁶⁵ *Ivi*, p.185.

the care of others, as taught in the parable of the Good Samaritan, we hope takes over the prevailing and excessive care of the self. Regaining our status as sons, allows us then to achieve an ethical horizon in which everything is not simplistically reduced to me, but in which the care and concern for others, allows us to discover in these others not foreigners or strangers, but brothers, since we are sons of one Father in Christ. In this sense, the way through which Christ proclaimed himself “the way, the truth, and the life” becomes an indication or warning to follow the path of sharing and joint participation, in pain and pleasure, in love and respect for that only Life, worthy to be honoured and defended in every respect.

The theoretical urgency to investigate within the invisible forces that lie in the visible, led the philosopher to challenge a pervasive and reductionistic science which had ended up denying the instances of pathos and affectivity within the broader and more complex understanding of human life. The philosopher was also inspired to formulate a thought not only with an “ecological vocation”, that is, aimed at the appreciation of the value of life in its expression in creation, as Anna-Teresa Tymieniecka underlines. However, his thought also firstly defends the ethical demands in building lasting bonds by recognizing that every being belongs to the community of the living,⁶⁶ but above all to the religious community,⁶⁷ in the sense of “religio” as in the “religo” of Ortega,⁶⁸ or as a intertwining of the link with the ‘Primordial’, in order to attempt to stem the pervasive and suffocating lack of values in the contemporary world. These are surely the most interesting legacies of a philosophy that never stops intriguing, in each reading, our ability to focus on the splendid origami that Life is able to produce.

⁶⁶ Michel Henry, *A Material Phenomenology; Fenomenologia materiale*, cit., p. 176.

⁶⁷ Cfr. Giuseppina De Simone, *The revelation of life. Christianity and philosophy in Michel Henry La rivelazione della vita. Cristianesimo e filosofia in Michel Henry*, cit.

⁶⁸ José Ortega y Gasset, *Think and Believe; Pensare e credere*, Alinea, Firenze 1995.

Intentionnalité, Telos, Transcendentalité en tant que Forces Ontopoiétiques du Cosmos

Francesco Totaro

Abstract This report considers at first the overturning, within the ontopoiesis as a new metaphysics, of categories such intentionality, *telos* and transcendentality, because their translation from concepts of knowledge to structural forces of beingness. Then it considers the relationship between sciences and anthropological aim in order to focus this question: does the so-called “will of power” depend on a wrong and separate self-comprehension of the scientific knowledge or on the human pretentiousness to submit knowledge, and its applications to the life, to own arbitrary project? The unbalanced relationship between human and sciences leads to pay attention to a more general imbalance of the human constitution, a very living oxymore for consisting in a mixture of empirical situation and transcendental opening. Even deeper is the asymmetrical relationship between beingness and becoming. Therefore, beyond of becoming ontopoiesis, we need an ontopoiesis of being in itself, which is capable to collect all the richness of becoming.

Ontopoiesis et détournement métaphysique

Je voudrais approcher la question posée dans le titre de mon intervention avant tout d’un point de vue de réflexion ‘problématique’, qui se relie strictement au détour ou, plus exactement, au détournement (dans le sens de l’allemand *Kehre* et de l’anglais *overturning*) de la philosophie de l’*ontopoiesis* comme nouvelle métaphysique, laquelle se distingue de la tradition phénoménologique tout en l’approfondissant. Dans la métaphysique ontopoiétique, pour ainsi dire, les catégories, dont la phénoménologie précédente fait un usage en prévalence gnoséologique, ne sont pas bornées à la sphère de la connaissance. Dans le nouveau contexte, c’est-à-dire dans la

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« Unity-of-Everything-There-Is-Alive », ces catégories deviennent des articulations de l'« Universal Logos of Life » et, par conséquence, des *forces* propulsives du dynamisme ontologique en tant que devenir de toute espèce de *beingness*.

Une telle *translation* regarde d'abord la manière d'entendre l'intentionnalité. Comment se pose l'intentionnalité ontopoïétique en rapport à la visée précédente de l'intentionnalité? Nous allons d'emblée à Husserl et à la notion gnoséologique, ou cognitive, de l'intentionnalité : comme ouverture de la conscience à l'objet dans la mesure même que l'objet se donne à la conscience. Mais nous ne devrions pas oublier – et Anna-Teresa Tymieniecka ne l'oublie tout à fait – que dans la phase dernière de sa pensée Husserl attribue à l'intentionnalité une valeur téléologique. L'intentionnalité devient la structure d'un monde possible. C'est-à-dire l'intentionnalité va acquérir une consistance nouvelle comme le *telos* ou la fin vers laquelle doit se diriger le processus historique, grâce à une révision radicale de la fonction jouée par les “sciences européennes”. Un changement épistémologique devrait se faire garant et protagoniste d'un nouveau cours du processus historique. En tout cas l'intentionnalité épistémologique se fait intentionnalité historique. Ici Husserl se rattache à une idée ancienne, et évidemment platonicienne, de *eidōs*, ou de intention eidétique, comme modèle de la facticité.

Critique des sciences et finalité anthropologique

La phénoménologie devient ainsi, d'une certaine mesure, une philosophie de l'histoire. Est-elle capable de trouver une correspondance dans le tissu matériel du devenir? Nous devons admettre que, bien que conscience critique des limites autoréférentielles des sciences modernes, en tant que signées par un appareil ou un dispositif conceptuel unilatéralement physico-mathématique, le projet husserlien de finalisation des sciences à un but anthropologique, qui voudrait donner à celles-ci un accroissement de sens, s'est épointé contre la tendance du savoir et de la pratique scientifique positive à persister dans ses propres procédures exclusives. Au point que la puissance des procédures mêmes est devenue la finalité la plus importante du progrès scientifique.

Max Scheler parlera ensuite de l'« impuissance de l'esprit » et nous pourrions référer aussi cette formule négative au rapport de l'intention transformatrice de la philosophie avec la dureté des sciences empiriques. Max Weber a consacré, avec la méthode de la *Wertfreiheit*, ou de la suspension du jugement de valeur à propos des présupposés du savoir empirique (même pour ce qui concerne le savoir historico-social), le statut d'autonomie que les sciences ‘positives’ semblent posséder d'une manière qui serait irréversible, bien que, après lui, Scheler soulignait très polémiqement que renoncer à évaluer les présupposés des sciences est à son tour un choix de valeur, un choix inspiré par la rationalité retreinte et segmentaire imposée par les sciences elles-mêmes.¹

¹ Cfr. Francesco Totaro, “Contro la metafisica della tecnica. La critica di Scheler alla restrizione weberiana della razionalità”, en *La tecnica e il destino della ragione*, ed. Mario Ruggenini (Venice: Marsilio, 1979), pp. 141–167.

En conclusion, les sciences empiriques, en dépit des critiques et avec peu d'exceptions, ne semblent rendre compte qu'à elles-mêmes. Leur application pragmatique aux besoins ou bien aux désirs de l'existence humaine dans la vie quotidienne, et dans les situations d'émergence aussi, est plutôt une conséquence de leur succès intrinsèque. Le succès entraîne le pouvoir de rendre légitime (presque) tout résultat. On aboutit, en synthèse, à ce qu'on appelle, à partir de Martin Heidegger, *l'âge de la technique*, à laquelle on ne pourrait pas résister, sinon provisoirement et stérilement, comme il arrive d'une façon qui est inévitable dans une lutte contre le destin.

Critique et volonté de puissance

Mais, dans une direction tout à fait contraire à l'interprétation jusqu'ici esquissée, on pourrait penser que l'expansion apparemment du tout autonome des sciences soit simplement un chapitre de la hégélienne "ruse de la raison", que seulement un vice de subjectivisme abstrait empêcherait de comprendre et d'accepter. Dans cette vision des choses, qui voudrait être alternative à la première dont nous avons dit, ce qui se déroule apparemment comme dimension autonome et autoréférentielle serait, sans le savoir non plus et donc d'une façon inconsciente, au service de la totalité d'un dessin de la raison universelle, dont la démarche se passerait toujours à travers des étapes qui ont un sens qui reste inconnu aux individus (à moins qu'ils ne soient des individus « mondiales » – *weltgeschichtlich*).

D'ailleurs, comme nous l'apprenait déjà Giambattista Vico, l'histoire du genre humain, et pas seulement de son savoir mais de ses passions aussi, posséderait une logique immanente qui échappe aux prétentions du sujet humain de la conduire à son arbitre. Au contraire, la téléologie husserlienne, et les courants de la pensée critique qui à elle se sont rattachés jusqu'aux analyses développées par les exposants de l'École sociologique de Francfort, exprimeraient alors, en dépit de leur volonté déclarée de contester le domaine exercée par la raison occidentale liée aussi à la diffusion 'impérialiste' de l'économie capitaliste, un ajournement de la « volonté de puissance » que Heidegger a dénoncé comme la pathologie la plus inguérissable de la pensée de l'Occident, à partir au moins des notions fondamentales de la métaphysique d'Aristote (morphé, eidos, to ti en einai, genos, ecc.), selon les thèses très connues – bien que très discutables – que l'on trouve en particulier dans son livre *Die Grundprobleme der Phänomenologie*.

Un renversement paradoxal

Suivant ces dernières considérations, nous serions plongés dans un renversement paradoxal de la pensée critique des 'sciences européennes'. Le champ de l'imposition de la logique de puissance à l'agir de l'homme n'aurait pas son origine dans

l'expansion des sciences de la modernité, en tant que échappées au control de l'homme et à sa présumée mesure de sagesse. Tout au contraire, il serait l'évaluation exagérée de l'agir de l'homme, en proie à un délire de *hybris* s'exprimant dans la prétendue de diriger l'évolution des sciences, à nourrir la volonté de puissance *sur* la démarche des sciences mêmes et *contre* l'expérience effective par elles engendrée. La volonté de puissance se situerait, décidément, du côté du sujet humain. En outre, on pourrait ajouter que ce sujet humain, incapable d'accepter le progrès d'un savoir qui, à bien voir, a eu en lui-même la source première, serait un sujet bien sot et bien aveugle.

Restons encore un peu sur ce point. On sait bien que, pour rendre compte de la déviation des sciences du chemin de l'homme, la pensée critique cherche son appui dans la métaphore de l'apprenti sorcier : c'est-à-dire que un procès engendré par le sujet humain serait échappé à son control en se tournant contre lui-même (nous pouvons emprunter à Karl Marx l'image qu'il référerait plus proprement au renversement entre le sujet et l'objet dans le processus de la réification capitaliste). Nous tous connaissons aussi l'image très célèbre de Horkheimer et Adorno dans la *Dialektik der Aufklärung* : celle de Ulysse qui recours à l'artifice de se faire tamponner les oreilles pour se soustraire au chant des sirènes. Ulysse prend ainsi la distance de la nature pour réussir à la maîtriser avec l'invention de l'artifice, mais la conséquence de ce geste – le résultat négatif qui sort de la négation de la nature – est la soumission à l'artifice et donc à la logique instrumentale de la technique, qui réduis à son impératif soit la nature soit le royaume humain.

L'homme contemporain, héritier de l'héros homérique, devrait alors seulement se repentir des moyens qui dépendent de son expédient créatif et, donc, de l'efficacité de son intelligence? Ou bien la conscience malheureuse de Ulysse, ou bien de tous les hommes victimes des conséquences de l'artifice, aurait pour cause l'incapacité de reconnaître humblement les résultats surprenants et imprévus de la créativité humaine? Le péché original du sujet humain consisterait, peut-être, dans la maladie d'être toujours insatisfait de la condition où il se trouve, à commencer de la condition 'mythique' du jardin paradisiaque?

L'humain en déséquilibre

Entre les deux interprétations possibles du rapport entre l'humain et le savoir, prenant celui-ci pas seulement en soi mais encore plus dans ses applications au monde où l'humain est toujours situé et au même temps déplacé, quelle doit-on préférer? Laissons la question ouverte, sans proposer non plus une position intermédiaire, apparemment de bon sens, mais plus facile à dire qu'à faire. En tout cas, ce qui sort, à partir des considérations précédentes, il est que le rapport entre l'humain et les produits de son savoir est bien problématique. Soit que l'humain maîtrise son savoir soit qu'il accepte la soumission à son développement qui se fait non plus gouvernable, il est en tout cas en difficulté, c'est-à-dire il trahit une *dis-tonie* structurale envers son propre savoir et, plus encore, envers ses applications concrètes.

Mais cela est peut-être – voilà le clou de la question – un des signes d'une plus générale *dis-tonie* anthropologique, qui attient à l'*human beingness* en tant que tel, c'est-à-dire en tant qu'il est, d'un côté, individualité ou individualisation dans un espace et dans un temps déterminés et, d'autre côté, ouverture à un horizon de transcendentalité, lequel embrasse, *au niveau formel et non pour les contenus matériels (effectifs)*, tout espace et tous les temps. Dans cet *allotrope* empirique-transcendental, comme s'exprimait Michel Foucault à propos de l'humain, dans cette *mixture* d'empirie – ou d'expérience toujours située – et de transcendentalité, on pourrait dire dans cet oxymore vivant, s'épanouissent la scène de l'histoire et la scène du cosmos entier, une scène qui est remplie par le passé mais est encore vide du futur et constitue l'unité du moment présent, en le déchirant toujours entre ce qui n'apparaît *plus* comme étant et ce qui n'apparaît *pas encore* comme étant. C'est la scène du devenir, dont l'humain uniquement se fait la représentation consciente et 'tragique', suspendu comme il est entre un manque qui précède et l'autre qui suit.

L'homme est alors vraiment un être *dis-équilibré* (selon la formule de Michele Federico Sciacca, un penseur italien exposant du personnalisme) dans le contexte de l'être en général? Le *vortex*, ou le tourbillon qui a donné lieu à son individualisation, semblerait plutôt un trou qui s'enfonce en soi-même à mesure que cette individualisation s'accomplit et, en outre, s'accomplit de façon toujours différente dans chaque individu de l'individualisation, de sorte que chaque individu est toujours un discontinu dans la continuité et peut introduire une discontinuité dans la continuité donnée jusqu'à présent.

Être et devenir : l'ontopoïesis au-delà de l'ontopoïesis

Le caractère extraordinaire du flux ou de l'écoulement de l'*ontopoïesis* juste dans son développement ordinaire, il est que la discontinuité se résout au bout du compte et en moyenne dans la continuité. Mais l'individu singulier, dans sa propre non répétibilité et dans son histoire unique, est toujours en risque de ne pas bénéficier de la continuité générale et ne peut pas oublier d'être un « possible pour la mort ». Mais on ne peut pas exclure non plus que la discontinuité puisse prévaloir sur la continuité *en ligne générale*, c'est-à-dire pour ce qui concerne l'espèce humaine en tant que telle et pour ce qui concerne le futur du cosmos entier.

Je voudrais souligner que, si on reste à l'intérieur de notre expérience, et des limites d'espace et de temps qui la marquent, nous n'avons pas aucun argument décisif pour affirmer la perpétuation de l'*ontopoïesis* qui a eu lieu dans le passé en arrivant jusque à notre présent. La structure complexive de l'*ontopoïesis* serait une structure de contingence. Également l'intentionnalité, exprimée par l'ontopoïesis, serait subordonnée à une logique de contingence et, avec elle, le *telos* dessiné par le processus ainsi que nous connaissons ce dernier dans son devenir actuel. Plus radicalement, le devenir même dans sa totalité serait à risque de cesser de devenir. Laisse à soi-même, le devenir n'a pas la force de soutenir sa propre persistance, à

moins de le faire coïncider avec l'être tout court. Tout l'être dont nous pourrions parler serait alors l'être qui devient, mais il est précisément cette façon d'être qui est soumise à un double manque.

Si le devenir est supposé comme absolu, on rend absolu le gaspillage d'être que tout étant qui devient ne peut pas éviter. D'ailleurs, une contingence qui prétendrait d'être permanente ou inconditionnée serait une contradiction en termes. À cette contradiction nous faisons place si nous pensons le devenir comme identique à l'être, contradiction à laquelle Friedrich Nietzsche, qui certainement nous a appris à ne tomber plus dans une métaphysique dualiste produisant la dévaluation du devenir, n'a pas su se soustraire avec la thèse du retour éternel de tout ce qui devient.

Allant au-delà du dualisme et refusant cependant la contradiction, en tant que *nouveaux métaphysiciens* nous pouvons affirmer que tout le devenir est dans l'être, sans que l'on puisse affirmer que tout l'être est dans le devenir, pour la raison que dans le devenir l'être est exposé à ne pas être. Le devenir a besoin des limites et des conditions du temps et de l'espace, tandis que l'*être*, qui d'un côté peut être pensé comme l'inconditionné en soi-même, est d'un autre côté le recueillement des conditions dans l'inconditionné même. Donc : jamais penser le devenir sans l'être, jamais penser l'être seulement comme devenir. La relation entre l'être et le devenir est asymétrique. Et il faut alors penser le devenir du point de vue de l'être, qui peut recueillir toute la richesse du devenir.

À ce point l'épanouissement de transcendance, dont l'humain est capable, est appelé à s'étendre en intentionnalité tournée vers une transcendance verticale. Sur la scène du devenir s'épanouit la visée de l'*inconditionné*, qui donne sens au sens même du devenir toujours conditionné. Dans cette extension l'*imagination créatrice*, qui est aboutie dans l'émergence anthropologique, peut arriver au comble extrême et, au-delà, à la transgression radicale de l'*ontopoiesis* cosmique, en s'ouvrant à la manifestation d'une *ontopoiesis* qui ne se produit pas par continuité et discontinuité de ses moments différents.

Dans l'être inconditionné peut trouver aussi sa plénitude la contingence de ce qui devient.² Mais, visant au *telos* de son accomplissement, l'*ontopoiesis* devrait renverser sa logique en tant que *ontopoiesis* du devenir et interpréter cette dernière comme liée à une *ontopoiesis* originaire, qui produirait incessamment soi-même avec une activité sans ruptures et sans déchirements, et, se dévoilant comme omnipotence divine capable d'un amour infini, pourrait sauver le processus du devenir du gaspillage de l'être : une tâche pour laquelle le devenir laissé à soi-même n'aurait pas la force suffisante.

²Pour approfondir je me permets de renvoyer à Totaro, *Assoluto e relativo. L'essere e il suo accadere per noi* (Milan: Vita e pensiero, 2013).

Pythagoras in the Sacred Cosmos of Chartres Cathedral

Patricia Trutty-Coohill

Abstract This paper, indebted to Peter Ellard's *Sacred Cosmos*, explores the ramifications of twelfth-century culture on the figure of Pythagoras in the Incarnation Portal of the west façade of Chartres Cathedral. Its goal is to provide a historical perspective on contemporaneous discussions of creative human understanding of the cosmos. The text is a gloss, albeit historical, on the sense of the Pythagoras in light of the pedagogy and scientific attitudes in the School of Chartres and in the light of the criticism of conservative theologians, like Bernard of Clairvaux. References include William of Conches, Thierry of Chartres and their Medieval Neo-Platonism through Boethius and Martianus Capella, *lectio divina* vs integument as a means of approaching God. An underlying theme is the ontopoietic work of the scholar.

God invented and gave us sight to the end that we might behold the courses of intelligence in the heaven, and apply them to the courses of our own intelligence which are akin to them.

Plato, *Timaeus* 3:46¹

A scribe sits intent on his writing, a quill in his right hand, a penknife in his left to steady his hand, to hold the vellum still, to scrape away his mistakes (Fig. 1). He concentrates on getting it right, is ready to correct his errors. Eminently human, he

¹Plato, *Timaeus* 3: 46. The *Timaeus*, the only Plato known to the Chartrains directly, was an incomplete Latin translation by Calcidius in the fourth century. They were exposed to other works by Plato through, e.g., Augustine, Macrobius and Boethius (Ellard, 9). All Plato quotations are taken from *The Dialogues of Plato translated into English with Analyses and Introductions by B. Jowett, M.A. in Five Volumes*. 3rd edition revised and corrected. Oxford: Oxford University Press, 1892.

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Fig. 1 Pythagoras. Chartres. Royal Portal, right archivolt. Photo: Nick Thompson, Flickr

is an image of Plato’s true philosopher who in “conversing with the divine and the orderly, becomes orderly and divine” (*Republic* 6:500c). He has been identified with Pythagoras, one of the giants upon whose shoulders we dwarfs perch. Bernard of Chartres² coined the phrase “standing on the shoulders of giants” to induce humility

² John of Salisbury, *Metalogicon: the Twelfth-Century Defense of the Verbal and Logical Arts of the Trivium*, Gloucester MA: Peter Smith 1971, translation by Daniel McGarry, 167, as cited by Ellard, 5. Bernard of Chartres died in 1124, just 20 years before the sculpture was undertaken.



Fig. 2 Cathedral of Our Lady at Chartres, Chartres. Photo source: Ireneed, Wikipedia Commons

into his students at the school at Chartres; his successors left us a cathedral that has the same effect.

The Gothic cathedral is a wonder. Built to express the very human desire to surge, to surge toward the skies, its articulations sing in a chorus of lines that drive us aloft, to transcend mundane cares. Built with the labor of thousands of hands and the knowledge of hundreds of minds, it uplifts millions. Our immediate reaction to the mighty, towering cathedral of Our Lady of Chartres, the first High Gothic church in all of France, is made more profound when we are confronted by its memories (Fig. 2).

A cathedral stood on this site since the eighth century, rebuilt after five great fires in 743, 858, 962, 1020, 1134 and 1194.³ Although this paper will concentrate on the work of the 1140s, most of what we experience today was built in after the last fire, dedicated in 1260, with additions over the centuries, including the north tower spire in 1507. It is renowned for the human work in its construction: two accounts record the generous labor of those who, no matter what rank, helped drag its stone from the quarries.⁴ Its survival is based on the wit, wisdom and bravery of a few individuals.

³Margot E. Fassler, *The Virgin of Chartres: Making History through Liturgy and the Arts*, New Haven & London: Yale University Press, 2010. Fassler dedicates her book to Charoigne Pierre Bizeau (Archiviste diocésain de Chartres, 1959–2007, d. 2008).

⁴In 1134, *The Chronicle of Robert de Torigny*, Abbot of Mont-Saint-Michel, records that “primarily at Chartres, men [and women] began, with their own shoulders, to drag wagons loaded with stone, wood, train and other materials to the workshop of the church . . . through deep swamps.”

For example, in 1793, when ordered to blow up the North Porch, a local architect argued to the Revolutionary committee that the demolition would clog the streets with so much rubble that it would take years to clear away. It would have been destroyed in the Second World War, but for the bravery of two men on 16 August 1944. In the drive to push the Germans from the area, Allied action was directed against the cathedral (the 14 acres of glass had been removed in 1939, in anticipation of the German advances). “With utter disregard for his own safety,” an American colonel, Welborn Bartin Griffith Jr. with an enlisted man, reconnoitered, “found no enemy troops within and signaled the cessation of fire.”⁵ He was killed later that day at Lèves 3 km from the cathedral.

As we approach the building itself we are impressed by the handling of its materials: the size of the stones, their weight, their overwhelming plenitude. So many stones, so many ways to use stone. How could men like us have done this? How many trips to the quarry? How many and how long did the townspeople do this heavy work? And once done, how was it maintained over 800 years? How do I dare approach, much less use, this wonder? How am I worthy?⁶ The great scholar of the School of Chartres, Édouard Jeuneau,⁷ was inspired by the sculpture on the south transept: an ass tries to play a harp with his hoofs. The iconography is explained in Phaedrus’s Ass and Lyre tale, retold by Boethius and Martianus Capella in the fifth century and familiar in the Middle Ages, a metaphor for the humility we experience when we face our limited capacities. It also calls for admiration for those who carry on.

Phenomenological Approach

I read this attitude into the Pythagoras on the west facade at Chartres, at the base of the inner archivolt of the right hand portal, Music/Harmony above. Both are iconographic links to the first theme of this volume, the forces of the cosmos; my interpretation links the Pythagoras figure to the second, the ontopoietic genesis of life.

A letter of Hugh, Archbishop of Rouen, to Theodore, Bishop of Amiens, tells how the workers prepared their souls through confession and penance, if they had been at enmity “put aside their anger and ill-will and met together in harmony and well-founded peace.” See Robert Branner, *Chartres Cathedral* (New York: Norton, 1969) pp. 93–94.

⁵Griffith (West Point 1925) was posthumously awarded the Distinguished Service Cross for saving the-cathedral; he was killed in action on 16 August 1944 in Lèves, 3 km from the cathedral; he is buried in St. James, France. Welborn Bartin Griffith, Jr., “Military Times Hall of Valor.” Military Times.com, as cited in Wikipedia, “Chartres Cathedral.” Leves commemorated his bravery with a sidewalk plaque, see Jay Nordlinger, “A Colonel at Chartres,” *National Review Online*, 10 May 2011. This paper is dedicated to Colonel Griffith and those who taught him so well.

⁶Such a reaction Scheler would consider our most original and primordial relation to the world, that world that “entices us to perceive it and to know it . . . [a world that] is always already given in relief, a world to which we are emotionally attached.” Zachary Davis and Anthony Steinbock, “Max Scheler,” *The Stanford Encyclopedia of Philosophy* (Winter 2011 Edition), Edward N. Zalta (ed.), <<http://plato.stanford.edu/archives/win2011/entries/scheler/>>, consulted August 13, 2012.

⁷Rethinking the School of Chartres, trans. Claude Paul Desmarais (Toronto: University of Toronto Press, 2009), pp. 13–14. <http://ariadne.org/centrechartre> whose Christopher Crockett whose witty has been most helpful.

My question is what gives us the sense that he is not just copying manuscripts, but rather that he is rooted in life, and perhaps even in “the loving act of participation by the core of the human being in the essence of all things”?⁸

To address these questions I must first build the membrane that enfolds the image, I must turn the “unintentional” background into intentional, I must bring forward what Husserl called “the circumstances of acts.” We will see that indeed these are, in Husserl’s words, “much more entangled than it first appears.”⁹ Potent images give us an immediate handle to grasp, but most times, we do not realize the handle’s import until we see the cultural membranes that surround it and also support it. As we learn more about its circumstances our original intuitions are tested. If we are on the right path, the original intuitions are enlarged and strengthened.

We seem to be pulling strands that offer themselves out of the past, out of the present, out of theory, out of history, if we are lucky. Fortune plays a large role in such work, as it certainly has with the study, for if, several years ago I had not bought a postcard of what I thought was the perfect image of scholarship, if Professor Tymieniecka at about the same time opened our investigations into the universe, and if my colleague Peter Ellard had not published his *Sacred Cosmos* in 2007, this paper would not have developed. And is it a coincidence that Paul Olson’s *The Journey to Wisdom* was published in 1995, the first year of my participation of the WPI? This study has become highly personal; I experience the wonder of being inside Plato’s universe into which God “poured the elemental elements, and mingled, them . . . diluted as they were to a second or third degree” (Plato, *Timaeus*, 3: 30). Plato’s was the philosophical standpoint of the masters of the School of Chartres, the psychological and metaphysical site that produced the little figure of Pythagoras. And Plato’s tribute to sight relates the theme of this volume to him.

I will . . . speak of the higher use and purpose for which God has given [eyes] to us. Sight in my opinion is the source of the greatest benefit to us, for had we never seen the stars and the sun and the heavens, none of the works which we had spoken about the universe would ever had been uttered. But now the sight of day and night, and the months and the revolutions of the years, have created number and have us a conception of time, and the power of enquiring about the nature of the universe; and from this source we have derived philosophy (*Timaeus* 3:46).

Historical Background

In the thirteenth century, when most of Chartres Cathedral proper was built, the newly formed universities dominated European education. Aristotelianism was the favored method; Thomas Aquinas wrote his *Summa Theologica*.¹⁰ But we are

⁸Max Scheler’s *Von Ewingen im Menschen*, vol. 5 in *Gesammelte Werke*, vol. 5, Maria Scheler (ed.), Bern: Francke Verlag, 1954, p. 68, as cited in Davis, Zachary and Steinbock, Anthony, “Max Scheler”, *The Stanford Encyclopedia of Philosophy* (Winter 2011 Edition), Edward N. Zalta (ed.), <<http://plato.stanford.edu/archives/win2011/entries/scheler/>>.

⁹Edmund Husserl, *The Phenomenological Uncovering of the Whole, Unified, Connected Stream of Consciousness*, *Edmund Husserl Collected Works* 12, Dordrecht: Springer, 2008, pp. 67–68.

¹⁰Adolf Katzenellenbogen, *The Sculptural Programs of Chartres Cathedral*, New York: Norton, 1964 (Johns Hopkins Press, 1959), p. viii.

concerned with the century before, 1140s–1150s when the Royal Portal was built, when Chartres, besides being a famed pilgrimage site, was the site of a famous and influential cathedral school for the training of diocesan clergy. Fulbert established the school c. 990, became its canon and chancellor of the cathedral chapter 1006, bishop of Chartres in 1020. By the first half of the twelfth century, the Chartres cathedral school attracted the caliber of Bernard of Chartres (died after 1124), William of Conches (c. 1090–after 1154), Gilbert of Poitiers (1085/1090–1154), Thierry of Chartres (d. before 1155), and John of Salisbury (c. 1120–1180).¹¹ Known for their Platonism and their taste for natural science its scholars were “the forefront of the intense intellectual rethinking that culminated in what is now known as the twelfth-century renaissance, pioneering the scholastic philosophy that came to dominate medieval thinking throughout Europe.”¹² Margot Fassler’s recent major study notes that “their thought was sometime subtle and original in its philosophical content and modes of reasoning and is certainly worthy of study today.”¹³

These philosophers taught and debated in the era of Peter Abelard (1079–1142) and Bernard of Clairvaux (1090–1153). Indeed the west portals of Chartres were being designed in the year of the Sens debate between Abelard and Bernard (1141), when Thierry of Chartres was chancellor the cathedral school of Chartres and Geoffrey II of Léves was bishop of the cathedral. Following Abelard’s condemnation at the Sens, William of St. Thierry wrote a letter to Bernard of Clairvaux accusing William of Conches of errors worse than Abelard’s: his “diversity of exposition” and his attempted combination of the world of natural science and theology. During the planning and building of the west portal, William of Conches and Thierry of Chartres were in the sort of situation Eileen Sweeney describes:

medieval philosophical thinkers operated under the threat of censure from political and religious authority, moving them, some have argued, to write esoterically or to otherwise protect themselves from persecution. . . . [making] medieval philosophical texts considerably more difficult to understand and interpret than modern or even classical philosophical texts. Moreover, the broad range of genres used in medieval philosophy raises questions about the nature of philosophical writing in general when compared to the much more restricted set of accepted forms in modern and contemporary philosophical works.¹⁴

William of Conches would end his days under the protection of Norman duke Geoffrey Plantagenet (c. 1145–1154); Thierry, left the cathedral chapter in 1148, became a monk at the Cistercian monastery, and was dead by 1156.¹⁵

¹¹ I accept the arguments of Jauneau about the association of these men with Chartres. For the historiography, see Jauneau, pp. 17–27.

¹² “School of Chartres,” Wikipedia.

¹³ Fassler, 194: “A small group of influential scholars were in residence (at Chartres) at midcentury, Master Thierry being the most important of them.” Fassler’s thorough historiography of Chartres does not explore the philosophy of the School of Chartres. Ellard’s 2007 study is not included in her bibliography.

¹⁴ “Literary Forms of Medieval Philosophy,” *The Stanford Encyclopedia of Philosophy* (Fall 2008 Edition), Edward .N. Zalta (ed.), URL <http://plato.stanford.edu/archives/fall2008/entries/medieval-literary/>. Consulted 19 July 2012.

¹⁵ Fassler, p. 196, citing André Vernet, “Un épitaphe inédite de Thierry de Chartres,” in *Recueil de travaux offert à C. Brunel* 2, 660–670, Paris: Société de l’Ecole des Chartres, 1955. Thierry left

Works of visual art designed for public places like church facades undergo an even more rigorous scrutiny. Made, in large part, for the education of the illiterate, the stories they tell must meet criteria that even Plato would have envied. Their messages, while imaging faith, must appear be anodyne to their contemporaries.

Reaching for God

In the Middle Ages the existence of God was not doubted or denied. What was argued was how humans could properly learn about God. For the conservatives, we learn about God through revelation in the Scriptures, the word of God. A common Benedictine practice and one emphasized by Cistercian Bernard of Clairvaux (1080–1153) was the *Lectio divina* wherein passages from scripture were read aloud for the monks' meditation, which would be followed by prayer and then "rest in God." In the late twelfth century, Carthusian Giugno II formalized the specific the *lectio, meditatio, oratio, and contemplatio* system. Instructions for the technique are found today on the internet, see Father Luke Dysinger, O.S.B.:

Lectio divina is a slow, contemplative praying of the Scriptures. Time set aside in a special way for *lectio divina* enables us to discover in our daily life an underlying spiritual rhythm. Within this rhythm, we discover an increasing ability to offer more of ourselves and our relationships to the Father, and to accept the embrace that God is continuously extending to us in the person of his son, Jesus Christ.¹⁶

The divine words were meant to reach each individual's interior where they would be stripped of their "covering" through meditation, which could lead to a deeper prayer and further contemplation. This method emphasized that the sacred words were just starting points for approaching God.

For the Chartrains, God could be approached and even revealed, not only through such exercises but also through the study of the Liberal Arts, for such studies could reveal patterns of creation that could even reveal the patterns of the divine mind. Now even though the Chartrains invested great credence in scientific matters, we must not attribute modern scientific methods or approaches to them. As Peter Ellard (5) warns:

In the twelfth century there were no 'just scientific' discoveries. Interpreted within widely held Neoplatonic metaphysics, all sensible reality was understood as containing a deeper meaning, and to have its true or fuller existence in the intelligible world of ideas, which the Chartrains and other Christian Neoplatonists place in the mind of God, the Eternal Word. Thus the discovery of nature and of the individual was a spiritual discovery, and the understanding reached was a religious one with deep theological significance.

his books to the library at Chartres, perhaps the greatest in the Middle Ages. The library was destroyed in an allied bombing raid on the evening of May 26, 1944. (<http://news.bbc.co.uk/2/hi/science/nature/3038368.stm>.)

¹⁶Lawrence S. Cunningham and Keith J. Egan, *Christian spirituality: themes from the tradition*, Mahwah, NJ: Paulist Press, 1996, 91–92. The www is replete with instructions for the technique. <http://www.beliefnet.com/Faiths/Catholic/2000/08/How-To-Practice-Lectio-Divina.aspx>

Interpretation is key here because the Chartrains argued for a more than literal interpretation of Revelation and of creation. Their interpretations often involved metaphors (medieval terms: of involcrum/envelope/integumentum) of the kind Bernard Silvester of the twelfth century explained as “a kind of demonstration that wraps the thing that is understood under a fabulous narration of the truth.”¹⁷ The sense is that of contemporary artists Christo and Jean-Claude whose wrapping of islands, buildings, and bridges have demonstrated the effectiveness of the image/idea of enwrapped, covered truth. And of course phenomenology has luxuriated it, for example, Husserl’s 1910–1911 *The Phenomenological Uncovering of the Whole, Unified, Connected Stream of Consciousness*. So we should be at home with the Platonisms of the Chartrains who believed Plato’s system was merely a means of demonstrating workings the cosmos, just a model comprehensible to our weak human mind, remote and grossly inferior from the wisdom that resides archetypically in the divine mind.¹⁸ Even through our hoofs cannot play the divine harmonies perfectly, we can at least touch the instrument. Ellard summarizes the Chartrains’ confidence succinctly: they

viewed everything as an image that has its accompanying eternal idea in the mind of God. By contemplating images encountered in the sense perceptible world, one could be led to a contemplation of the ideas of that image in the divine mind, and eventually to the divine mind itself. . . . Through the study of Plato, the Neoplatonists (etc.) and the study of the cosmos itself, one could experience, one could ascend to the knowledge of and experience of God. It was . . . their use of integument within the context of their Neoplatonic metaphysics that made this possible (58).

For the Chartrains, any system was merely a means of demonstrating the workings of the cosmos, just a model comprehensible to our weak human minds, remote and grossly inferior to the wisdom of the whole that resides archetypically in the divine mind. “The fact that the cosmos was created by God as an image of ultimate reality did not diminish its value. It heightened it. It pointed out the sacredness of the cosmos. So the scientific study of the physical cosmos informed their theology—it taught them about God” (Ellard 167).

According to Thierry of Chartres, even the world “God” is a metaphor for the “power of producing and ordering tall things, which is called his creating. . . . All words used of God are spoken metaphorically, otherwise they are not appropriate to God. . . . All [words] about God are borrowed.”¹⁹ So too, the World Soul, the Logos, Divine Love and Nature are metaphors for the intermediary between the creative power of God and that of humanity. Nature, as the fecund force of the cosmos, acts analogously to God in creating its creating power (Ellard, 180), except that God

¹⁷ *Commentary on the First Six Books*, cited and translated by Marie-Dominique Chenu, in *Nature, Man and Society in the Twelfth Century*, edited and translated by Jerome Taylor and Lester K. Little, Chicago: University of Chicago Press, 110, as cited by Ellard, p. 47.

¹⁸ Winthrop Wetherbee, “Philosophy, Cosmology, and the Twelfth-Century Renaissance,” in *A History of the Western Twelfth-Century Philosophy*, Cambridge: Cambridge University Press, 1988, 21–53, esp. 37.

¹⁹ Thierry of Chartres, *Abbreviatio Monacensis*, Haring, 448–449 as cited by Ellard, 66. The text is an abridgement of Thierry’s commentaries on Boethius by one of his students.

creates out of nothing. Nature creates like from like; human creators imitate nature, based on what they have experienced. Nature and humanity, not only participate in the form of being that is God, they image the activity, the power, the work of God.

The Incarnation Portal of Chartres Cathedral

With these thoughts in mind, let us examine our Pythagoras in his physical, iconographic, and iconological position. I leave the anagogical level to the Abbot Suger (1081–1151), of St. Denis. Our purpose here is not the contemplation of the mystical. We do not intend, like Suger, to be “called away from external cares”²⁰ but rather to use external cares to account for the Pythagoras’ attitude, hunched over his desk, filled with intensity for the gravitas of his work.

Pythagoras is placed in bottom vousoir of the Incarnation portal on the Royal Portal at Chartres. While the central and left tympana (Fig. 3) focus on the Christ’s divine powers, the Ascension at the left and the Second Coming in the center,²¹ the



Fig. 3 Chartres, Royal Portal, Photo: Nina Aldin Thune, Wikipedia Commons

²⁰ *The Book of Suger, Abbot of St.-Denis: On What was Done under his Administration*, 22–48 in Elizabeth Holt, *A Documentary History of Art*, selected and edited by Elizabeth Holt, Garden City NY: Doubleday, 1957, 30: “Thus when – out of my delight in the beauty of the house of God – the loveliness of the many-colored gems has called me away from external cares, and worthy meditation has induced me to reflect, transferring that which is material to that which is immaterial.”

²¹ As with most medieval buildings, the backstory of the construction of the west facade is literally multi-levelled. The west facade (as completed c. 1155) replaced a vestibule added to Fulbert’s church, c. 1050–1075. This has been damaged during the 1134 fire. To replace that structure a new west front was designed with two large towers and with three portals between. Originally the



Fig. 4 Chartres, Royal Portal, Right tympanum, Incarnation of Christ, The Liberal Arts, Angels, Pisces and the Gemini. Photo: Nick Thompson, Flickr

right tympanum emphasizes Christ's role, through his mother, on earth (Fig. 4). Its theme is the coming of Wisdom in the world. The tympanum illustrates the traditional theological position, that Christ is the Wisdom of the World, God's wisdom incarnate. The *voissoirs* embody how wisdom comes to man through the study of the Liberal Arts, the trivium of grammar, dialectic, and rhetoric and the quadrivium arithmetic, geometry, astronomy and music. Embodied beneath them are the heroes of learning in Thierry's *Heptateuchon*: Priscian for grammar, Aristotle for dialectic, Cicero for rhetoric, Boethius for arithmetic, Euclid for geometry, Ptolemy for astronomy, and Pythagoras for Music. Also included are six angels that frame the *Sedes Sapientiae* and two "leftover" Zodiacal signs, Pisces and Gemini, at the lower left next to the horizontal registers of Christ's Birth and Presentation that might be related to the Feast of the Annunciation (March 25) and the birth of John the Baptist (June 24), a secondary feast of the Cathedral.²²

Katzenellenbogen (18) quotes Thierry: "Philosophy has two principle instruments, the mind and its expression. The mind is enlightened by the Quadrivium. Its expression, elegant, reasonable, ornate is provided by the Trivium; thus it is manifest that the *Heptateuchon* is the proper and only instrument of philosophy."²³

portals were set between the back of the towers, and sculpture was designed for that expanse. However, at some point it was decided to move the portals to the forward plane. Modifications to the sculpture that was already executed is apparent in the tympana of the side portals. See Branner, 75-76; Fassler, 258.

²³E. Jeaneau, "Le Prologus in Eptatheucon de Thierry de Chartres," *Medieval Studies* XVI (1954), p. 174.

The following summarizes Katzenellenbogen's authoritative discussion. The Incarnation theme in the tympanum of the right portal is divided into three levels, each of which is dominated by an axial image.²⁴ At the bottom Christ's birth: He is laid on an altar, his mother below. At the sides typical scenes, the Annunciation, the Visitation, and the Annunciation to the Shepherds. In the level above, Christ stands on an altar as he is presented in the Temple. Above a dominating Mary holds the Child as a *Sedes Sapientiae*, Wisdom, the operative motif is "rooted in concepts of St. Paul [I Cor.1:24 and 30], which are, in turn, based on Platonic ideas."²⁵ Katzenellenbogen (19) surmises that because of the clarity and finesse of its intricate presentation, Thierry of Chartres must have been involved in the planning.²⁶ Katzenellenbogen's caution must be noted:

The particular protohumanism of the School of Chartres pervades the iconography. Classical erudition and ancient philosophers are given a monument in stone. The power of reason is strongly and definitely stated in the Liberal Arts but not accorded autonomy. Reason remains dependent and centered on divine wisdom. Seen within the iconographic program it has limited importance only. The main emphasis is placed on theological truths which are made clear to the mind at the expense of narrative exuberance and emotional intensity.²⁷

This being said, we should note that, while the value of the study of pagan authors was defended in the twelfth century traditional classically-based education was under attack (its height reached in the 1130s) by the Cornificians who believed that it was a waste of time to study grammar, rhetoric and logic (it would come naturally), and that depending on a pagan corpus of sources would corrupt the Christian mind. Particularly galling must have been the Cornifician claim that they had a shortcut, that students could become eloquent without art and become philosophers without working (Ellard, xviii–xix). Thierry of Chartres used personifications to complain "with all the bitterness of irony, [writing that] Envy, falsely dressed up as Dialectic, had slandered him before Rumor and caused her to accuse falsely and revile him everywhere" (Katzenellenbogen, 23).

²⁴ Katzenellenbogen, 15, emphasizes the ideographic function of the axial placement.

²⁵ Benedictine historian Guibert of Nogent (c. 1055–1124) wrote "God the Father, like Solomon, built a throne when He prepared a seat for Himself in the Virgin." This trope is typological, based on the description of the throne of Solomon in Book of Kings 10: 18–20.

²⁶ P. Abrahams, *Les oeuvres poe'tiques de Baudri de Bourgueil (1046–1130)*, Paris: H. Champion, 1926, 196ff., as cited by Katzenellenbogen (p. 15, note 46) who points out that the intent of the grouping can be seen in whole set of relationships in the c. 1100 bedchamber of Adela, Countess of Chartres, where the walls were covered with religious, mythological and historical scenes, the ceiling with the Sky and the floor with the Earth and the bedposts were carved into images of Philosophy and the Liberal Arts. Other examples are found in note 45. Abbot Baudri's descriptions of the tapestries should not be taken literally, but it does offer a sense that such decorations were known at the time; see Frank Merry Station, *Anglo-Saxon England*, Oxford: Clarendon Press, 1971 (third edition), 698. Fassler characterizes Adela (31, 134, 143–146, 181, 191).

²⁷ Katzenellenbogen, p. 48.

The Chartrain interpretive method, their ease with moving from sacred to profane literature because of their use of integument led to criticism. “Attempting to discover divine truth, that is, what God was saying in these writings, was another. The Chartrains, along with Peter Abelard and others, did just that. [Their] use of integument to uncover the ways that the Holy Spirit had spoken to and through Plato, Boethius, and Macrobius, as well as Augustine and Jerome, was to become their central trademark [and] the target on their backs” (Ellard 52).

Hugh of St. Victor’s critique echoes the conservative opinion, critical of Chartrain methods:

In the books of the pagans we find many things quite plausibly argued about the eternity of God and the immortality of souls, about eternal rewards owing to virtues, and about eternal punishments owing to evils, and yet no one supposes that these books merit the term sacred. . . . The writing of philosophers like a whitewashed wall of clay, boast an attractive surface all shining with eloquence; but if sometimes they hold forth to us a semblance of truth, nevertheless, by mixing falsehoods with it, they conceal the clay of error, as it were, under the over-spread coat of color. The Sacred Scriptures, on the other hand, are most fittingly likened to a honeycomb, for while in the simplicity of their language they seem dry, within they are filled with sweetness.²⁸

We might therefore consider the inclusion of the Liberal Arts in the Incarnation portal design confrontational, a declaration of the efficacy of the Chartrain pedagogy. It addresses both the Cornificians and the conservatives of the Church. It looks forward humanism of the Renaissance.

Protohumanism

The female personifications of the Liberal Arts in the *voussoirs*, carry the attributes Martianus Capella assigned them in the fifth century. If we read them, as Katzenellenbogen suggests, clockwise from lower left to lower right (Grammar, Dialectic, Rhetoric, Geometry, Arithmetic, Astronomy, Music) they follow the order of Capella’s presentation in his *De nuptiis Philologieae et Mercurii* [On the Marriage of Philology and Mercury]. In the frame tale Mercury, a symbol of learning in the Middle Ages, seeks a wife. After Wisdom, Divination and Soul refuse him, the gods encourage him to pursue to the Philologia (eloquence) – think the WPI’s Phenomenology and Literature Society. “The other books provide a comprehensive handbook of the liberal arts that was an important component in education for a 1000 years.”²⁹ Copies of the *Marriage* in the later Middle Ages were frequently limited to the heavenly settings of Books I and II.

²⁸ Hugh of St. Victor, *The Didascalion*, edited and translated by Jerome Taylor, New York: Columbia University Press, 1961, 21. As cited by Ellard, p. 55.

²⁹ Stahl, 115. This is Stahl’s concluding remark, after a thorough discussion of the Capella philology up to 1965.

The question of the relationship between the Learning and Eloquence dates at least from Plato's criticism of the Sophists. Remember that the cathedral school at Chartres was for the education of diocesan priests. Paul Olson explains:

The differences between the philosophers and the sophists are not trivial, for they concern both the form and content of education and the basis of the social unit. . . . Whereas the Sophist makes the human words that channel physical power to create the civic world, the Platonist makes the divine structure, understood by mathematics, serves as a model for what the civic world ought to be -- the "word" or Logos that tells human beings what is required of them. . . . For the Platonists, to act properly, human beings must understand the material world as a construct guided by the same transcendent patterns or rules that govern humankind when it acts justly. Philosophic and mathematical education, based in dialectics and numbers--not in poetry--provides the way to know these patterns.³⁰

Book VIII describing an astronomical model of a geocentric universe became a separate manual on astronomy in 30 codices, one of which was much appreciated by Copernicus.³¹ Capella's *Marriage* and Macrobius' *Commentarii in Somnium Scipionis* [Commentary on the Dream of Scipio] were considered authoritative on cosmography, especially by the Chartrains.³²

The Cosmos

The twelfth-century cosmos was not our cosmos. Their world was composed of four elements, its men of four humors. The universe was that of Ptolemy: earth-centered, nested in transparent spheres whose quintessence was thick enough for correcting epicycles to accommodate the movement of the planets, Sun and moon, and a sphere of firmament for the unmoving stars. All was created by God.

William of Conches and Thierry of Chartres's work in cosmology can be distinguished from that of their contemporaries by their desire, in Thierry's words, to explain creation "*secundum phisicam et ad litteram*."³³ Since the Chartrains prided themselves in their abilities at the Trivium, the order of the sentence is very important: that his interpretation will be firstly by physics (natural science) and secondarily according to the letter (first book of Genesis). As Ellard (176) says, this focus on scientific under-

³⁰Paul A. Olson, *The Journey to Wisdom: Self-Education in Patristic and Medieval Literature*, Lincoln and London: University of Nebraska Press, 1995, pp. 8–10.

³¹Illustrated in Valentine Naboth (1523–1593), *Primarum de Coelo et Terra Institutionum quotidianorumque Mundi revolutionem*, Venice, 1573, p. 40. Capella worked in the Ptolemaic system with the Sun and the three outer planets circling the earth, but introduces a special epicycle for Mercury and Venus to circle Sun.

³²William H. Stahl, "To a Better Understanding of Martianus Capella," *Speculum* 40.1 (January 1965), pp. 102–115, especially 102. The final quotation in the paragraph is his conclusion, after a thorough discussion of the Capella philology up to 1965.

³³Thierry of Chartres, *Tractatus de sex dierum operibus*, Haring, 555: "*De septem diebus et sex operum distinctionibus primam Geneseos partem secundum phisicam et ad litteram ego expositurus, in primis de intentione auctris et de libri utilitate pauca premitam. Postea vero ad sensum littere hystoriam exponendum veniam, ut et allegoricam et morale lectionem, que a, sanctis doctoribus aperte execute sunt, ex toto pretermittam*" (Ellard, 184, note 56).

standing and interpretation of the cosmos as a distinct discipline “ventures far from others that preceded it. The Chartrains were seeking to establish the combined natural sciences as a discipline in its own right.” It also is lead them to explain their studies beyond Plato, Boethius and Macrobius, Thierry to the scientific works of the Arabs (Thierry) and Greek and Arab medical texts (William) as Jeuneau points out.³⁴

Pythagoras

We should not be concerned with the factuality of the myths associated with Pythagoras the man, but understand that for the Chartrains, Pythagoreanism was the basic because it demonstrated that the universe, because of its mathematical foundations, was comprehensible.³⁵ The world itself would be an integument, one that could only be penetrated by those who saw the patterns and the harmony through mathematics.

The Chartrains would have known Pythagoras through Plato and Boethius--whose works were the best available at the time. Although Boethius' understanding of mathematics was rather limited and his sources for arithmetic and geometry of poor quality, it taught medieval scholars about Pythagorean number theory. Boethius was a major source of material for the quadrivium, for relating music to science, suggesting, for example, that the pitch of a note is related to the frequency of sound. Music is related to number, is related to the heavens, all declaring the unity of creation, for as Plato (Laws ix, 1016) says “Every diagram, system of number, every scheme of harmony, and every law of movement of the stars ought to appear one to him who studies rightly”³⁶ The Music that sits above Pythagoras at Chartres (Fig. 5) might refer to the music of the spheres, Boethius' music *mundana*, but Music with instruments is another category, music *instrumentalis*.³⁷ In this process-oriented interpretation, we

³⁴ Eduoard Jeuneau, “Les Maîtres Chartrains,” in *Monde Médiéval et Société Chartrain*, pp. 109–110, as cited by Ellard, p. 182.

³⁵ The Babylonians knew the “Pythagorean theorem.” Xenocrates' story that Pythagoras recognized the concords in the sound of hammers striking an anvil gave only general qualities, like the more massive the object the lower the pitch of its sound. Plato met some of Pythagoras's disciples, used geometrical proofs in one of his dialogues, and later was thought to follow Pythagoras. W. Burkett, *Lore and Science in ancient Pythagoreanism*, translation E. Minar, Cambridge, Mass: Harvard University Press, 1972, 429 (first German edition 1962). As cited by Carl Huffman, “Pythagoras”, *The Stanford Encyclopedia of Philosophy (Fall 2011 Edition)*, Edward N. Zalta (ed.), URL = <<http://plato.stanford.edu/archives/fall2011/entries/pythagoras/>>. Consulted February 24, 2012. See also Kitty Ferguson, *Pythagoras, His Lives and the Legacy of a Rational Universe*, London: Icon Books, 2010.

³⁶ J. J. O'Connor and E. F. Robertson, “Anicius Manlius Severinus Boethius,” <http://www-history.mcs.st-andrews.ac.uk/Biographies/Boethius.html>. Consulted Feb. 1, 2013.

³⁷ Boethius, *The Fundamentals of Music*, c. 520. The fact that this is largely a translation and paraphrase from Nicomachus and Ptolemy should not distract us from its import, for as Stephen MCluskey argues, progress is only half the picture of science; the other half is to preserve and promulgate what is already known. In the Middle Ages, alternatives were progress, preservation or decline (*Astronomies and Cultures in Early Medieval Europe*, Cambridge: Cambridge University Press, 1998). More study needs to be devoted to the figure of Music at Chartres, as well as the notion of harmony.



Fig. 5 Chartres, Royal Portal, Right tympanum, right voissiors, Music/Harmony and Pythagoras, Grammar, and Priscian/Donatus. Photo: Nick Thompson, Flicker

might look to the *Timaeus* 3: 46: “the sense of hearing is granted to us for the sake of harmony. And harmony . . . is meant to correct any discord which may have arisen in the courses of the soul, and to be our ally in bringing her to harmony and agreement with herself.”

The Ontopoiesis of Scholarship

The *work* of the Chartrain scholars was to make their new processes fit in their belief system. Note how Ellard describes their processes, verbs mounting. William: “What we *see* is an man *seeing* the world of science *change* around him and *struggling to keep up, to reevaluate and to integrate*” (182). Thierry: “reiterates many times that he *is seeking* rational explanations for the natural phenomena of the cosmos. . . He *uses* scientific explanation to *redefine* how God *is present* and how God *acts* in the cosmos. He *argues to uphold* both the transcendence and immanence of God. At the same time, *we see him strive to understand* the created status of the world and its *creating processes*” (emphasis added; Ellard 176). Like our Pythagoras.

Considered in this light, we can imagine that the Pythagoras figure shows the process of creativity, thought and judgment—the process of ontopoiesis. Significant for this interpretation is that for the Neoplatonists, it is *the process of thought* that opens us to the divine. Here is where we meet Tymieniecka directly.

Vulnerable to what he has learned of the world, Pythagoras bends over the pages making that new awareness fit into what he understands of God’s plan. Scraper in hand, he is ready to correct his mistakes. And above his hunched shoulders Music raises a hammer to find harmony in her bells. Next to him works Priscian; above him Grammar teaches children, book in one hand, trashing bundle in another. Across the way sits Aristotle, Dialectic above him holding the symbols of good and evil, a flower and a dragon with the head of a dog. For Katzenellenbogen (21) these figures emphasizes the work of the humans and their achievements: “the actual task of each art is . . . indicated on the ideal level of personifications, while the authors are shown as they conceive or write down their ideas” (i.e., in process).

We might consider the arrangement in Tymienieckan terms. We might read the personifications as “the infinite possibilities floating in the air of our sphere of imaginative intellective consciousness” above the working scholars who seek “their ground in the final source of reality and their ultimate condition,” i.e., their here and now. Creative work faces these realities, faces the fact that we *are* through coping with *our* becoming. Our dignity and nobility come from embracing the ontopoiesis that makes us human for “it is the ontopoietic constructive stream of being/becoming that establishes and carries the current of life.”³⁸

Indeed we might reverse the traditional interpretation of the relationships between the scholars and the arts at Chartres: that rather than the arts raining down

³⁸ Anna-Teresa Tymieniecka, “Possibility, Life’s Ontopoiesis, and the Vindication of the Cosmos,” *Phenomenological Inquiry* XXXVI (October 2012), pp. 2–3.

inspiration on scholars seated below them, we can say with Bernard of Chartres, that the arts can see further because they stand on the shoulders of real human giants,³⁹ those scholars who face their life conditions and, by their work, provide us with the consolation that is philosophy.⁴⁰

³⁹John of Salisbury, *Metalogicon*, p. 167: “Bernard of Chartres used to compare us to dwarfs perched on the shoulders of giants. He pointed out that we see more and farther than our predecessors, not because we have keener vision or greater height, but because we are lifted up and borne aloft on their gigantic stature.” Cited by Ellard, p. 5.

⁴⁰The reference is more than rhetorical. I identify the mood of the Chartres Pythagoras with the salvific coping strategies of Boethius’ last days.

Part II

Le chaos du monde sensible et la quête du sens rudimentaire (à partir de Plotin)

Róbert Karul

Abstract When considering the sensible world, Plotinus among others makes use of the image of Hades and the concept of matter. The aim of the paper is to positively re-interpret his negative metaphor of Hades as well as the negative concept of matter. The question is, whether after having accepted the delusional character of the sensible world we still can claim a plausible similarity between the sensible and the intelligible. Is a valuable relationship to things and the others still to be found in such a world?

La compréhension du monde sensible chez Plotin prend plusieurs formes, l'une des plus sombres quoique imagée et ainsi bien saisissable est celle mise en avant par J. Laurent : « Or, l'Hadès n'est pas pour Plotin une partie du monde souterrain, ni une pure fiction poétique : c'est notre condition terrestre elle-même. »¹ Sa vision improbable se réfère au traité *Qu'est-ce que l'animal ? Qu'est-ce que l'homme ?* I, 1 (53) : « Héraclès possède les vertus pratiques, et, à cause de sa bravoure, il a été jugé digne d'être un dieu ; mais parce qu'il a la vertu pratique et non la vertu contemplative (sinon il eût été tout entier là-haut) il est là-haut, mais il reste quelque chose de lui dans la région inférieure. »² Après sa mort, Héraclès a été élevé auprès des dieux, pourtant une partie de lui a gagnée un autre site posthume, qui est précisément l'Hadès. À partir du seul extrait précité il n'est pas intelligible pourquoi « la région inférieure » se rapportant de prime abord au site posthume inférieur, l'Hadès, doit être identifiée au monde sensible, au monde de notre existence. L'idée improbable de Laurent n'est éclairée que par le contexte plus large de la phrase citée sur lequel J. Laurent s'appuie. On y voit que l'histoire racontée par Plotin et les mots

¹ Laurent, J.: *L'Homme et le monde selon Plotin*. Fontenay-aux-Roses: ENS 1999, pp. 58–59.

² *En. I, 1 (53) 12*; Plotin: *Première Ennéade*. Paris: Les belles lettres 1997, p. 29.

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par lesquels il l'exprime ne sont pas à lui, mais à Homère, ce qui est peut-être un truisme, mais cela nous donne une motivation à chercher la version plotinienne de l'histoire et des termes y utilisés, pour dire l'analogie du sort d'Héraclès. Après la description de la manière dont l'âme crée son reflet (ou bien son image) et se sépare de celui-ci, Plotin rapproche le fait que « l'âme se sépare de son reflet », avec l'assertion d'Homère que « l'image d'Héraclès est dans l'Hadès, et que le héros lui-même est chez les dieux ». ³ Or, on sait que le monde sensible est constitué précisément par l'image descendante de l'âme. Le rapprochement du monde sensible et de l'Hadès est donc tout à fait justifiable par le texte de Plotin ; disons sans plus développer l'argumentation que l'image de l'âme dans le monde sensible répond à l'image de l'héros dans l'Hadès.

Dans notre imaginaire féérique commun, l'Hadès est le site des ombres, des formes incertaines ou bien des déformations ténébreuses, le site qui n'est pas un lieu de la vie, bien que ce ne soit pas non plus le lieu de la mort parfaite, achevée ; c'est un lieu de la non-vie, le lieu du séjour et de la rencontre des ombres humaines. Ce n'est pas un lieu de l'être, c'est le lieu du non-être.

On peut se poser la question dans quelle mesure l'Hadès peut-il être réinterprété d'une façon positive, abstraction faite de certaines connotations que nous sommes habitués de réprouver à cause d'une hypersensibilité au thème extrême qui est la mort. Ainsi, l'Hadès ne sera-t-il plus à considérer comme un spectacle extrême dont on doit s'affranchir le plus vite possible par une argumentation raisonnable, mais comme une analogie vraiment instructive de l'intuition sensible.

Le monde sensible n'est pas constitué par des reflets singuliers produits par l'âme (à partir de ses *logoi*), ces reflets singuliers ne sont pas suffisants pour l'engendrer. Ceux-ci se produisent comme si sans égard à l'existence ou la non-existence de cet extériorité radicale qu'est le monde sensible. Ils sont produits par la puissance productrice de l'âme et demeurent dans sa proximité avant l'ouverture même de l'extérieur. La production de l'âme est en effet double. L'âme ne crée pas que les raisons séminales (*logoi spermatikoi*) des choses et des âmes singulières ; il y a parallèlement une autre création. En se rapportant à ce qui est au-dessus d'elle, l'âme demeure dans l'être, en se rapportant à ce qui est au-dessous d'elle, elle se tourne vers le non-être. « Et c'est ce qu'elle fait lorsqu'elle se porte vers elle-même ; car, lorsqu'elle tend vers elle-même, elle produit au-dessous d'elle une image d'elle, sans réalité. Elle-même est sans terrain solide, et perd toute détermination fixe ; et son image est tout ce qu'il y a de plus indéterminé et obscur ; privée de raison et d'intelligence, cette image est à une très grande distance de l'être. A ce moment, l'âme est encore à sa place propre, dans la région intermédiaire ; mais elle jette de nouveau un regard sur l'image ; par ce second coup d'œil, elle lui donne une forme, et, contente, elle descend en elle ». ⁴ Ce fragment du traité *Considérations diverses* est d'habitude interprété comme la production de la matière qui reçoit ensuite les raisons séminales des étants. L'image de l'âme – matière qui « ensuite » accueille les raisons séminales des choses particulières – a des traits similaires à la scène souterraine : tout

³ *Ibid.*

⁴ *En. III, 9 (13) 3*; Plotin, *Troisième Ennéade*, Paris: Les belles lettres 2002, p. 297.

d'abord le non-être, la non-réalité, puis les choses plus visuelles : l'incertitude, l'amorphisme et l'obscurité, la non-vie ne manquant pas dans l'énumération étant donné que la vie est étroitement liée à l'être ainsi qu'à la réalité de l'intelligence qui est absente ici. La similitude n'y est pas confirmée qu'au niveau des traits, quelque interconnectés qu'ils soient et qu'ils insinuent eux-mêmes une certaine indépendance ontologique, mais aussi au niveau du rôle joué par la matière et par le règne des ombres et du silence. La matière, de même que l'Hadès, joue un rôle de réceptacle des raisons séminales d'un côté, c'est-à-dire des reflets, des idées (des formes), et de l'autre côté des reflets des âmes singulières.

Nous avons donc une raison de considérer que le caractère fantomatique du monde sensible pourrait à moitié être trouvé dans le médium de réception, dans « l'environnement » de l'Hadès ou dans la matière. Regardons de plus près la deuxième partie du traité *De l'impassibilité des incorporels* qui traite de la matière ainsi que des reflets qui sont en elle. Et essayons de trouver progressivement des éléments qui pourraient servir de base pour l'interprétation non-négative, neutre de l'Hadès.

Nous reportons encore pour un moment la lecture du traité pour pouvoir remarquer que nous ne voulons pas consacrer notre effort à dresser la liste métaphysique des qualités qui dévalorisent la matière dans notre traité, c'est-à-dire à une quelconque description objective. Nous essayons de nous concentrer autant que possible à une description phénoménologique, subjective de la rencontre de l'âme (par laquelle nous connaissons) et de la matière, c'est pourquoi nous ne choisissons qu'un fragment de la partie relativement vaste consacrée à l'impassibilité de la matière. Cette différence entre le regard de l'extérieur et celui de l'intérieur est assez importante apparemment ; elle marque peut-être une frontière entre ce qui est intéressant pour un lecteur contemporain et ce qui est une métaphysique périmée. Sans se prononcer de la même façon sur l'intérêt inégal des différents regards, J. Laurent distingue dans les *Ennéades* la différence entre un saisissement objectif et subjectif de l'état des choses : « On le voit, l'adjectif 'admirable'... désigne certes une propriété 'objective' de la Nature, de la Providence, de l'Âme et de l'Être (un terme comparable en ce sens serait 'divin'), mais aussi une propriété subjectivement reconnue par l'homme : c'est le philosophe qui considère la Nature, la Providence, etc., et qui les pose comme dignes d'admiration. Une puissance est 'admirable' c'est-à-dire qu'elle est objectivement parfaite, et ne pourrait être mieux qu'elle n'est..., mais aussi elle suscite le *thaumadzein* philosophique, l'interrogation émerveillée sur l'origine de cette puissance aux effets éternellement merveilleux ».⁵

Passons maintenant à la rencontre de l'âme et de la matière, dans la mesure où cette rencontre est possible : la matière « est le vrai non-être, une image et un fantôme de la masse corporelle, une aspiration à l'existence », « elle est en repos, sans être immobile ; elle est invisible en elle-même, elle échappe à qui veut la voir, et elle arrive quand on ne la regarde pas, toujours elle a en elle l'image des contraires ; elle est le grand et le petit, le moins et le plus, le défaut et l'excès ; fantôme instable... »⁶ et encore « Elle ment en tout ce qu'elle promet ; si on l'imagine grande, la

⁵ J. Laurent, *L'Homme et le monde selon Plotin*, Fontenay-aux-Roses: ENS 1999, p. 41.

⁶ *En. III, 6 (26) 7*; Plotin, *Troisième Ennéade*, Paris: Les belles lettres 2002, p. 169.

voici petite ; quand elle paraît augmenter, elle diminue ; l'être qu'on imagine en elle, est un non-être, et comme un jeu fugitif ; tout ce qu'on croit voir en elle se joue de nous et n'est qu'un fantôme dans un autre fantôme, exactement comme en un miroir, où l'objet apparaît ailleurs qu'à l'endroit où il est situé ; en apparence le miroir est plein d'objets ; il ne contient rien et paraît tout avoir ».⁷

Le paragraphe cité nous explique ce que c'est que la matière, cet être incorporel, non-sensible : on n'arrive qu'à peine à l'approcher (uniquement par sa définition, mais la définition suffit-elle comme l'approche ?). Elle nous échappe à chaque fois. Elle est une création de l'âme, mais séparée de l'âme, expulsée hors sa capacité de raisonner et donc inconnaissable par elle ; sa rencontre qu'on a voulu circonscrire est en effet impossible. Malgré cela, elle s'impose dans notre champs d'entourage, dans notre proximité ; la proximité n'est pas forcément une visibilité, elle se propose d'abord plutôt comme un mouvement de l'élément étranger, parfois elle nous fait sentir la présence d'autrui, de l'étranger personnifié, Plotin frôle les métaphores sociales : il mentionne notamment qu'« elle se joue » de nous, mais aussi « la voici » sans nous prévenir, se présenter autrement qu'attendue. En plus, elle s'impose plus spécifiquement aussi dans notre champ visuel : fantôme de la masse corporelle, insaisissabilité double ; « fantôme dans un autre fantôme », exactement comme un miroir...

Malgré la tension d'insaisissabilités rivalisant dans leur caractère insaisissable, comme si le passage de la locution « fantôme dans un autre fantôme », littéralement vertigineuse, à sa comparaison au miroir signifierait un glissement de signification. Il semblerait que le glissement fondamental consiste dans le passage d'une masse non claire et menaçante à une image plus expressive, d'un battement embryonnaire d'un certain espace initial à un glissement considérable vers le monde sensible, perçu ; d'une matière tactile à une image, à un champ du visible. Pour le moment, ce n'est pas ce glissement que nous visons : « 'Ce qui entre dans la matière et en sort, ce sont des images' et des fantômes des êtres ; fantômes qui pénètrent dans un fantôme sans forme. »⁸ Dès lors, il devient clair que ce n'est pas la matière en tant que telle qui est « le fantôme dans le fantôme », mais que cette pénétration d'un fantôme dans un autre (et distinct) fantôme est le monde sensible, c'est-à-dire ce sont les images des choses et les images des âmes ayant pénétré dans la matière. Il s'agit là d'un miroitement des motifs comme des images dans un miroir. Que dans la deuxième partie du traité *De l'impassibilité des incorporels* il ne s'agit pas seulement de la matière elle-même, mais du monde sensible, nous pouvons le voir chez F. Fauquier également : « Cette représentation réfléchie ne porte pas sur la matière elle-même, indépendante des autres réalités, la représentation réfléchie tente de donner un visage au rapport que la matière entretient avec le corps tout en essayant d'illustrer son informité ».⁹

⁷ *Ibid.*

⁸ *En. III, 6 (26) 7*; Plotin, *Troisième Ennéade*, Paris: Les belles lettres 2002, p. 169.

⁹ F. Fauquier, "La matière comme miroir – pertinence et limites d'une image selon Plotin et Proclus," in: *Revue de métaphysique et de morale*, 2003, 1, p. 73.

Le miroitement quitte sa position de la métaphore plutôt intellectuelle (la réalité inférieure est le miroitement de celle supérieure, par exemple les reflets des raisons séminales sont captés dans la matière) pour acquérir la position de la figure de l'expérience, le miroitement rend la perception/l'imagination. Il s'agit ici de saisir le monde sensible par la perception/imagination en guise de miroir avec son caractère fantomatique. Une autre parabole de cette lignée est la suivante : « comme l'écho est renvoyé par les surfaces lisses et planes ; comme le son ne reste pas sur ces surfaces, on s'imagine qu'il y était et qu'il y vient ». ¹⁰ L'écho comme pendant de l'image reflétée, l'écho qui a besoin de la matière pour parvenir jusqu'à nous, pour pouvoir la percevoir. Ce qui se présente ici tout le temps est précisément le fantôme, soit dans sa forme visible, soit dans sa forme audible. Et tout effort de Plotin converge vers un seul point : il faut se rendre compte de cette illusion, de ce caractère fantomatique comme de la (non-)essence du monde. Accepter le monde comme inconsistance serait en fin du compte « juste », positif ou, mieux encore, non-négatif. Accepter le monde au niveau même de la perception/de l'imagination comme inconsistance et illusion.

Revenons au contexte plus strictement plotinien quant à l'évaluation de l'illusion. L'illusoire de la matière va main dans la main avec l'illusoire des images des choses et des âmes ; à la première moitié du fantomatique de la matière s'ajoute la seconde moitié du fantomatique, cette fois-ci celle de l'image qui y descend, le fantôme dans un autre fantôme. « Fragile et mensonger, mensonge tombé sur un autre mensonge ». ¹¹

Ce mensonge pourrait nous donner l'impression légitime qu'il soit impossible de passer du monde sensible à une intuition quelconque intéressante en quelque sorte, ou, disons-le autrement, à un contact avec l'âme, puis avec l'intelligence et avec quelque chose de supérieur encore. L'affaiblissement de l'image reflétée dans la matière est si important qu'il ôte la possibilité de retour sur la voie de l'émanation. « ... si les objets qu'on voit en elle [en matière] avaient quelque ressemblance avec les modèles dont ils émanent, on pourrait croire qu'il y a en ces objets quelque chose de la puissance de ces modèles qui les envoient en elle, et qu'elle pâtit sous l'action de cette puissance. Mais, comme les objets qui se reflètent en la matière sont bien différents de ces reflets, on peut en conclure à la fausseté de notre impression, puisque ce reflet n'est qu'un mensonge et n'a aucune ressemblance avec l'objet qui l'a produit. » ¹² S'il y a une distorsion insondable entre le monde des perceptions et le monde des raisons séminales, la perception sensible est alors un tâtonnement vain au milieu des fantômes. Plotin avance-t-il dans son raisonnement en cherchant, quelques pages plus loin, à décrire l'entrée de la qualité de grandeur dans la matière qui n'avait pas cette qualité, enfin, de même que toutes les qualités ? « La matière s'étend en quelque sorte, dans son rapport à la forme totale et à toutes les formes particulières ; elle est obligée d'être en cette forme et de s'enfler en une masse aussi grande qu'a pu le faire la puissance grâce à laquelle ce qui n'est rien par

¹⁰ En. III, 6 (26) 14; Plotin, *Troisième Ennéade*, Paris: Les belles lettres 2002, pp. 189–191.

¹¹ En. III, 6 (26) 7; Plotin, *Troisième Ennéade*, Paris: Les belles lettres 2002, pp. 169–171.

¹² En. III, 6 (26) 7; Plotin, *Troisième Ennéade*, Paris: Les belles lettres 2002, p. 169.

soi-même est tout. C'est ainsi que la couleur visible est née de ce qui n'est pas couleur, que la qualité sensible est née de ce qui n'est qualité ; mais les causes, par homonymie, tirent leurs noms de leurs effets. C'est ainsi que la grandeur vient de ce qui n'est pas une grandeur, ou qui l'est par homonymie ». ¹³ Comme s'il nous donnait au début un certain espoir en parlant de la relation à la forme – idée, mais il nous l'enlève par la suite en refusant la relation en tant que l'homonymie pure. Pourtant, tout n'est pas encore perdu, parce qu'on pourrait essayer de critiquer une telle homonymie qui est homonymie pure ne connectant deux choses que par leur nom et sinon par rien d'autre. Dans ce cas l'homonymie marquerait la relation entre une chose et une autre, elle limiterait la déformation, permettant à la fin de voir quelque chose d'intéressant dans le monde sensible (on utilise ce terme faible au lieu d'« essentiel » plus plotinien). E. Lassègue cherche également à sauver l'homonymie en tant qu'une relation possible, parlant de l'homonymie de la « faiblesse » à propos du corps et de l'âme : la faiblesse de l'âme est tout à fait différente de celle du corps, mais imaginer la faiblesse du corps nous aide à comprendre la faiblesse de l'âme ; il s'agit ainsi de la ressemblance dans la dissemblance et non pas de la dissemblance parfaite. ¹⁴

Pourtant, comment serait-il possible de garder l'espoir de secours vis-à-vis de la conclusion suivante : « Ces grandeurs nous apparaissent, parce qu'elles viennent de l'intelligible ; mais elles sont des mensonges, parce que ce en quoi elles apparaissent n'est pas. » ¹⁵ Malgré la même coloration de la fausseté, il y a ici un déplacement d'accent de la ressemblance – différence (point de vue épistémologique) vers l'être – non-être (point de vue ontologique) et on peut supposer que la ressemblance ne doit pas être forcément touchée par cette fausseté, cette fois ci ontologique. On peut trouver une tendance interprétative analogue chez E. Lassègue. Le lecteur a l'impression que chez lui ce n'est pas une simple tendance, mais une vraie passion interprétative : « Mais lorsqu'il parle d'image, Plotin s'intéresse moins à l'irréalité de l'image qu'à sa dépendance à l'égard du modèle. Le fait que l'image ne soit qu'un reflet ne l'empêche pas de ressembler à son modèle, au contraire c'est parce qu'elle en est le reflet qu'elle lui ressemble ». ¹⁶

Même si nous sommes parvenus à une telle attitude, il nous faut avouer que le terrain sur lequel nous tenons pour le moment est instable. Cela relève, par ailleurs, du concept de ressemblance dans sa version plotinienne. Plotin distingue la ressemblance réciproque (entre les images) de la ressemblance unidirectionnelle (l'image ressemble au modèle, mais non pas le modèle à l'image) : « la seconde espèce de ressemblance existe entre deux choses dont l'une est devenue semblable à une autre, qui est elle-même primitive et dont on ne peut pas dire par réciprocité qu'elle est semblable. Ce second type de ressemblance n'exige pas la présence d'un élément

¹³ *En. III, 6 (26) 17*; Plotin, *Troisième Ennéade*, Paris: Les belles lettres 2002, p. 197.

¹⁴ Cf. M. Lassègue, "Note sur la signification de la notion d'image chez Plotin," in: *Revue de l'enseignement philosophique*, 1983, 6, p. 9.

¹⁵ *En. III, 6 (26)*; Plotin, *Troisième Ennéade*, Paris: Les belles lettres 2002, p. 199.

¹⁶ M. Lassègue, "Note sur la signification de la notion d'image chez Plotin," in: *Revue de l'enseignement philosophique*, 1983, 6, p. 12.

identique dans les deux êtres, mais plutôt un élément dissemblant... »¹⁷ Dans le même traité qu'on vient de citer, *Des vertus* I, 2 (19), il écrit : « La ressemblance avec les gens de bien, c'est la ressemblance d'une image avec une autre image qui vient du même modèle : mais la ressemblance avec Dieu, c'est la ressemblance avec le modèle lui-même. »¹⁸ E. Lassègue en donne une explication éclairante : « Dieu... n'a pas de vertus, ainsi le modèle est différent de l'image qu'est l'homme de bien, qui, lui, possède les vertus ».¹⁹

Aussi dans le traité *Contre ceux qui disent que le démiurge du monde est méchant et que le monde est mauvais* (II, 9 (33)), où Plotin se prononce sur le monde sensible de la façon extraordinairement positive, en comparaison avec le reste des Ennéades, la compréhensibilité, et éventuellement le charme du monde sensible, ne se confirme que sous la condition qu'on connaisse déjà le monde intelligible. La ressemblance du monde sensible au monde intelligible, « la relation » de la descente, se confirme, mais non pas la ressemblance de direction inverse et la montée ; une montée qui commencerait uniquement en bas (non pas aidée par la réminiscence). « Il faut être aveugle, n'avoir ni sens ni intelligence, être par conséquent bien loin de contempler le monde intelligible puisque l'on ne sait même pas regarder le monde sensible ».²⁰ Plotin donne une illustration à son idée : « Est-il musicien, connaissant les rapports intelligibles d'harmonie, qui ne soit ému en écoutant un accord sensible dans les sons »²¹ ?

Vu à partir du monde sensible, le monde intelligible est différent et par la suite inaccessible. La thèse du terrain instable se révèle encore rabaissante ; on est dans une impasse véritable, si on veut montrer la ressemblance des choses visibles aux choses pensées par l'âme (dans cet ordre) et on aboutirait à une ressemblance qui est au fait une dissemblance, et on ne saurait absolument pas suivre à travers une telle défiguration la voie de la couche inférieure à la couche supérieure de la réalité. Il y aurait tout de même une idée de secours qui du coup raffermirait le sol et ouvrirait la barre : toute cette pensée de la ressemblance est dynamique, communicative, relationnelle.

Maints auteurs sont en consonance sur ce point. Comme le dit I. Koch : « Le statut de l'image dépend donc étroitement de la relation vivante qui l'unit à son principe, selon un double mouvement de production, qui va du principe à l'image, et de conversion, qui ramène ou retient dans la ressemblance au principe ».²² Ou

¹⁷ *En. I, 2 (19) 2*; Plotin, *Première Ennéade*, Paris: Les belles lettres 1997, p. 39; cf. M. Lassègue, "Note sur la signification de la notion d'image chez Plotin," in: *Revue de l'enseignement philosophique*, 1983, 6, pp. 6-7.

¹⁸ *I, 2 (19) 7*; Plotin, *Première Ennéade*, Paris: Les belles lettres 1997, p. 53

¹⁹ M. Lassègue, "Note sur la signification de la notion d'image chez Plotin," in: *Revue de l'enseignement philosophique*, 1983, 6, p. 7.

²⁰ *En. II, 9, (33) 16*; Plotin, *Deuxième Ennéade*, Paris: Les belles lettres 1998, 255; cf. M. Lassègue, "Note sur la signification de la notion d'image chez Plotin," in: *Revue de l'enseignement philosophique*, 1983, 6, p. 6.

²¹ *En. II, 9 (33) 16*; Plotin, *Deuxième Ennéade*, Paris: Les belles lettres 1998, 255.

²² I. Koch, "Image plotinienne, image augustinienne," in: *Philosophiques*, 1998, 1, p. 74.

M. Fattal : « On ne peut... manquer de signaler ici que ces puissances productrices sont également des puissances de relation. ... Ces puissances de relation ont une portée ontologique puisqu'elles assurent le lien entre l'être sensible et l'être intelligible... ».²³ Ou de nouveau E. Lassègue : « Car s'il y a ce qui n'appartient qu'au modèle, il y a aussi ce qui appartient à la relation de l'image au modèle, ce doit bien être quelque chose, faute de quoi on ne comprendrait pas pourquoi Plotin a fait cette analyse, si originale, de la notion de ressemblance ».²⁴

Coupons cette interprétation plus stricte et laissons-nous guider plus librement, pour pouvoir réinterpréter de la façon positive l'Hadès, qui communique d'une manière quelconque avec quelque chose de valeur et par conséquent, il a de la valeur lui-même. Cette réinterprétation part de telle compréhension de la ressemblance qui ne cherche pas d'emblée la valeur du monde sensible en renvoyant la ressemblance au modèle et en l'y transférant. Nous concevons la ressemblance au sens que si elle est ressemblance, le monde sensible a de la valeur en lui-même, en restant à son niveau. La relation est donc à deux termes, le terme inférieur ayant de la valeur en tant qu'inférieur, tout en renvoyant en fin de compte au terme supérieur. Ainsi, le caractère fantomatique serait-il justement ce qui doit exister dans le monde sensible dans l'hypothèse où ce dernier est lié au monde intelligible. Le caractère fantomatique serait interconnexion.

La neutralisation de la compréhension négative de l'Hadès : Pourrait-on songer à une poétique de l'ombre ? Un spécialiste de l'œuvre de Plotin nous répondra par la négative. J. Laurent affirme à propos de la Terre (et la Terre est la matière formée la plus morte, la plus proche de la matière informée) : « La Terre selon Plotin n'entre en rien dans les rêveries du repos ou de volonté qu'a présenté Bachelard. Il est remarquable en ce sens que pour désigner la Terre, pas plus que ne le faisait Aristote ou les Stoïciens, Plotin n'utilise jamais le terme de *khthôn* ou l'adjectif *khthonios* mais le terme de *gè*. À coup sûr, le chthonien est poétique, fréquemment présent chez Homère et les Tragiques... ».²⁵ Aventurons-nous à cette entreprise malgré le fait qu'il est évident que nous ne pourrions ni saurons la faire parvenir à une forme développée. N'est-ce pas justement le songe qui est souvent lié à la rêverie dans sa variation poétisante ? Et le monde sensible est précisément le songe : « Ils font comme les rêveurs qui prennent pour évident tout ce qu'ils voient en songe. La sensation est pour une âme en sommeil... se lever avec le corps, c'est passer d'un sommeil à un autre ».²⁶ Notre interprétation de l'Hadès sera onirique, mais en opposition à Plotin poétiquement onirique.

« La notion d'image comme celle de ressemblance qui lui est apparentée, se retrouve souvent dans les *Ennéades*. On peut dire qu'elle accompagne à tous ses stades la Vie (*Zóé*) qui circule du monde animé au monde intellectuel ».²⁷ Les

²³ M. Fattal, *Logos et image chez Plotin*, Paris: L'Harmattan 1998, pp. 82–83.

²⁴ M. Lassègue, "Note sur la signification de la notion d'image chez Plotin," in: *Revue de l'enseignement philosophique*, 1983, 6, p. 8.

²⁵ J. Laurent, *L'Homme et le monde selon Plotin*, Fontenay-aux-Roses: ENS 1999, p. 54.

²⁶ *En. III, 6 (26) 6*; Plotin, *Troisième Ennéade*, Paris: Les belles lettres 2002, p. 167.

²⁷ P. Aubin, "L'image dans l'œuvre de Plotin", in: *Recherches de science religieuse*, 1953, 41, p. 349.

phrases apparemment peu frappantes qui pourtant mettent en rapport la vie et l'image. Afin d'atteindre les premières formes timides dans le développement de cette conception onirique, on doit faire les distinctions dans la notion de vie : il est clair que la vie au-dessous de l'Intelligence se distingue à des niveaux respectifs par son degré, pour atteindre le non-être, la non-vie au niveau du monde sensible. Malgré cela, on peut rencontrer le terme de vie lié au sensible, par exemple : le mouvement, qui est comme la vie du corps, imite la vie.²⁸ Certes, non pas la vie, mais « comme » la vie, une imitation de la vie. A. Vydra a écrit sur la pensée grecque de la vie, mais non pas dans le contexte directement plotinien : « *Zóé* est la vie en tant que telle, c'est pourquoi le terme s'oppose au terme de *bios*. *Zóé* signifie la puissance vitale. Tandis que le *bios* est la vie mortelle, la vie délimitée par la naissance et par la mort, *zôé* ne naît pas, ne meurt pas ». ²⁹ Parmi ces deux termes distincts, nous nous intéressons justement à la vie mortelle et à la possibilité d'y trouver une autre distinction. La vie mortelle, cette petite mort dans l'Hadès, se prêterait-elle aussi à la distinction quant à sa sublimité ? Retournons à Plotin et relatons encore une autre présentation du monde sensible et les distinctions qui s'y trouvent. Les choses sensibles dans leur matérialité et leur immobilité sont prédéterminées à se heurter violemment en se choquant,³⁰ à troubler et gêner les autres,³¹ à être inertes. Or, parmi elles il y a des choses qui sont plus légères, tout en restant au niveau de leur matérialité, comme l'eau, l'air et le feu. La mollesse est typique pour les choses plus animées et ainsi passons-nous à des corps animés, non pas à des corps inanimés, lisant que « les corps animés... sont plus agréables à rencontrer ». ³² Dans le monde sensible, dans cet Hadès, on saurait trouver une distinction entre ce qui est plus bas et ce qui est plus haut ; « plus haut » dans le contexte des choses, plus haut dans « l'intentionnalité » signifierait que ces choses sont fluides, obscures, incertaines, « ombreuses » (comme opposés par rapport aux choses dures, bien profilées), et dans le contexte du rapport à autrui, dans « l'intersubjectivité », ceci signifierait une rencontre plus agréable, d'autant plus agréable que les corps plus animés se rencontreraient. Cette « non-vie » plus haute de la souplesse et de l'animation serait justement une interconnexion plus intense à la vie intelligible, plus intense par rapport à l'inertie des heurtes (au sens le plus large).

Nous pourrions tirer une leçon sur notre rapport aux « fantômes des choses » d'un autre texte par A. Vydra dont le titre exprime exceptionnellement son contenu : *Du toucher qui ne saisit pas* : « Là où on parle d'un scintillement dans la modalité du regard, on parlerait dans une expérience de toucher d'une caresse, d'un fin frémissement, qui s'évanouit sans serrer la main. La décision de ne pas posséder, de ne pas serrer les choses fort dans les mains, de ne pas exercer sur elles son autorité, est le miroitement de l'esthétique subtile, l'esthétique à la quelle appartient le

²⁸ En. III, (26) 6; Plotin, *Troisième Ennéade*, Paris: Les belles lettres 2002, p. 165.

²⁹ A. Vydra, *O tvorbe a nesmrtnosti*, Pusté Úľany: Schola Philosophica 2007, p. 19.

³⁰ En. III, 6 (26) 6; Plotin, *Troisième Ennéade*, Paris: Les belles lettres 2002, p. 163.

³¹ En. III, 6 (26) 6; Plotin, *Troisième Ennéade*, Paris: Les belles lettres 2002, p. 165.

³² *Ibid.*

respect silencieux devant les choses ». ³³ Dans le paysage des ombres où les objets perdent leurs contours et leurs consistances, peut-être même la caresse n'est-elle pas convenable. Pourrait-on parler du toucher qui ne touche pas, tout en restant toucher ? Et le scintillement mentionné par A. Vydra dans la modalité du regard ? Là aussi, nous procéderions plus loin, l'illumination devrait céder à « l'obscurcissement » dans l'Hadès, la poétique de la lumière incohérente devrait céder à la poétique de la nuit obscurcissante.

On a distingué deux non-vies dans la non-vie du *bios*. Regardons-le encore une fois d'une façon un peu différente : L'une se figure elle-même comme la vie même, l'autre est conciliée avec sa non-vivacité. Comme écrit J.-L. Chrétien sur le point d'intersection de la pensée d'E. Levinas et de celle d'I. Kant (sur le point d'intersection qui n'en est pas un) : « La vie la plus digne, la vie toute de dignité, est la vie dégoûtée de la vie, la vie que nous maintenons sans y tenir, la vie qui ne vit plus par l'amour de la vie, la vie qui souhaiterait mourir, mais ne le doit ». ³⁴ Cette vie mortifiée qui comporte une éthique de la non-vie peut comporter en même temps une certaine esthétique (le toucher qui n'affleure pas, la vision de clair-obscur...) sans reprendre toutes les significations qui sont contenues dans la phrase (c'est-à-dire la dignité, le devoir, mais aussi le dégoût...) dans la définition de cette éthique rudimentaire. Dès lors on peut reformuler la phrase de « l'intersubjectivité », tout en tenant compte de la manière dont on imagine l'Hadès automatiquement – comme des ombres humains qui « rencontrent » d'autres ombres humains – et dire « Il est plus sublime de rencontrer les corps animés » ; par là on remplace « plus agréable » résiduellement hédonique par le terme plus neutre « plus sublime ». Or, on peut faire encore un pas de plus et distinguer encore une autre sublimité : Il est plus sublime de rencontrer l'animé, mais s'il est possible de rencontrer l'animé de plusieurs façons, d'une façon plus basse, d'une façon plus haute, d'une façon moins ou plus « animée », on le saisirait mieux, si on disait : « il est plus sublime de rencontrer les corps animés plus sublimement. »

³³ A. Vydra, "O dotýkaní, které nechopuje," in: *Filozofia*, vol. 65, 2007, no. 5, p. 451.

³⁴ J.-L. Chrétien, "La dette et l'élection," in: C. Chalier – M. Abensour (dir.), *Cahier de l'Herne – Emmanuel Lévinas*. Paris: L'Herne 1993, p. 258.

Intentionality of Time and Quantum – Phenomenological Sense of Space

Mamuka Dolidze

Abstract Intentionality of time seems to play a role of vitally important phenomenon in comprehensible sphere of cosmos. The work presented here is just devoted to the problem of timing the space throughout the genesis and development of the universe. This philosophical inquiry goes beyond physical cosmology and refers to phenomenology of life in the light of biblical-theological experience of mankind concerning the supernatural celestial events.

To explain the correlation between the intelligible order of outer space and the logical structure of consciousness, it is suggested (based on the phenomenology of Hegel and in the spirit of the ontology of Heidegger) that being has an inborn intentionality of self-reflection. Therefore, incipient state of being – primeval chaos, which gives birth to the cosmos presents the self-reflective and hence the self-ordering system. Emergence of life and development of human consciousness both are essential points in unfolding this system, since Logos of life appears to have realized this inborn intentionality of being.

This position makes some critical remarks to the cosmological theory of “Big Bang”. Phenomenological interpretation of wave-particle duality explains the expansion of the galaxies without referring to the starting explosion.

It is suggested that the cosmos is not exhausted by the objective reality of mega-physical events and shares with subjective forces of life which make the sense of time penetrating all the cosmic river of stars. Although, time is relative (it depends on the reference system), the intentionality of real time (from the past toward the future) keeps its absolute meaning for all the diversity of beings. On the other hand, subjective origin of arrow of time ruins objective perspective of spreading the classical causality throughout space, since the cosmos has had not the monological, continual structure.

Discontinuity of the upper-land means the coexistence of galactic physical reality with transcendental sphere of ideas and sense-forming acts. This subjective process

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of becoming the sense saturates the world and inserts some freedom and uncertainty within the starry order. Therefore, the cosmos is not absolutely intelligible and cognoscible. Neither the lack of cosmic information nor the failure of cosmological theory is responsible for cosmic uncertainty. The latter has a positive value, since it has manifested the phenomenological openness of cosmos toward primordial chaos. It makes an opportunity of creative development of human consciousness in the everlasting life of the universe.

Part One

It is not accidental that the cosmos serves as the area of my imagination, fantasy and dream. The very fact of coordination of my subjectivity with the celestial sphere means that the cosmos cannot be exhausted by interactions of physical-celestial bodies. The moon is the source of my poetical inspiration, the sun symbolises the joyfulness and happiness of life, stars accompany my dreams. All these phenomena of my psycho-emotional life have the roots in the metaphysical mystery of cosmos. I always used to confuse when meeting the explorations revealing the tremendous scale of the mega-world – the distance million and million light years, time leading in a huge number of centuries... My imagination is unable and my words are inflexible to express the incredible scale of cosmic forces. Theoretically I can calculate the great number of stars and embrace immense diversity of galaxies but let me be sceptical concerning the phenomena which I cannot actually comprehend (In physical cosmology, according to current scientific theory, the diameter of the observable cosmos is thought to be about 93 billion light years. The diameter of the entire cosmos is unknown. However according to Alun Guth's "inflation theory" the actual size of the cosmos is at least fifteen orders of magnitude larger than observable universe, approximately 10^{26} light years). See (Guth 1997).

Indeed, my terrestrial being is far to be compared with the great distances and forces of cosmos, but I have the consciousness which gets my being to deal with a spiritual sphere and thanks to this relation I am a subject who perceives and cognizes the cosmos. Therefore, there should be some accordance between the subject and object of this cognition. If the cosmos presents a comprehensible system of objects, I as a subject should be comparable with the cosmos and the huge celestial events calculated from the data of the cosmic experiment yet going beyond my comprehension, would be illusive.

To clearly recognize the problem let's emphasize what kind of the subject we are speaking about. The subject as the source of vital spiritual energy is worth mentioning here. He looks like the subject of quantum measurement which participates in the process of making the sense of atomic objects. Therefore, the subject appearing in the cosmos is not only the observer. He presents the vital agent of some energy acting as the creator on the stage of celestial phenomena.

When I speak about the cosmological theory of "Big bang" leading to the expansion of the distance between the galaxies I am not the vital narrator of the history

of the cosmos. My suggestions are based on the data of the cosmic experiment according to the logic of classical causality. Here I imply that the universe has a mono-logical and continual structure which makes me free to extend endlessly my classical knowledge. I do not take into account that I am the subject which acts, like the quantum measurement in the dualistic (polyphonic) spheres of being.

Discontinuity of matter rejects the mono-logical structure of the universe and hence I should restrict the using of classical causality in the cosmos. Classical physics does not take into account attendance of vital consciousness in the cosmos which deals with the stream of some intellectual energy participating in making the sense of cosmological order.

Theory of “Big bang” reveals the incipient explosion of the super-dense matter resulting the extension of the system of the galaxies. The theory of relativity implies the cognoscibility of the universe (Hawking 1999). Both conceptions make the cosmological viewpoints according to physics. To speak about the metaphysical aspect of space in the sphere of genesis of the being we also need the philosophical approach.

Phenomenological philosophy assists us to grasp the universe in the dynamic process of becoming the being. It takes into account the sense-forming acts reflecting the process of the cosmic development. Phenomenology embraces the motion of cosmic forces in its integrity with human consciousness. Such a complicated problem is far from the physical viewpoint. To the physicist the cosmos presents the area of physical–celestial bodies and the cosmic relations are reducible to interactions of the physical objects. Even if we shared the position of Einstein concerning the intelligible nature of the cosmos it would be the intelligible space from the viewpoint of the physicist – who considers the cosmological concepts and ideas as the ideal, stable, basic forms which determines objectively the physical objects and the relations in between. Einstein’s viewpoint implies that order of the cosmos has absolute character and all the cosmic phenomena eventually are reducible to the some intellectual position of the system of knowable concepts and ideas. In other words, there is some possibility to unfold the cosmos completely according to the logical concepts and the development of human mind shares with this intellectual position. Professor Ash Gobar analyzes this position on the background of dialectical realism (Gobar 1994).

Although the cosmic order has an intelligible (geometrical) structure, phenomenological approach rejects the absolute cognoscibility of the cosmos. Phenomenology takes into account the metaphysical, unknowable as principle character of the universe and what is more important, it does not consider this unknowable aspect in negative sense (which according to the physical viewpoint must be overcome). Phenomenology interprets the cosmic non-cognoscibility as a positive value, which must be kept as the basis of human creativity and as the perspective of the creative development of the cosmos.

Such a position echoes with the cosmological ideas of phenomenology of life which are developed in the work of Professor Tymieniecka A-T. – “Human Development Between Imaginative Freedom and Vital Constraints” (Tymieniecka 2009).

How to reconcile the metaphysical aspect with the physical order of the cosmic phenomena?

The cosmos is knowable and intelligible since it has a geometrical structure and it is penetrated with ideas. We can imagine the cosmic ideas as the ideal particles which are involved in wave-particle dualism of quantum physics. The interaction of these ideas makes a vital language of the cosmos and presents the process which saturates the universe. But cosmic order is not completely intelligible and absolutely clear, it has some hidden uncertainty since it has been provided by the creative process of sense-formation. Thanks to this positive uncertainty the cosmic order has a changeable and creative character in the perspective of endless development.

Thus we suggest that the universe is penetrated with ideas and confines the sense-forming process which is responsible for the development and order of the cosmos. Our suggestion derives from the basic thesis we have expressed it after the phenomenology of Hegel and in the spirit of the ontology of Heidegger (1989): the being (existence) is related to itself and hence it has an intentionality of self-reflection. Thanks to this existential intentionality, in primeval chaos we can assume the occurrence of some intellectual energy of becoming the being. Chaos has an inborn intentionality toward the being which would be self-reflected. Therefore chaos partially and step by step turned into the cosmos which thanks to the incipient intentionality, would be constituted as an intelligible system of the beings on the point of being reflected through the consciousness. Emergence of human consciousness is an indispensable step in the development of the cosmos and we can emphasize once again: there should be some accordance between the intentionality of human consciousness and intelligible nature of space.

Thanks to this essential accordance, cosmic disorder should be accompanied by the disturbance of human consciousness. One can see the signs of cosmic disaster in estrangement of human consciousness leading to self-alienation of man and to the ecological catastrophes. Being has a potential striving for self-reflection, that means that the being presents a self-ordering system. (Otherwise, in state of disorder it cannot be reflected on its own). Emergence of life which through the adaptation reflects the environment, is the first step of realization of this hidden potential of the being. If some celestial body burst into the system of the galaxy and broke its order it would mean that the being had lost its striving for self-reflection (and hence, the tendency to self-ordering) and life and consciousness as the fruitless phenomena should be destroyed. Therefore the crisis of human consciousness leading to the destruction of life should anticipate the cosmological disaster... This problem needs special investigation going beyond our paper.

To come back to our phenomenological approach it should be noted that intentionality of human consciousness in alliance with an intelligible nature of space makes vital wholeness of a subject-object relation and the heterogeneous order of the cosmos is based on this vital stream of intentionality. Therefore there must be some correlation and balance between the consciousness as an intentional, subjective phenomenon and the cosmos which presents the object of human investigation. Man as an intentional subject is comparable with his object and the

cosmos is not incredibly big. It is great but not as matchlessly great as compared to human consciousness.

Primordial chaos which anticipates and limits the cosmos is the area of Brownian movement. Brownian movement presents the in-deterministic, non-predictable rambling of particles which can be expressed through the principle: there is always the threat of braking the interaction between two particles by the accidental invasion of the third particle.

Scrutinizing this principle we have come to the point that there is no sense of time in Brownian movement; time can be measured through the duration of some movement, but this duration cannot be objectively established, because the movement always can be accidentally interrupted by the invasion and clash with a new wandering particle. Therefore it is impossible to determine the period of time in Brownian chaos and the time loses its sense.

The similar logical judgment is true for the law of causality: the link between the cause and effect always can be destroyed because of a sudden invasion of accidental particle. So we have an in-deterministic chaos of the particles which is devoid of the senses of time and causality.

Considering the primordial chaos as Brownian movement of the celestial bodies, we should take into account that our analogy is not completely identical. Chaos giving birth to the cosmos coincides and at the same time differs from Brownian movement, since it has had some inner, spiritual energy of self-reflection. This intentional energy eventually makes within the chaos the order and some wholeness of the system of beings. It would be an indivisible whole which prevents the objects from the accidental invasion of wandering celestial bodies. Within this system the time gains its existential sense and the law of causality commences to work. That is the cosmos which begets in itself the life and develops the consciousness to realize its potential tendency to self-reflection.

Phenomenological intangibility of cosmos means that the cosmic order has openness toward disorder of chaos. It embraces therefore some uncertainty which phenomenology considers in the positive sense – as the perspective of creative development of the world. The upper-land presents the sphere of some suggestions, ideas and hypotheses excluding in principle the exact science about the cosmos. The speculative character of cosmic knowledge is not the result of lack of corresponding information or the failure of cosmological theory; it derives from the real uncertainty thanks to metaphysical openness of the cosmos. Like the ontological probability of micro-phenomena, the events of the mega-sphere also are partly unpredictable as the events of the creative forces keeping the balance between chaos and the cosmos.

Here is a very important link between the objective reality of the mega-sphere and some kind of subjective being which roots in the speculative diversity of the cosmological models. It would not be strange that all these subjective phenomena serve also as a source of mythological interpretation of the celestial world. Description of genesis of the world according to the Bible appears to contain the true information concerning the incipient point of being. The word, which presents God exists before the centuries i.e. before the time and hence, belongs to

primordial chaos. At the first day of genesis divine word created the light and separated it from the darkness. It was not the physical light which was the light of day, (which he separated from the night) it was the shining of Logos, the light of absolute mind, the substance for arising the sense (Losski 1991). Our suggestion echoes Such biblical understanding of beginning of the world; Brownian movement confines some intentionality of Logos which makes first of all the sense of being and then realizes the world we call the cosmos.

This intentionality is an inner, potential ability of the universe striving for being reflected through the consciousness. Of course, genesis of the world in accord with Bible is more obvious and visual, than our philosophical suggestion. The suggestion as a scientific idea assumes the incipient intentionality of being which explains scientifically the appearance of the cosmos and emergence of life from chaos. But logical chain of scientific explanation needs to be extended endlessly, so we must spread it beyond the origin of being and answer the question – why the primordial chaos has the intentionality of self-reflection?

Even if we found the answer it would evoke a new question concerning the genesis of a new commencement and so on endlessly...

Description of the world's genesis according to the Bible avoids this difficulty. Vital experience of language shows that a word is inexhaustible for all its meanings and the word as the subject of expression anticipates the object which it expresses. The existence of the vital word as the inexhaustible subjective energy of expression is the fact, it is the phenomenological givenness and it does not need any foundation and explanation. Therefore, the word as the subject is worth considering as the absolute commencement of the world.

If we followed the biblical description of genesis of the world and assumed word-subject as the origin of being, we could not refer to the scientific – objective explanation of cosmological events. We should describe the history of the world in the concepts of subjective being. Therefore the Holy Bible contains the history of Hebrew's nation but thanks to the mythological expansion, this description goes beyond the historical introspection and refers to the cosmological sense of incarnation of God.

The biblical interpretation and the scientific – cosmological explanation both appear to be the equivalent descriptions of genesis of the world, they complete each other.

Phenomenological approach seems to try to synthesize both – the objective-scientific and the subjective introspections of becoming the world. It keeps but at the same time takes the scientific explanation in brackets taking into account genesis of the world according to the Bible.

Eventually we come to the dualistic vision of the nature of the cosmos. The celestial order should be in alliance with the creative imagination of consciousness which must be taken into account as a subjective phenomenon. The scientific description of the cosmos has been restricted by the viewpoint leading us to the development of human consciousness on the background of creative uncertainty of ubiquitous life.

Phenomenology of life differentiates two main abilities of human mind: constitutive function and creative activity (Tymieniecka 1990). The first refers to the rational power of mind which establishes the deterministic structure of the cognizable world. Under the spell of rational authorities of mind we involuntarily come to the absolute cognoscibility of cosmos – to the close system of interactions between the physical-celestial bodies.

The creative impulse inserts the freedom of intentionality as a weapon against the monster of rationality. Creative activity of mind appeals to the sense-forming process which furtively saturates all the heterogeneous diversity of upper-land. Creative impulse versus to analytical thought – that is the motto which drives not only the inner working of mind but it also develops the propulsion of the cosmic forces beyond physical matter to the vital intentionality of chaos. Openness of the cosmos toward primordial chaos provides the human mind with the creative condition.

Heterogeneous world of heaven is responsible for devaluation of the concept of causality for benefit of the idea of freedom. The link between cause and effect is played down thanks to the cosmological duality of spirit and matter. We assumed the area of uncertainty where the inborn intentionality of self-reflection acts as the subject and creates the light as the shining sense and then makes the order of cosmos which can be reflected through the human consciousness. This uncertainty could be identified with infinite darkness which God separated from the spiritual light. It is the positive darkness impregnated by light of Logos; it is a precondition of arising the world (Losski 1991).

This creative uncertainty is not the object of scientific – analytical thought. It is the sphere of phenomenological description where the integrity of subject and object would be unfolded in terms of subjective being, as the biblical history of mankind with cosmological sense of incarnation of God.

These ideas derived from the results of comparative analysis of the work of professor Tymieniecka A-T (Tymieniecka 1990) and our work (Dolidze 2006). To find the existential basis of human consciousness we used gradually the method of phenomenology and removed the claim of being from the inner strata of mind. This process of ousting (bracketing) the existence had been ended eventually; we came to the basic procedural level of the content with undeniable existential claim. It was the irreversible process of sense-forming acts, which had been embracing some mutually exclusive, conjugate couples of the phenomena, like the spirit and matter, the wave and particle (in quantum physics), The particle and anti-particle (the electron and positron) the essence and existence, the being and becoming, continuity and discreteness etc. Although these phenomena were mutually exclusive, they needed and completed each other since the one provided another with existential sense and vice versa. To explain this paradox we interpreted the phenomenon of freedom as the result of devaluation of deterministic – causal link. The mutually exclusive phenomena of conjugate pairs annihilated each other as the causal events, they were manifested and unfolded as free phenomena and thanks to this freedom they gained the existential sense in the ubiquitous river of sense-forming acts.

We used our model in a different spheres of phenomenological inquires. It resolves for instance, the paradox of wave behavior of quantum particle. Only in

continuity of wave-state, which excludes the discontinuity of particles the deterministic factors of local micro-object are devaluated and the quantum particle displays itself as a free, in-deterministic phenomenon. Thanks to this freedom the quantum particle gets its physical sense since the freedom is an inevitable condition of arising the sense. Therefore, if atomic particle had not behavior of wave it could not exist as a particle and vice versa: If quantum wave was not considered as a stream of micro-particles it could not exist as a wave.

If we expanded this phenomenological approach on the cosmic sphere, we would come to the point that chaos and the cosmos both are mutually exclusive, conjugate states of the universe. They provide each other with existential sense. Through the inborn intentionality of chaos the cosmos gets its sense of being. Why? Because the physical order of cosmos devaluates the causal structure of primordial intentionality, the latter turns into a free phenomenon and this creative freedom provides the cosmos with existential sense.

On the other hand the causality and necessity of the cosmos are played down in eternal endlessness of chaos. Cosmic order deals with creative freedom and thanks to this freedom the intentionality of chaos obtains its ontological sense of divine existence and the cosmos is worth considering as the creation of God.

Such phenomenological approach helps us out from the problems arising not only in the history of micro- physics (concerning the principle of uncertainty in quantum theory) but also in the mega-sphere of celestial events. Philosophical – speculative – scientific – hypothetical explanation of the universe completes the biblical description of Genesis . Indeed ! they are mutually exclusive yet equal and correlative approaches to the great problem of becoming the being which drives the development of philosophical thought.

Our conception of freedom seems to be acceptable to genesis according to the Bible. The word dwelling before the centuries, hangs upon the chaos as a play and freedom and creates the world. We must take the beginning of the world through our believe in God without any analytical explanation. This religious position echoes with the phenomenological approach that the sense of being dwells beyond causality in the sphere of freedom and anticipates genesis of the world.

If chaos had an inborn intentionality of self-reflection and if this intentionality established the physical order of the cosmos, first of all it would establish the transcendental condition of arising the sense of this order. The sense of cosmic order appears to be in the area of creative uncertainty between chaos and the cosmos. It basis the physical order of the cosmos but at the same time it refers to the hidden nucleus of chaos – to the intentionality of becoming the being. Therefore there would be complicated, many-fold relation (and even divergence) between the sense of the order and the actual cosmological order and the latter (and hence the currency of natural events) could be changed and destroyed according to this hidden, cosmological sense, if it reveals the intentionality of God.

That is our phenomenological explanation of miracles of God.

Now we would like to examine more closely the hidden self – reflection of chaos leading to the cosmological order. As we mentioned elsewhere the miracle of

arising life crowns itself with emergence of human consciousness and presents the final accord with the realization of the inborn, celestial intentionality.

The cosmos arranged itself so that it can be reflected through the consciousness. The latter plays a role of a vital agent participating in the sense-forming process, which establishes first of all the forms of space and time for the celestial phenomena . As far as the consciousness is the fruit of primordial intentionality, which arranges chaos and unfolds the cosmos, we cannot consider it in the Kantian sense, as a transcendental-ideal basis of the human world; rather it would be presented in the spirit of phenomenology of life as an issue of self-interpretation of matter which shares with Logos of life thanks to the creative activity of subjective forces.

It is impossible to enter the river of Heraclitus twice but Logos of life makes possible to enter it at once. That means that although uniqueness of life is a non-periodical stream, life avoids the accidental state of chaos thanks to intentionality of Logos . Logos attaches to the life-river some periodical sense of similarity. Thanks to this sense, the unique particles of life are integrated in the one and the same stream of wave, which makes the indivisible period of time, we call it the “present time”. I can enter the river of life at once, because Logos, through the sense of similarity organizes the duration which exists and awaits me as the present time. Here, we think is acceptable our model of conjugate pairs we have worked out through the phenomenological approach; the continuity of wave and the discreteness of particles both organize the mutually exclusive, conjugate pair; they provide each other with existential sense.

Indeed, stream of life, like the river of Heraclitus exists as an interplay of waves but the continuity of wave (making the indivisible period of present time) gets the sense of being through the discontinuity of unique particles of life and vice versa – if Logos would not attach the periodical sense of similarity to the uniqueness of life, inserting the order and law in chaos, life could not exist as the unique phenomenon.

Thus, instead of network of Kantian categories, concepts and ideas, which arranges the close system of world, restricted by the metaphysical “thing in itself”, we refer to the phenomenology of life and consider genesis of the world according to the vital intentionality of the universe, which as Logos of life provides chaos with sense-forming process and connects the cosmic order with human vital consciousness and opens the creative perspective of the development of the world toward the positive uncertainty of metaphysical sphere.

Part Two

The problems arising here are worth considering in the light of “The Brief History of Time” – a brilliant cosmological inquiry by Stephen Hawking (Hawking 1999). The author deems the beginning of the universe in accord with the theory of “Big Bang”. He argues that starting point of the universe is the explosion of the super-dense mass resulting the infinite extension of the galaxies. It would be the way of

increasing the entropy – the way leading from the incipient order to disorder. Stephen Hawking asserts that the arrow of time has emerged after the explosion thanks to increasing the entropy from the order to disorder. He distinguishes three directions of this intentionality – the cosmological explosion accompanied by the extension of the galaxies (the universe is expanding rather than contracting), than the thermodynamic arrow of time – the direction of time in which disorder of entropy increases, and the psychological arrow of time – the direction in which we feel time passes and hence, we remember the past but not the future.

The author argues that life presents the act of increasing the entropy – we digest some food and turn it into an energy of life; this thermodynamic energy arises thanks to destruction of the previous order we have accepted as a food. Therefore, the emergence of life (and hence, the appearance of human consciousness) as an act of increasing the entropy, is compatible with the cosmological process of the extension of the galaxies which commenced from the explosion of the super-dense mass according to the theory of “Big Bang”. The process of contracting the universe would be accompanied by the opposite arrow of time, when the effect anticipated the cause and we could remember the future but not the past. Life and consciousness would be non-compatible with such absurd state of things. (The particular case of contracting the entropy – the crystallization of stars and planets under the forces of gravitation he considers as a divergence from the total cosmic extension which cannot change the general arrow of time).

Although “The Brief History of time” by Stephen Hawking seems to be a very significant inquiry of the world’s genesis, from the position of phenomenological philosophy it deserves some critical remarks: this work brings to light the cosmic development according to the viewpoint of physics. The author does not take into account that emergence of the sense of being anticipates and differs from the process of realization of being which manifests and unfolds itself as a cosmos. Yes, indeed, the arrow of time is the result of increasing the entropy (from the order to disorder) but we suggest, that the sense of time which anticipates the real stream of time arises thanks to Logos of life which attaches the sense of similarity to the unique, vital particles of the river of life, making indivisible, instant period of present time. This sense-forming act of the present always provides the real stream of time with intentionality from the past to the future [Logos of life makes the sense of actual time connecting the previous (past) vital particle with the next (future) one but not vice versa].

Therefore the sense of time which basis the intentionality of real time is a free phenomenon and it is independent from the general state of the universe. If the universe changed its orientation and instead of unfolding began to contract, time would keep its intentionality from the past to the future thanks to independence and resistance of the sense of time, deriving from Logos of life. Hence the existence of intentionality of time is not the argument for benefit of theory of “Big Bang” since the sense of time has been compatible to both – the unfolding and contracting states of the universe and the absurdity of the contracting state (when time passes from the future to the past) can be abolished.

The second argument for the theory of “Big Bang” is based on emergence of life. Life presents the act of increasing the entropy from the order to disorder (we digest some food and turn it into the thermodynamic energy of life). But if the physical life is compatible with unfolding state of the universe, (where the entropy also increases) the sense of life needs the contracting cosmological process. Truly, if we used our phenomenological model of the mutually exclusive, conjugate pairs, we would come to the point that life as an act of increasing the entropy would get its sense of being through the opposite, contracting state of the universe where the entropy decreased. Only in this contracting cosmological state the deterministic factors of life are devaluated, life appears to be a free phenomenon and thanks to this freedom life gets its existential sense. Emergence of physical life which derives from the Logos of life shows that both – the unfolding and contracting states of the universe are possible and thus, the theory of “Big Bang” does not correspond with genesis of the world.

The explosion of the super-dense mass resulting in extension of the galaxies is the explanation of the very beginning of the universe through the concepts of causality and necessity. However, if time presented the result of explosion, causality, basing on the arrow of time also would emanate after the Big bang and it could not embrace the beginning of this process. Hence we cannot regard the starting point of the explosion as a primary cause of the world. On the other hand, the chain of the cause and effect is limitless and it needs to be spread endlessly. Therefore, the question arises concerning the cause of the incipient explosion, which needs as for it the previous cause and so on...

Phenomenological model of decreasing the entropy from chaos to the cosmos, refers to the freedom and contingency as a conditions of arising the sense of the world. The vital word dwelt in chaos as the intentionality of self-reflection. There were neither time nor causality in Brownian movement of primordial chaos (so we could not set a question concerning the previous causal state of chaos.) But infinite chaos was not the senseless. It was Brownian movement of the celestial particles with intentionality of self –reflection. Therefore there was a probability that some part of chaos accidentally would arrange itself and could establish the cosmos. The existence of the sense of chaos made the possibility of accidental arising of cosmos. Thus the sense and the hidden intentionality of chaos both were the one and the same phenomena.

Openness of the cosmos toward the metaphysical sphere of chaos means that both- the unfolding and contracting states of the galaxies are possible but the intentionality of time, from the past to the future must be kept in both cases according to primordial Logos of life. The destruction of the arrow of time and changing its orientation from the future to the past means that our observation goes beyond the cosmos and deals with illusive celestial order that is really disorder of chaos.

Theory of relativity seems to avoid such an illusive celestial order. Because of definite velocity of light the observation of any cosmic event needs some periodical interval. During this time we can see the celestial event which has already passed and does not exist now. Hence we can only perceive the past event and the present time is always elusive for our observation. Einstein avoids this destruction of the

present time asserting that absolute simultaneity does not exist and thus we cannot match the time of observation with the time of a cosmic event (It is the result of relativity of time). All the mathematical equations and principles of the theory of relativity keep the intentionality of time from the past to the future thanks to the absolute constant of the velocity of light.

Indeed, the velocity of light could not be exceeded. Otherwise, according to the formulas of the theory, time would pass from the future to the past, the effect would anticipate the cause and we could fall in a senseless state of the not- being.

However, recently, in new experiment of elementary particles (Nationali Laboratori del Gran Sasso 2011) the velocity of light has been exceeded; the speed of neutrino surpassed the spreading of light yet the time and the causal link have kept their normal intentionality from the past to the future. What does it mean? It means that physical quantity (namely the velocity of light) cannot serve as an absolute basic constant for the theory. We think that the new limit of maximal speed also would be surpassed.

The constant of the velocity of light supported the normal intentionality of time In the theory of relativity. But this constant has been exceeded. We interpret this fact as devaluation of absoluteness of all physical – measurable constants. Even if we assumed that there had been an error in OPERA experiment (Nationali Laboratori del Gran Sasso 2011) and the new datum of neutrino speed was not reliable, the very fact of arising this experiment would show that the absolute value of velocity of light could be doubtful, it was useful only in sphere of cosmic physical reality and we should find the new constant for phenomenological description of the universe.

Positive intentionality of time appears to play a role of this absolute constant.

Therefore, instead of a physical phenomenon now we should find some metaphysical basis for saving this arrow of time and for keeping the sense of simultaneity.

In the physical reality of space absolute simultaneity does not exist. It is not a technical problem of identification of the different moments of time; simultaneity is impossible objectively, because the cosmos presents the creation of intentionality of life which penetrates all the universe and inserts the uniqueness in the world; but on the other hand simultaneity as a sense of similarity is admissible thanks to Logos of life which makes the time step we call the present time. Therefore, we can match the previous state of a cosmic event with a moment of observation if both moments belong to the one and the same period of the present time-slice. The latter has some duration which can embrace the different points of the event -perception and we can enter the cosmic river at once. To save the arrow of time, we need not introduce some pseudo- absolute physical constants. Although time is relative (it depends on a reference system) intentionality of time is unchangeable and absolute since it has referred to the sense of present time arising thanks to Logos of life, through the connection of the past and the future (but not vice versa).

The doctrine of positive arrow of time is based on the creative action of Logos of life which always makes the quantum of the present through the sequence of the past and the future.

However this doctrine seemed to be broken in quantum physics, namely in spatio-temporal interpretation of quantum theory by Richard F. Feynman (Gardner 1969).

Feynman formulated mathematical description of quantum theory so that the anti-particle could be considered to follow the negative arrow of time from the future toward the past. He focused on the effect of arising the couple – electron (particle) and positron (anti-particle i.e. electron with positive charge). In this effect the positron was a short-life particle. It would immediately clash with other electron. Both mutually annihilated themselves resulting the emanation of Gamma-rays.

Instead of two particles (electron and positron) with normal intentionality of time, Feynman offered to consider only one particle – electron moving by turns in alternative streams of time. Positron could be at one with electron if the latter changed its intentionality from the future toward the past. Electron would keep its negative charge but thanks to opposite temporal direction eventually we would receive the positive energy of positron. Instead of trajectories of electron and positron Feynman considers one tangled trajectory of electron.

Thus in this model, time was reversible. Quantum events were described with the precedent of negative intentionality of time.

Phenomenology of quantum physics offers different interpretation of this paradoxical effect. Our model of conjugate couples considered above, shows that we cannot reduce the coexistence of two particles (electron and positron) to the existence of one particle (electron) which would move by turns in opposite streams of time. Electron cannot obtain the physical (existential) sense without conjugate relation to its anti-particle. If we removed the positron from the picture of micro-objects electron would lose its sense of being and description would turn into the formal model of imaginary phenomena.

The short life of the positron, because of the external collision reveals the presence of other electrons surrounding this individual effect. After the positron's collapse electron keeps its physical sense through the interaction with other electrons making the stream of discrete particles, which, according to the principle of uncertainty would behave itself as a continual wave.

Thus the short life period of anti-particle is truly the period of becoming the existential (physical) sense of the particle. This duration coincides with the duration of the present moment when micro-object enters the existential river of time and we can use it as a unit of time in the micro-world.

Quantum principle of uncertainty determines the relation between the elements of this conjugate (particle-antiparticle) couple: more the first element acquires the physical sense, more the second one loses it and vice versa. Positive arrow of time is essential condition of such an effect of arising the physical sense.

It is our conviction to draw an analogy between wave-particle duality of quantum effects and cosmic phenomena. Therefore, we can replace in Feynman's picture the pair of particle-antiparticle (electron-positron) by the couple of star and "Black hole". If star emitted the beams "Black hole" as a celestial body with superdense mass (Hawking 1999), would absorb the light and in this respect we could

consider them as a conjugate couple of particle-antiparticle. The appearance of “Black hole” with existence of star supports the positive arrow of time in cosmos. If “Black hole”, like a Feinman’s positron would be considered as a shining star, the positive temporal intentionality would change in negative time and star, turning into illusive phenomenon, would lose its physical sense.

The existence of Black holes provides stars with sense of being and keeps the normal intentionality of time throughout the cosmos.

Thus, we suggest that wave-particle duality goes beyond quantum physics and embraces all the universe. If we considered this duality according to our model of conjugate couples, we could make an argument against the theory of “Big Bang”.

Theory of “Big bang” is based on the experimental data of redshift in spectrum of cosmic rays, which points out the expansion of distance between the galaxies. Yet this permanent expansion of the galaxies is not the sufficient argument for the suggestion about the incipient explosion of super-dense mass.

Phenomenology of quantum physics is worth offering another explanation (Dolidze 2002). We mentioned elsewhere that quantum particle would gain the physical sense if it behaved itself as a continual wave. Hence we can explain the extension of galaxies without referring to the starting explosion.

Starry order, we call cosmos has been formed under the forces of gravitation as a discrete system of celestial particles. According to our model of conjugate couples, this system could not gain the physical sense if it did not behave itself as a quantum wave resulting the endless expansion and dispersion of the system. Therefore cosmic galaxies as a parts of this system are in state of permanent expansion striving to turn into the continual wave which would be spread endlessly. Otherwise the cosmos, the discrete system of celestial bodies would lose its sense of being.

In phenomenological conception of quantum physics (Dolidze 2002), wave-particle duality derives from the quantum-measurement situation, which was not exhausted with objective physical interactions. It was penetrated with subjectivity since it had presented the situation of genesis the physical sense of quantum system.

Accordingly, in space, wave-particle celestial duality derives from the state of the universe which is penetrated with subjective forces of appearance the existential sense of cosmos. We call it the inborn intentionality of life which always has referred to the positive arrow of time.

This expansion of quantum subjectivity throughout of cosmos, inspires us to continue our scientific inquiry in the spirit of phenomenology of life, taking into account the subjective origin and vital genesis of the world according to Bible.

On the background of wave-particle duality, our analogy between quantum physics and cosmos supports the doctrine of positive time and makes clear that temporal intentionality is irreversible for all the physical reality. Negative arrow of time involves us in a dreamy kingdom of imaginary things leading to chaos.

Hence it is possible to speak about the comprehensible distance and limits of the cosmic world. It would be the celestial sphere where time and causality tend to keep

their intentionality. If we observed a cosmic event which could not be identified with actual time of observation and leads us to the past of the event (accordingly, the causal link changes its orientation from the effect to the cause), that would mean that the intentionality of time is ruined, observation goes beyond the cosmos and the visual event might be involved in disorder of chaos.

The inseparable wholeness of the present time-slice roots in the subjective and metaphysical forces of Logos of life. Human consciousness, in the daily routine, through the awareness of self makes the integrity of present time-slice, in which it identifies the perception with its external object. That is the basis for cognition of the mundane world. To establish the present time-slice for the cosmic observation we also appeal to the subjective forces of life-logos resulting the psychological influence of the celestial events on the spiritual state of the self. Here we meet some uncertainty since the subjective influence of Logos, making the cosmic present time cannot be objectified and measured. Although it has some duration (which embraces the moments of the past and the future), this duration cannot be established objectively, since it has subjective sense of simultaneity under the sign of the present. For instance, the influence of constellation on our psychological self is considered to be instant and if we restricted the cosmic speed by the velocity of light (or by the other measurable constant) this sense of simultaneity would be devaluated and the integrity of the present would disintegrate and fall to pieces of the past and the future. That would ruin the temporal intentionality and hence we would lose the existence of time. Therefore Einstein rejected the idea of simultaneity, excluded the instant influence of subjective forces and believed in absolute cognoscibility of space. But this position eventually led him to the close and completely objective system of celestial interactions without positive uncertainty of the creative development.

In the astrologer's consideration, the most important part of the sky is the sign of Zodiac which has emerged at the moment of the child's birth. That makes the individual horoscope of the man and establishes his psychological nature. Instead of Zodiac, astrophysics gets activity of sun to determine our psychological self. In both cases, at the moment of child's birth the influence of constellation (or influence of the sun) through the position of the earth (around the sun), is instantaneous although it has some duration. Indeed, to keep the actual relation between the cosmic state of stars and the moment of birth, this influence should have the sense of momentary interaction, but on the other hand it has some duration. This duration plays a role of an individual temporal interval for each person. Therefore, "momentary duration" of starry influence is uncontrollable, immeasurable; it cannot establish itself objectively. We think that it is the period of interaction of the cosmic subjective forces rooting in primordial Logos of life. It coincides with the cosmic present time-slice which is given from the heaven to the individual as a standard of his psychological time.

According to this standard the individual can enter the river of life at once and identify his perception with an external world. Thanks to this standard he keeps the intentionality of time with a normal causal link, not only in his daily routine but

throughout of cosmic interactions, where he participates as a life. It is an individual standard of the present time-slice which determines his subjective self, since the activity of sun or the position of earth toward the sign of Zodiac, both are unique at the moment and place of his birth. Therefore every individual quantizes time subjectively, on his own way keeping the idea of simultaneity through the integrity of present period and following in general the intentionality of time from the past toward the future.

It is very important to consider the cosmic order in accord with individualization of life and subjective activity of human consciousness. The idea of simultaneity supports our belief that the every physical speed can be exceeded in a new cosmic experiment. Therefore, it would not be senseless to speak about a “metaphysical duration” of the present moment. That is the unique gift of heaven which helps us to enter the river of life. In the sphere of subjective cosmic forces we can save the arrow of time and keep the causality thanks to the individual standard of time. If we examined closely the influence of constellation on our psychological self we would determine the standard of our time. Beyond the cosmic boundaries the wave of present time disintegrates, the self cannot enter the vital cosmic river and the sense of simultaneity (the accordance between the celestial event and the state of the self) would be lost and chaos absorbs everything.

Neither astrophysics nor astrology can establish the metaphysical sense of time. The thing is that a horoscope, determining an individual standard of present time derives from the natural position of stars. According to our model of conjugate pairs, a natural cosmological state needs some supernatural event which would create the freedom for the metaphysical sense of time to arise. Therefore we need some supernatural phenomenon through which Logos of life makes the sense of “metaphysical duration” of the present. This phenomenon would be individual and at the same time general.

The Christmas star arising as a mark of the birth of Messiah was the brilliant evidence of miraculous accordance between the celestial and terrestrial events. At the moment of incarnation of God the basic present time-slice was established, which had derived from the incipient intentionality of life. The subjective cosmic force provides the Christmas star and the birth of Messiah with a momentary connection. Individual standard of the present time is reducible to this basic present time and hence the grace of God as the positive energy of entering the cosmic river is accessible to our mundane world.

An individual self is determined by the standard of the present time. We receive it as a cosmic gift through the momentary contact with the state of constellation on our birth day. That is a very significant moment of becoming a being when we enter the river – life at once. But this cosmic influence determines our life under the sign of destiny and we need God’s assistance to turn our destiny into freedom. That would be possible, if we connected the individual standard of time with the basic present time arising at the moment of incarnation of God.

Astronomers have made several attempts to link the Christmas star to the unusual astronomical events such as the conjunction of Jupiter and Saturn or arising of the

supernova nearby Andromeda nebulous. Some astrophysics argue that at that moment Jupiter and Saturn were in a triple conjunction in the constellation Pisces. According to another modern version the birth of Christ was accompanied by the supernova occurring in the nearby Andromeda galaxy. We suggest that In both cases there were some supernatural astronomical phenomena deriving from the primeval intentionality of life.

It is significant to connect an individual standard of time with the basic present time-slice. The former appears to be the issue of natural cosmic influence restricting the man by the necessity, the latter has a supernatural origin and helps him out of the psychological destiny. Therefore, the physical birth must be supported by the birth from the spirit.

“Truly, truly I say to you, unless one is born of water and Spirit, he cannot enter into the Kingdom of God” (John).

We can interpret the words of Jesus Christ as the communion of individual standard time with the metaphysical integrity of the present which was realized through the incarnation of God. Here comes into effect our model of conjugate pairs: both, the natural individual time and the supernatural present time both provide each other with the sense of being. The latter creates the freedom within the natural necessity that is the condition for the existential sense to arise.

The Resurrection of Christ certainly presents a significant point in the history of the world. This miracle keeps always the sense of present. Christ tends to arise from death permanently and every year the miracle has been accompanied by an emergence of the divine fire on the wall of Christ’s grave. That means that the terrestrial miracle (divine fire) might be in interaction with some supernatural cosmic phenomenon and this interaction has the sense of a momentary influence.

The Resurrection of Christ establishes a coincidence and simultaneity between the celestial and terrestrial phenomena and the distance of this momentary interaction corresponds to the basic interval of the present period where the intentionality of time is maintained. Beyond this distance the supernatural event would not keep the sense of time, intentionality would be ruined and we would not be able to speak about the cosmic order. However, this distance is not a measurable object since it has a subjective origin. Eventually it derives from the interaction of the individual self with God who is the subject. But our phenomenological approach revealed that this subjective relation has an existential sense and thus we can speak about the distance between the supernatural and terrestrial phenomena . We can restrict the sphere of cosmos by this distance which corresponds to the step of the present time deriving from the Resurrection of Christ. This sphere of cosmos dwells under the protection of God and the starry order cannot be destroyed unless life and consciousness both are ruined on the earth. As far as the heavenly order is the creation of God (who keeps the intentionality of time in celestial interactions), destruction of human consciousness implies devaluation of faith throughout the world. Therefore the belief in God is significant not only to save the soul but to protect our planet from cosmic disasters.

Thus, to determine and comprehend the area of cosmos we can use the mystical experience of mankind.

Astrophysics consider the cosmos as an objective reality of celestial events and finds the non-comprehensible distance or radius of the cosmic sphere (Guth 1997).

Astrology interprets the upper-land subjectively through mythological signs and psychological destiny and it is unable to resolve this problem.

We think that transcendental phenomenology of life, basing on the vital integrity of subject and object and appealing to the creative light of God can speak about the existence of the comprehensible border of cosmos. If our scientific observation and calculation went beyond these boundaries, the intentionality of time would collapse, we could deal with an illusive order of the celestial events that means the disorder and darkness of infinite chaos.

Now, to conclude, we would like to observe the landscape of our phenomenological approach in general. The centuries-old philosophical question of the beginning of the world appears to have some definite solution from the position of phenomenology of life. Infinite chaos has the intentionality of self-reflection. That is the potential energy of making the sense of being. Therefore, chaos gives birth to the cosmos which has the heterogeneous, polyphonic structure. It presents the coexistence of the physical reality of celestial bodies with the transcendental sphere of ideas and sense-forming acts. Intentionality of life, as the vital word of God makes first of all the sense of being and then the physical reality of beings we call the cosmos. This divine force of creation is responsible for the order of space and for the emergence of life and for the development of human consciousness. Life and consciousness are both the cornerstones of unfolding the cosmos in the realization of the inborn idea of self-reflection. That is the reason that the cosmos has an intelligible structure. The analogy between quantum physics and phenomenological cosmology spreads the wave-particle duality in the sphere of cosmos and explains the expansion of galaxies without referring to the theory of "Big Bang". According to the positive intentionality of time, It shows the genesis of the existential sense in the conjugate relations of stars and the Black holes.

The universe is far to be exhausted with the physical interactions of celestial bodies and enchants us with a spiritual spell of subjective forces, speculative ideas and the sense – forming acts. It is not accidental that the metaphysical uncertainty of an upper – land serves as a field of hypothesis, conceptions, theories and on the other hand, it might be turned into the sphere of my imagination, fantasy and dreams. The cosmos is not incredibly big. It is great but not as matchlessly great as compared to human consciousness. Thanks to the Revelation of Christ, it is possible to speak about the comprehensible area and boundaries of space, although the cosmos is not a close system of matter. Openness of cosmos means that cosmic matter gets the sense of being beyond itself in the transcendental sphere of ideas. The incarnation of God revealed this creative aspect of Logos of life. Appearance of Christ with the arising Christmas star and the Resurrection of God present significant turning points from the natural necessity to the supernatural freedom of life, toward the creative perspective of unfolding the world. It is the world of my creativity and my faith. It

inspires my thought to go beyond the physical reality, into the very heart of the truth and life; into the hidden interplay of the subjective forces with the celestial matter. Such theological standpoint is compatible with scientific picture of the universe on the basis of analogy between phenomenology of quantum physics and modern cosmology. Considering the wave-particle duality as a condition of the genesis of existential sense, quantum-phenomenological approach takes into account the transcendental sphere of sense-forming acts as a background of metaphysical openness of space in which we live.

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Duality and the 2011 Nobel Prize in Physics

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Abstract The 2011 Nobel Prize in Physics honored the observation that dark matter and dark energy constitute the underlying reality of the universe in which “dark energy yields its expansion while dark mass slows it down,” (Kishner, Editorial Page.) Thus, the two interact to obtain harmonious balance, sustaining the existence and change in all things and events in the universe.

In a sense, this observation reconfirms a most fundamental and simplistic universal principle. It supports the theory that duality is the ultimate phenomenon of the universe. Duality is manifested in a primordial pair interacting in complementary contradiction. This duality exists according to what quantum mechanics discovered in the microscopic world and what classical physics discovered in the macroscopic world.

Knowledge, as a result of human cognitive activities, is also reflective of the same principle of duality. The duality of the known and unknown, that which can be known and that which cannot be known, interact to attain the harmonious balance. Confucius contended to know the unknown is part of knowledge (Zhi bu zhi she zhi ye.) One must study as long as one is alive, according to Confucius. With that study come dramatic revelations. For example, the most advanced tools for probing the universe today are “neutrino eyes.” (Gelmini, et al. pp. 38–49) Using this technique, scientists learned that neutrinos move faster than the speed of light, challenging Einstein’s Theory of Relativity. They were able to ascertain the existence of mass and energy, yet 96 % of it is unknown, therefore the term “dark” is being used to describe it. Scientists speculate that multi-verse and parallel universe exist and that our Milky Way is not the only one to be warped by dark matter, as well, they suppose that billions of galaxies exist that are beyond description. (Creach, p. 46)

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Science, the most reliable of all knowledge, can answer the questions regarding what and how but not the whys. Philosophy plays a necessary role in the evolution of knowledge. The simple truth is that it takes two to interact, balance and survive. Hence, duality is the ultimate phenomenon of the universe.

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In 2011, the Nobel Prize in physics was bestowed upon three scientists, Saul Perlmutter of the Supernova Cosmology Project, Brian P. Schmidt and Adam G. Riess of the High-z Supernova Team. They were honored for their observations of dark matter and dark energy; “dark energy yields its expansion, while dark mass slows it down.” (Kishner, Editorial page) In a way, they constitute the underlying reality of the universe. Thus, the two interact to attain harmonious balance for sustaining the existence and change in all things and events in the universe. In a sense, this observation reconfirms the most fundamental and simplistic universal principle that duality is the ultimate phenomenon of the universe. It manifests in a primordial pair, interacting in complementary contradiction according to what quantum mechanics discovered in the microscopic world and classical physics discovered in the macroscopic world. One could suppose that the 2011 Nobel Prize in Physics was conferred upon the existence of duality.

Obviously, the assertion of a universe based both dark energy and a counterbalancing dark matter or mass points to a duality versus singularity or exclusivity to the fundamentals of the universe. Yet, what are dark matter and dark energy? The answer is somewhat uncertain and nearly unknown. It is for this reason that scientists use the term “dark” as a descriptor. Furthermore, cosmologist and astronomers contend that we live in a universe in which a mysterious force called dark energy makes up about 70 % of the total cosmos, another mysterious substance called matter makes up about 2 %, and ordinary matter, the stuff of the periodic table, assemblies of matter such as galaxies, stars, planets and all life on those planets, humans included, make up only a paltry 5 %. The implication of this observation is the of interaction between the known and the unknown, knowable and unknowable in the process of acquiring knowledge. Under the more advanced technologies, such as neutrino eyes, for example, one may be startled and fascinated by the sand-like abundance of galaxies sprinkled across the night sky. The most sensitive optical image made by human beings, the Hubble Ultra Deep Field, captures some 10,000 galaxies in an area about one-one-hundredth the size of the full moon. Scaled up to the whole sky, such a density implies a total of 200 billion galaxies. Remarkably, those are reportedly only the most luminous ones. The true number is probably much larger, according to James E. Creach. (Creach, pp. 46–53) At the present stage in astrophysics, “dark matter is not just a puzzle, it is a solution.” (Blitz, p. 36) The disk of the Milky Way, the galaxy of our universe, has developed a warp, which some astronomers think is a slow-motion

wave whose vibration was set in motion by disturbances in the galaxies and dark matter, triggered by two smaller satellite galaxies. Hence, dark matter, a sea of invisible particles that fills space unevenly, and dark energy, which is spread out uniformly, both act as if they are woven into a fabric, the fabric of space itself. Through the force of gravity, dark matter sculpts the universe into a web of galaxies. (Ferd & Frodden, pp. 38–45)

(2)

All in all, the 2011 Nobel Prize in physics, reaffirms the duality of dark matter and dark energy as the underlying reality of the universe. Despite these revelations, no clarification has been made of what “dark” is constituted, nor its disproportionate appearance throughout the known and unknown elements of the universe. The dichotomy of this existence is reflected in the common sense explanation that it takes two to interact. Scientist speculate that singularity only exists in the singularity of nothingness, which is only possible in the sinking state of a black hole. Billions of black holes exist, reflecting the known and what is unknowable (Greene, pp. 40–47, pp. 38–49) The process of discovery, as performed by the winners of the 2011 Nobel Prize in physics, reflects the effort to understand the unknown all of which leads to knowledge. Therefore, Confucius contended that the know the unknown constitutes knowledge (Zhi buzhi she yhi ye.)

The advancement of civilization implies that all knowledge is provisional and the duality of right and wrong initiates this process. Otherwise, quantum mechanics (physics) would not have emerged from classical physics. Einstein’s Theory of Relativity would not have evolved to challenge Newtonian physics. All knowledge consists of what is viewed as right or wrong answers, correct or incorrect perceptions. The only difference, in many cases, is that of proportion. The duality of success and failure interacts so that failure can be the mother of success. The success of scientific knowledge rests on its predictability. Yet, randomness does occur in the process. In life, that one will die is predictive, but the specific fact or knowledge of how, when, or where, are quite hard to predict. Science’s precepts allow it to explain how at times but not often why. Philosophy, then, is necessary for the evolution and acquisition of knowledge. Thus, Confucius plead that one must keep studying as long as one is alive (Huo dao lao, hueh dao lao.)

Today, the most advanced tools for probing the universe are neutrino eyes (Gelmini, pp. 38–49.) Using this technique, scientists learned that neutrinos move faster than the speed of light, challenging Einstein’s Theory of Relativity. In all, scientists were able to ascertain the existence of mass and energy in the universe. Ninety-six percent of it is yet unknown, therefore, the term “dark” is being used to describe it. Scientists speculate that multi-verse and parallel universe exist and suppose that billions of galaxies exist that are beyond description. (Creach, p. 46)

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The simple truth is that knowledge is the essence of civilization and emerged and has developed to sustain, enrich and address the question of the meaning of life. It is the direct product of the human mind, existing and operating in each individual. The duality of the individual's perception and the collective whole encompass and complete the entire process of the discovery and acquisition of knowledge. At the same time, for knowledge to exist on a continuum, one's knowledge must be recorded and/or shared for it to exist following one's death. Furthermore, one's capacity for knowledge has boundaries or limits. No one can know all or learn in a vacuum. One must also learn from others. Confucius contended that if there are three people on the road, one of them could teach him something (San ren xing bi you ah shi yi.) Knowledge, then, is created by an individual but sustained and advanced through collective acceptance and rejection. Each individual has the will to act. Chinese Taoists have a saying that 1100 idiots will remain idiots. It is the creative mind that is critical for the advancement of civilization and knowledge. Duality of acceptance and rejection is the foundation to this process. If the process is constrained, then it typically does not succeed. Karl Marx and Lenin invoked the Hegelian contention that opposition should be eliminated (even through physical force) in order to end capitalism, thereby eliminating greater opposition which allowed Hitler's horrors to continue. The duality of the process of acceptance and rejection in individual and collective structure continues to this day.

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Although the 2011 Nobel Prize in physics reaffirms the duality of dark matter and dark energy in the universe, the assertion that duality is an oversimplified point of view continues. Since the world's civilization has entered the "information age," information is digitally expressed in 1s and 0s. The binary mathematics, on which all computer operations is based, allows scientists to observe, explore and consider all elements of the universe. Is it possible that the duality of the digitized world will allow scientists to ponder its relevance? (Moyer, pp. 30–37) It is only a matter of time and it may be on the horizon sooner than one might think.

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Part III

Ontopoietic Process of Life in Kierkegaard's Books: Zoe and Bios

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Abstract Life is the “theme of our time” as Ortega would say. Yet, as the work of Anna-Teresa Tymieniecka shows it, life is not always questioned in depth. According to her reflections on the ontopoietic genesis of life, we will focus our interest on life, from the point of view of Kierkegaard's thought. What is life *in concreto*? Life as the ontopoietic progress of the impulse of existing emerges in the auto-individualization of the being. Our task to comprehend a praxical movement of life in Kierkegaard's work is to be considered from the point of view of the classical philosophy with the distinction Aristotle made between two notions of life: ζωη (Zoé) and βίος (Bios). By ζωη, the Stagirite means life in general, referring to what is common to all the living beings and makes them animate. It is the *act* of being alive in the manner of a plant that grows and dies. In her book on the soul of the plants, Hedwig Conrad-Martius will guide us step by step through the world-of-life and lead us to the presence of the plant in the sense that it has a life of its own, “a life that is existentially fixed on a ground”. That thought is not different from Kierkegaard's existential questioning: how do we make the difference between the animal kingdom and the vegetal kingdom? What can we learn about life in general from the vegetal kingdom, and of course about our lives as Individuals (*Den Enkelke*)? The Lily of the field and the Birds of the air, two metaphors for Kierkegaard to tell us about life, will illustrate our researches on a life to be built.

Life has a central part in phenomenology. From Husserl's *Lebenswelt* to the actual life of Heidegger's Dasein, life is constantly questioned by the great phenomenology. Yet, it is difficult to find a unique definition of life perhaps because life is not considered in its true depth but only in a superficial and evident way. To truly question life, one must focus on the activity of the living organism in the center of

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the environment. In other words, the phenomenological analysis must come back to an almost biological ground: life is given to our exploration through the images of the living being interacting with their environment.

The World-of-Life: The Vegetal Life and the Animal Life (ζωή) Outside of the System

Life is everywhere and yet nobody gives it thoughts, not to speak of the unthought-of of the brilliant commentators of Kierkegaard. It is true that, like Heidegger in *Being and Time*, Kierkegaard sees life in a poetical way, only he did that using metaphors and comparisons from the Bible and the romantic tradition (we will talk about that later). Thus, under the cover of seeing life as a metaphor, the commentators have explained that existence has a central place at the expense of the world of the life of the living. If we only think of the human life, the consequence is that we misunderstand the original world since we don't take the vital rooting into account. Life gives us matter to think over, that is why we must go beyond the usual criticism towards Kierkegaard and the human life so that we can explore a broader, unexplored field: the life of the vegetal and the animals which we will call *Zoe*. Kierkegaard is familiar with the Aristotle's thought on power and a certain conception of the life of the living beings. Aristotle gives a definition of life in *De Anima*¹: "the difference between the animate and the inanimate is life". If the fact that a being can move is sufficient to call it "alive" everything in the world, even the more primitive, is living. But, "there are several ways of understanding life" (II, 2, 41 3a 22–26). First of all, the man is the only one to have all these qualities, and if he were to lose the attributes of the plant he would not be able to survive in its environment anymore. It is in that sense that Aristotle said in *Parts of Animals*,² II, 10, that the nutritive function of the plants is the basis that is most shared by all the living beings: "we assert that these beings are living". The nutritive role is at the basis of the living, without it no mortal being would be able to survive. If the vegetal factor is that important for the constitution of all the other ways of being according to the philosophical tradition, what does Kierkegaard say about it? Strangely enough, there are a few elements from nature in his first texts. We can thus wonder if the place given to the concept of life is not minimized because life is reduced to a metaphorical sense where it is difficult to recognize the activity of the living beings.

Kierkegaard reveals a sort of dynamism of life, influenced by the correspondences of Aristotle between the livings but, unlike him, he doesn't aim at a scientific classification since he "(...) believes that nature also has to be explored from another aspect which doesn't demand to be initiated to the secrets of science". Because he doesn't do biology, does that mean he neglects the impact of the science of nature in

¹ Aristote, *De l'âme (De Anima)*, trad. Par E. Barbotin, Les Belles Lettres, Paris, 1989.

² Aristote, *Parties des animaux*, trad. Par J.M. Le Blond, Aubier, Paris, 1945.

his conception of life? In his *Correspondence* of June 1, 1835 with Peter Wilhelm Lund, Kierkegaard tells his numerous hobbies among which we find, on top of the list, the science of nature. He also says that his very theme of study is life itself but not in the light of scientific means:

I have been fascinated by sciences and still am; still, I don't intend to study them as my principal topic. Life, due to reason and liberty, has always been what interests me most, and I have always wanted to understand and solve that enigma.³

Why is science not able to render an account of life? Science calls upon the knowledge of men, their knowledge of the world and of the environment of the living beings, and integrates that in a process of synthesis of data: that is why "tomorrow, I will require your life". The scientific appears as the means by which science can analyze and understand the phenomena of the world since it is thanks to his experiments that science will evolve. Require one's life means requiring a body with flesh⁴ which senses the world in a kinesthetic way, an animated body close to the envelope of the world, *in contact with the world*. But science transcribes these sensations into measurements, data, so that when science "reads" the world, it gives parameters, calculations which establish homogeneous laws of the world of life. And yet, is life necessarily quantitative? If we speak of life in mathematical terms don't we risk reducing it to an abstract process and neglect the "power" of the life of nature, its power and the fascination it arouses in men, its mystery, and its magic? If life is caught in the swirl of scientific progress, of the numbers, wouldn't it be a life that ends up forgetting about its foundation all because of knowledge? What *is* the foundation of life? It is the fact of being. Yet, our modernity unveils an "existing" that is more than just *is*, it also *produces* through an advanced technology, a science that is more willing to objectivize and an economy willing to render account of the reality in its whole. In that way, the life of the "existing" is the *dealing* of the existence of the subject with the social and economic context.⁵ If we think about it, life is less rich if understood from the point of view of the objective progress of the System. It is obvious that Kierkegaard doesn't observe the lily or the bird through a microscope; he doesn't classify them according to their specificities, or the particularities of their species. If we want to have a better understanding of Kierkegaard's relationship with science, we should pay attention to the words the philosopher uses. One can't separate Kierkegaard's way of writing from his concepts, his philosophical style renders account of his concept of life so that, thinking of life means rendering life in a singular way. Nevertheless he tells us something about the living, not scientifically but poetically, for example in *l'Alternative* or in his *Correspondance* with Régine Olsen. The living which is said poetically is transmuted by Romanticism. Life becomes a

³ S. Kierkegaard, *Correspondance*, trad. Anne-Christine Habbard, Ed. Des Syrtes, Paris, 2003.

⁴ S. Kierkegaard, *Correspondance*, trad. Anne-Christine Habbard, Ed. Des Syrtes, Paris, 2003, p. 77.

⁵ Michel Cornu, *Contrepoint philosophique*, « L'existant est plus que la Vie », Rubrique Philosophie, Février 2005 : « Ce serait si commode de le (l'existant) dissoudre dans le simple flux vital, d'en faire un objet de science, une simple fonction variable de l'économie ». <http://www.contrepointphilosophique.ch/Philosophie/Sommaire/Existence.html>

metaphor and the flowers, become the symbols of an sparkling love: “Then came the winter, and the flowers faded away, but he saved some of them from the cold (...) and life already being too feeble in them, and in order to keep them alive when he still could, he held them tightly in his hands and they died; there remained a drop, born from the pain and which had the immortality which is possessed only by the fragrance of the flowers and by old melodies” (Letter of the 28th of October 1840 to Régine Olsen). Life can’t be scientifically understood because one would miss existentialist terms which are specific to the human life such as anguish or joy.

The fight Kierkegaard is having with Hegel is not a fight for the sake of fighting; it is a fight for the sake of life. He intends to demonstrate that science doesn’t take the variations of life taken as an existence into consideration. It doesn’t take the existentialist terms into account. The philosophy of Kierkegaard is interested in the existing as the man possessing life and contributing to perpetuate it. Whereas the science of the System plays with the rhetoric to talk about life, it keeps playing with words and staying at the surface and playing with the dialectics as it pleases. Life in the System is a series of abstract reversals which don’t have much to do with life *in concreto* anymore. As noted by Hannah Arendt in *La philosophie de l’existence et autres essais*, there is a division between two types of philosophies: Hegel’s with an extreme dialectics on one side, and on the other side, Kierkegaard’s aiming at life/concrete existence via the individual and not abstraction:

Philosophy loses in its system, the concrete self of the person who does philosophy, according to Kierkegaard. Philosophy is never about the “individual” in its concrete “existence”. Hegel, *precisely gives little importance to that individual and his life* (we underline); that little consideration comes from the fact that dialectics and its synthesis are not about the individual in his own existence, but individuality and the specific as *general abstractions* (we underline).⁶

How is Hegel’s System, dialectic of abstraction? Doesn’t he talk about life in a concrete way? Is abstraction not concrete to a higher level as Hegel puts it? “With Hegel the paradox of the thesis and the antithesis is already “solved” at the superior level of the synthesis. It is not the absence of result that is already present in the human life called “existence” by Kierkegaard, and on which life has to be based. Kierkegaard only talks about himself when Hegel speaks about his system (...). He rather speaks of this “general situation which includes all men because one of them is involved”. For they all are individuals”.⁷ For Kierkegaard, the *aufhebung* is not only one of the most important concept of philosophy but also the foundation of the systematic philosophy. He says in *Repetition, an essay in experimental psychology*: “if we give up mediation, we give up speculation (...) for mediation is certainly an idea of speculation”.⁸ Speculation is the alliance of two contraries since *aufhebung*

⁶H. Arendt, *La philosophie de l’existence et autres essais* Ed. Payot et Rivages, Paris, 2000, p. 61.

⁷Ibid.

⁸S. Kierkegaard, *La Reprise, Essai de psychologie expérimentale (Repetition, an essay in experimental psychology)* Robert Laffont, Paris, 1993, (1843), p. 12.

means keeping and making stop; ending and maintaining. It is expressed by a three terms method: one, two, three or thesis, antithesis, synthesis. Vigilius Haufniensis, a pseudonym of the *Concept of anxiety*⁹ says his opposition to that System since “the distinction has gone out of date, swept by the System”. His reproach targets the denial of the distinctions. The distinction regards the redistribution of the particularities between different domains of study (logics, metaphysics, and ethics). If mediation is at the same time the passage and the result of the passage as Hegel sees it, there is confusion in the process. What we become can't be treated as part of the logics. In that sense, when in *Phénoménologie de l'esprit*, Hegel sees the fact of becoming-self as a rational process which, marked by the coincidence between reality and rationality, suggests objectivity at the end of the story; Kierkegaard stays on a place where reality is certainly contradictory but, always related to a single subject and not with a conscience which is “separate from nature by an immense abyss” (Jacques Monod). Life, as a concrete fact understood by the subjectivity, resists to the logic since it can't be analyzed like an object. It is not a pure object of the thought because it is never entirely determined.

Jacques Colette reminds in his book *L'existentialisme* the real battlefield for the philosophy of the 19th century and the motives of discussion for Kierkegaard towards Hegel: “existence was not opposed to nature in the 19th century; it was opposed to *philosophy taken as science* (we underline). The matter was not to discuss the systematical thought because of its abstract style, but to wonder about the validity of its ambitions. It is a preliminary question: is the omission of certain intermediary determinations, called existential by Kierkegaard, not the price to pay for the access to the absolute Self?”¹⁰ The philosophy of Kierkegaard reproaches the System that it doesn't ask the good questions when it starts from an ideal foundation which is thus inexistent (from a practical point of view). In *Concluding unscientific postscriptum to The philosophical crumbs*, he criticizes the method of the dialectic of the System:

And when the dialectic was finally freed from the hold of the predicator, the man of the System came to tell it with the emphasis peculiar to the people of speculation: everything will become clear at the final conclusion, not before! (...) Everything will become clear at the conclusion, but alas, we are still waiting for it (...) for it is ridiculous to pretend that everything is finished and then add in conclusion that, there is no conclusion. If the conclusion is missing in the end, it is also missing in the beginning; and that is what they should say when they start”.¹¹ Thinking about life is founding a new philosophy: a philosophy which “denounces the impossibility to start without any presupposition and build everything out of nothing”.¹²

⁹S. Kierkegaard, *Le concept d'angoisse (Concept of anxiety)*, trad. K. Ferlov et J. Gateau, Gallimard, Paris, 1935, (1844).

¹⁰J. Colette, *L'existentialisme*, Paris, P.U.F, « Que sais-je ? », 4^e édition, 2007, p. 14.

¹¹S. Kierkegaard, *Post-Scriptum définitif et non scientifique aux Miettes philosophiques (Concluding unscientific postscriptum to The philosophical crumbs)*, Ed. l'Orante, Paris, 1977, (1846).

¹²Ibid. p. 9.

The Process of Life: From Zoe to Bios

The purpose of narration is supposed to be that of imitating the rhythm of life, with its melodious concord, its breaks and pauses. As opposed to the circularity of the encyclopedic system of the knowledge, the language of Kierkegaard is based on the games of the discourses, marked by the laws of the differences. It is thus through the writing of Kierkegaard that we come back to the expression of life and the living in this specific text: *The lily of the fields and the birds of the Air*. This text allows us to consider life in ontological categories (time, death, and world). The image of the living, either plant or bird is not romantic –despite the bucolic character of the sentence- but biblical. Indeed, the lily from the fields and the birds of the sky are references from the Gospel of Matthew, Chap. [Intentionality of Time and Quantum: Phenomenological Sense of Space](#), verse 26. The living beings in this text are not made of blood and flesh and yet the fiction makes them alive thanks to metaphor and personification. In the architectonic of the work of Kierkegaard, *The lily of the fields and the birds of the Air* has a peculiar place because it is between two edifying discourses: after *The circumstance discourse* and before *The Suffering discourses*. It is located in the middle of a first aesthetical discourse on the Individual and a third one considered religious (suffering as a way to become a Christian). Thus, this text is neither romantic nor religious even if the images are taken from the Bible. It deals with the story of a lily who, after listening to the discourse of a bird, wants to reach the “country of the magnificent lilies”.¹³ Kierkegaard seems to be far from a phenomenology of life but one must not be mistaken: there really is a fundamental distinction between two individualized existences: that of the lily and that of the bird. It is in that sense that we can see that in the process of the phenomenology of life, Aristotle and later on Husserl, show us that the-world-of-life emerges together with the things and beings which take part to the vital process.¹⁴ Yet, all the beings don't participate in the same way. Hedwig Conrad-Martius will consider the question of life in a new way, dealing with the problem of auto-individuation in her book about the soul of plants.¹⁵ The plant reacts to the signals of the light, humidity. Contrary to what one might think the plant doesn't have an immobile life, like Conrad-Martius reveals it, the plant bends when the wind blows, it can auto-regenerate. It can be called *sentient* which means that it is a unity that controls itself in its whole (as a plant), and in its parts (the cells). Besides, the plant can travel thanks to its seeds, (via the wind, the birds, and the insects) from a strictly spatial point of view, but also from an existential point of view with the buds developing

¹³ S. Kierkegaard, *Le lis des champs et l'oiseau du ciel*, In *Œuvres complètes*, trad. Tisseau, tome XVI, Paris, 1976, (1849).

¹⁴ That is called « Great Plan of Life » . Anna-Teresa Tymieniecka, “The Great Plan of Life” In *Phenomenology of Life's Return to the Sources of Western Philosophy*, Analecta Husserliana LII, Dordrecht: Kluwer Academic Publishers, 1998.

¹⁵ Anna-Teresa Tymieniecka, *La plénitude du Logos dans la registre de la vie, La métaphysique dans les nouvelles Lumières*, trad. Claire Hill, L'Harmattan, Paris, 2011.

into flowers or fruit." The plant manifests itself as a living individual".¹⁶ And yet, isn't the life of a plant limited to a location? "It is essentially fixed on the ground".¹⁷

Indeed, Kierkegaard writes: "this is how it is with the lily: it remains where it is and doesn't move, but it doesn't work nor weave, its only task is to decorate".¹⁸ Nevertheless, said Anna-Teresa Tymieniecka in *La plénitude du Logos dans le registre de la vie*, "there is specificity in the animal individualization of life, which is the unique specificum of subjectivity and freedom". What distinguishes the lives of the vegetal and the animal is the extent of spatiality since the vegetal is determined, in a certain way, to remain fixed on the ground otherwise it dies; and the animal has the existential possibility to freely come and go on the surface of the earth. As Kierkegaard notices, the little bird has the possibility to move; "the lily couldn't explain how the bird didn't remain in the same location like the little flowers, and found it so strange that it should be so capricious"¹⁹ whereas if the plant is removed from its vital environment it will die "it dug the lily up setting it free (...) Alas, the lily withered on the way" (Kierkegaard: p. 163). Beyond the rural story, there is an ethical content, since the descriptive method of these personified living beings leads us to think about the manifestation of life from its own existence. For that matter, Kierkegaard is not ambiguous: he asserts that the lily and the bird represent the humans. "Isn't what is true for me, poor flower, also true for the human condition? (...)" (Kierkegaard, p. 160).

The Bios of Life or Praxis of a Singular Life

In the case of *The lily of the fields and the birds of the sky* the vision of the world that is given is that of a world where what is seen is more important than being. The world is full of appearances, societal conveniences, and a world of *comparisons*. The lily compares itself to the world told by the bird where there are magnificent lilies; the woodpigeon compares itself to the other birds and imitates them. On one hand the lily, listening to the bird, starts feeling sorer for itself, loses taste in life and desires to become a magnificent lily. On the other hand, like the lily, the man sees better living conditions elsewhere, at the neighbors'. He will put all of his efforts into achieving that exceptional goal: to look like the magnificent lily in its splendor and beauty going beyond everything on earth. In the same way, the woodpigeon wants to adapt its life to that of the domestic pigeons, saving food in fear of the morrows. What does that mean? What is the idea conveyed by the metaphor? The point is to accept our human condition, which means to live our life as being singular without trying to make it look like an exterior life. Doesn't comparison distort the human condition by setting criteria, a value between several existences?

¹⁶ *Ibid.*, p. 10.

¹⁷ *Ibid.*, p. 101.

¹⁸ S. Kierkegaard, *Le lis des champs et l'oiseau du ciel*, *op.cit.*, p. 160.

¹⁹ *Ibid.*, p. 162.

In other words, if we keep comparisons, isn't that a way of classifying the beings into categories according to a hierarchy? Isn't that how we become concerned about our existence? The lily "doesn't want to become what it is not, a bird for example, it only wishes it were a magnificent one or even the most beautiful". It is jealous of the others and wants to become more beautiful than them. The bird only represents the poet who seduces the lily. And yet, the real life of the lily and of the man is to be himself, to achieve his human condition. It means that he has to content himself with what he has, what he is, which is, a mortal being. The worry of the lily is its appearance and also temporality. If we look closer, the spirit of the man is always trying to conform itself to the world by "artificial imitation" when it should focus on its inner subjectivity. Thus, the spirit concentrates on a finality that is clearly defined: the authenticity of the Self. The Individual that Kierkegaard pictures in *L'appendice sur l'Individu* and in *Edifying Discourses in Diverse Spirits* is a being which evolves like the vegetal element. He grows through different stages from the Person who is a being torn by different desires, to the Individual who is the unique being, unified and self-conscious, aware of his actions and of the world. It is in the dynamics that life gets structured in the process of becoming. Kierkegaard considers that the turn-out of life departs from the constructive movement of the subjective being, i.e. the individual. It is about the living being at large: the vegetal and the animal. But it is also the human being who becomes indivisible, the perfect unit of the existence, through the different stages of the self-being process. The book *Stages on Life's Way* shows the level of praxis to which the individual faces numerous forces he has to fight, or innovating moves which destroy the apparent routine of the phenomena. Thus, *Repetition* by Constantin Constantius is a great help for us in order to demonstrate in a phenomenological way that life is not an abstraction, a vain talk of the System that is supposed to deprive life from its living substance, its stimulating substance. On the contrary, that major work in the becoming-self of the Solitary of Copenhagen draws very useful subjects in our attempt to answer our initial question: the space-time axe, the flesh, the world, the Others, the Self. In fact, the young boy in *Repetition* would like to be alive what he had yet experimented. For that, he will travel to Berlin in order to repeat passed experience but, he did not succeed. The existence cannot be repeated. So, because of that consciousness, he realizes an ethical life. The second stage, the Ethic, enables to make the young boy of *Repetition* aware of his responsibilities and, in fact, he acts following his own choices. It is through the concept of decision, free and subjective decision that Kierkegaard focuses on the presence of God, who helps us, like Abraham on Moriah Mountain, and who rewards us, as Job has been. Now, come back to *The Lily on the field and the bird of the air* for understanding better the echoes from *Repetition* to this ethical book. What about the woodpigeon?

In the same way as the lily, it represents the Individual since it also worries. But this time it is not the worry of the appearance but the worry of the material and temporal goods. "They neither sow nor reap nor gather into barns", and that is precisely what the woodpigeon does while comparing itself to the swallows. It emulated the worry about the future: we should save what we got from the harvest for the coming days. It is a material worry because we keep in the barns what we have,

just in case. What is striking in this ethical text is that Kierkegaard manages to reflect on two essential themes for the phenomenology of life: on one hand the space which is the vital basis by which the movement of life manifests itself (Patočka talks about that), and on the other hand the temporality which allows to show the evolution of the being, what it becomes. In that sense, Kierkegaard introduces the notion of temporality which Heidegger²⁰ appreciated so much, by which he would qualify the existence on the mode of the Instant.²¹ If the birds in the sky don't sow nor reap, it is because they are in peace and calm regarding the course of time. Their life is a life of *rest*; it is not a life with the mark of the fallen world, which is a consequence of sin and mortality. In other words, the life of the Individual is a life of love and not hostility, competition, imitation or covetousness. It is through the way of love that the Individual joins the kingdom of God in his heart.²²

²⁰M. Heidegger, *Etre et Temps*, traduction E. Martineau, Ed. Numérique, 1985.

²¹S. Kierkegaard, *L'Instant*, trad. Tisseau, In *Œuvres Complètes*, trad. Tisseau, Paris, 1976, (1855).

²²That is the Kierkegaard's *First Edifying Discourse*.

Edifices

Semiha Akinci

Abstract Only two sorts of entities have thus far been considered in ontology: abstract entities, which have no beginning and no end, and concrete entities, which have both a beginning and an end. I intend to suggest that there is yet a third kind of entity w.r.t. this classification: those which have a beginning but no end. I shall call entities of these sort edifices since they occur mostly as types of edifices: literary works, musical compositions, mathematical and scientific theories.

The Relations Between an Entity and Its Manifestations

In order that my account makes sense, the relations between an entity and its manifestations have to be dwelt upon. Both abstract and concrete entities have manifestations, but in entirely different ways. Abstract entities may be manifested in endurants, i.e., concrete entities,¹ or properties-or-relations (characters) or sets thereof, the latter modes of manifestation all being dependent upon concrete, however. Concreta are manifested in their temporal slices, where the entity itself is considered to be the totality of its temporal slices. Each concretum has a unique beginning and end, but concreta may occur in nested intervals: The Ayasofya Museum is a subset of the temporal intervals which constitute the Hagia Sofia Orthodox Church, tadpoles are temporal slices of frogs, and ice cubes temporal slices of volumes of water, etc. In such cases the intertwined concreta may be distinguished by their dates- The Church and the Museum need not differ in physical properties; it's the date of Baptismal which makes the difference. (This suggests

¹ Abstract entities of the sort Aristotle called secondary substances are manifested in concrete individuals; other sorts are manifested in aspects or groups of such.

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the following construal: an essential property of a concretum is one which is displayed in all of its temporal slices, whereas an accidental property is one which is displayed in only a proper subset of its temporal slices. Thus being an old building is an essential character of the Museum, but not of the Church. Note that this construal is quite independent of the definition-description distinction).

The type-token distinction draws upon a manifestation relation: tokens are manifestations of their respective types. Consider the following list of entities:

- a. The second 'T' on the second line of this page;
- b. The graphic symbol which is my handwritten 't';
- c. The graphic symbol which is one of the usual handwriting characters for a miniscule 't', circa 1990.
- d. The graphic symbol for a handwritten 't';
- e. The graphic symbol for a miniscule 't';
- f. The letter T;
- g. The letter called 'Tee' in English, 'Tau' in Greek, 'The' in Arabic, etc.

Orthodox doctrine has it that only -a-, above, is a token, and is a token of all of the other entities listed. To my mind, however, these other entities each have different ontic status,² so the relation of each to -a- cannot be the same relation. Also, it is interesting to try to say how an entity on the top line is related to one immediately below it. To my mind the relation in question is one of instantiation in each case – though, strictly, a different relation-, and instantiation is a sort of manifestation. This indicates that instantiation can be a chain relation: -a- is an instance of -g-, as well as of all the other entities in between. It also indicates that manifestations of abstract entities are not only concreta or their characters: other abstract entities may also instantiate, or be manifestations of, abstract entities. The following is another list in which the entities above are instances of all those below:

- a. A circle of radius 1 cm, center at $x=5.00$, $y=1.07$;
- b. A circle of radius 1 cm;
- c. A circle.

This list looks simpler than the first, but I would say it is arranged on much the same pattern, but for having a concrete token on top. Suggest calling the relation between a top entity and one below it, for the case where both are abstract entities, 'specification'; -b- is no less abstract than -c-, but -b- is more specific.

Propositions are another kind of abstract entity which has various levels of manifestations. At the first level of specification there are the statements which encode them: Thus "not all flowers are red" and "some flowers are not red" are different statements which encode the same proposition. On the next level of specification are the sentences which encode statements by means of different languages: Thus the German sentence "Nicht alle Blumen sind rot" is a sentence which specificities

²As explained in the sequel, entities on a top line are more specific than are specifications of entities on the lower line(s). I am inclined to hold there are ontically determined distinct levels of specificity, but that discussion must be postponed.

the earlier of the statements mentioned above. Then there are the various wordings, formulations, of the same basic sentence; e.g., “Blumen sind nicht immer rot” is a different formulation of the German sentence above. Finally there are rock-bottom specific manifestations, tokens, of sentences: printed-or-inked-lines, aural events, patterns on individual ferric or silicon memories, etc. –I do not claim to give an exhaustive list of the various specification levels which could be distinguished; I am primarily concerned to show that there are various such levels.

Sentences are like edifices in being entities which must have had a beginning, but which do not, need not, rather, have ends. A sentence has to be in a certain language, and languages have beginnings and ends. –It may not be possible to determine just when a certain language begins or ends, but that is very common with physical things; as a matter of granted fact Latin, e.g., has begun and ended.- So a sentence must also have some beginning; it cannot have come into being before the language which encodes it did. But sentences do not inherit their ends from their parent languages in the same way: the sentences which formulate the Hammurabi codes go on being sentences of that language, whatever it was, in which they were encoded. If sentences thus outlive their parent languages, there is nothing else which could terminate them: it is at least logically possible that any sentence ever formulated in any language will be recovered in some possible world, and for this possibility to hold the sentence must be considered as going on being, with no assignable temporal limit. The language itself, we say, is recovered, but it is only the skeleton of the language, not the creative social phenomenon which is a living language. This may be difficult to argue for briefly, but I am convinced the difference is very real, very imposing. If recovered Sumerian were a genuine language, it could be made to have a word for an aero plane; can this be done?

Edifices depend not only on languages, but on authors as well, for their nativity they are, however, much less specific. The following are example of smallish edifices which occur to me on very brief reflection:

- i. A particular O’Henry short story,
- ii. A particular Nasraddin Hodja story,
- iii. The nativity, according to the St. James Bible,
- iv. The statement and proof of the Thales Theorem, as given in the Stoicheia of Eucklides,
- v. The Green sleeves Tune,
- vi. Hamlet’s soliloquy “To be or not to be”,
- vii. F. L. Wright’s plans and details for ‘Falling Water’,
- viii. E. A. Poe’s Anabelle Lee,
- ix. Any one of the Ten Commandments,
- x. The set of axioms for ZF Set Theory;

Each of these items must have been composed, in its recognized form, by somebody, although the author need not be known, as is the case with ii, iii, ix, and to some extent, iv and x. They must have been formulated in a particular language at a certain time and place, which may far antedate the time they appeared in print, -as must be the case with ii, v, vi, and ix- and in a certain language. –Taking Renaissance

Music and 20. Century architecture to be languages, by an innocent stretch of current usage- This initial language is not a feature which determines their identity, however; a German translation of I is still that item itself, or rather, and the original English version and a particular German Translation are different specifications of the same edifice-

(It may be difficult to specify what a 'translation' of an architectural plan would be, but I do not think the task is insurmountable. I can easily envisage a Japanese 'replica' of Falling Water, e.g.; plans for that might be taken as constituting such a translation. And a hard rock version of v is still a specification of that tune, though no longer in the same musical language, since the -implicit-conception of well-formedness is very different in the latter 'language'(!). So an edifice is the content, so to say, of these and similar items rather than the original rendering in all its specificity. Still, however, this content initially arose along with, as a function of, the original rendering; although ontically independent of it once the original rendering arose. One can say much the same for forms of artifacts; somebody, sometime, must have molded the first amphora, but after that the amphora form is independent of that first, or any other, physical amphora. There are no longer any physical dinosaurs around, but the various dinosaur forms will be with us forever, I am inclined to hold, for we know of no conditions under which forms perish. If our science is right in holding that dinosaurs came to be at a certain phase of history, forms of physical things are another kind of entity which have beginnings but no end).

I do not intend to imply that all forms must have had beginnings; I hold that abstract forms, such as that of a sphere, a straight line, or of justice and virtue, are timeless; only their imperfect instances are manifested in physical objects, and such manifestations are events, having ends as well as beginnings. I am only urging that not all forms, as we now use the word, are such Platonic forms: another sort of forms come to be, are initially displayed in, natural specimens or individual artifacts, but assume the imperishable status of Platonic forms thereafter. I am inclined to call such forms Aristotelian Forms, to cash in on a credible intuition of in res realism. The basic difference between the two sorts is in how they are manifested. Platonic forms are manifested only imperfectly in physical objects; their nature precludes full manifestation by temporal objects. Aristotelian forms are fully manifested in their regular specimens; unlike Platonic forms, they preclude exact definition,³ and their approximate nature is fully displayed in each of their-regular, normal-physical manifestations. An amphora does not manifest the amphora form

³The form of a particular amphora, or a stylistic blueprint of one, can of course be defined mathematically, as the solid of revolution of a curve segment, e.g. The point, however, is that this would not exhaust what goes under the rubric of amphoriform: other curves also would generate amphora forms; Aristotelian forms are not, by nature, exact and precise enough to have unique definitions. There is the form of a sphere, there is not the form of an amphora, in the same sense. Aristotelian forms are in some ways like the various first level specifications of Platonic forms, except that there is nothing above them.

As for the perennial question, whether justice and virtue admit of exact definition, I am inclined to hold there are such unique and encompassing definitions, although we, in our epistemic naivete, may not yet have been able to comprehend and formulate them.

only if it is seriously crumpled, the remains of an amphora; conversely, every intact amphora manifest the Aristotelian Amphora-form fully. This Aristotelian form, like Platonic forms, is that which is shared by the various distinct shapes of amphora's, but in the case of Aristotelian forms that common entity resists precise definition; not only in the sense that no such definition is yet available, but in the sense that Aristotelian forms are by nature indefinable, as physical objects are indefinable.

This long aside was to indicate that edifices are not unique in having beginnings but no ends; now back to edifices and their manifestations. While edifices initially come to be by someone's putting together a sequence of physical patterns of symbol tokens; it is not this sequence of tokens which constitute the edifice, but their content, the topic of comprehension which is manifested in that pattern. Edifices have various levels of specificity, and may have different modes of specificity at some of these levels. At the first level there are the renderings or translations, in particular sense indicated above; even the version in the original language of composition has to be considered a translation, since that also is a linguistic manifestation of what is basically a non-linguistic entity. Secondly there are texts, which manifest the translations. Texts may be copied or printed or reproduced; each of the copies so obtained is a copy of a text, the third level of specification of an edifice. Such copies are physical objects, somewhat like the tokens of edifices. But such tokens themselves do not exhaust the sort of physical manifestations edifices may have. Texts may be recited or performed, in music, or built, in the case of architectural edifices. They may be represented, in various degrees of fidelity, in memories, human or otherwise. These are various different modes of manifestation edifices may have in the temporal realm. One could say a recitation is a manifestation of a text as well as of the edifice.

I suggest calling an entity in the domain of a manifestation relation the radix of the manifestation in question: Thus every manifestation manifests the radix proper to it, although distinct manifestations may of course manifest the same radix. I suggest calling the inverse of the manifestation relation the engendering relation: Thus if a manifests R, then R engenders M. If a manifestation is, in particular, a physical object, one might say it phenominates its radix.

In order to convince ourselves that edifices are immune to change, and hence to perishing, we need only resort to the time-honoured expedient of thought experiments. Assume we discovered a twelfth century manuscript in which ten moral maxims were given, nine of them matching the Biblical commandments, but a tenth one saying adultery was permissible provided the spouses of both adulterers gave public consent. Would we decide the Biblical Ten commandments had changed somewhat in the intervening 12,000 years or so? Certainly not; we would say either that the manuscript misrepresented the Ten Commandments, or that it was about another set of maxims, most items of which came from the Biblical ones. One cannot change an edifice: one can give good or bad recitations or performances of them,

It is a proud human tenet to strive to attain goals supposed to be mortally unattainable, -perhaps such as comprehending fully what justice is, its definition-, but it would be childish to go on searching for what just is not there.

make copies or printings of them which are faithful or not, but one cannot thereby change the edifice itself.

In fact, it is just because the edifice itself remains unaltered that we can decide, on occasion across centuries, that a certain text is unfaithful to the original. Better still, one can reconstruct an edifice which has no perfect copies at all. This suggests that the basic edifice, though imperfectly manifested in any extant copy, still manages to manifest itself in its integral entirety, despite the flaws in its physical manifestations. This could not happen if texts or copies could change the basic edifices they manifest; it could not be decided which copies are of the altered, warped account and what the content of the genuine work is. In fact, there would be no grounds for distinguishing the genuine version; there would only be the various accounts, more or less diverging, and one from the others. One can compare two copies, both of them imperfect, of what one can still conclude are copies of the same edifice, and furthermore decide how each one diverges from the genuine version. How could this be possible if the edifice itself were not immutable, but could change along with its manifestation, if its identity were not independent of its manifestations? Much the same considerations apply to Aristotelian forms: we do not say the mammoth form has in the course of time changed to the form of the African Elephant; we grant that both forms are timeless; we know, and can produce representations of, the mammoth form eons after mammoths became extinct, we say, rather, that the former form is no longer instantiated, whereas the latter one was not exemplified before a certain time.

Lastly, I conceive this construal of edifices to be fully within the Fregean tradition, in effect being an extension of the doctrine of *gedanke*, thoughts. Edifices are sequences of thoughts; thoughts may, in turn, be conceived as the ultimately simple edifices, unit sequences which have no structure at all. This makes thoughts have beginnings too.

The Cave, the Lifeworld and the Tradition: The Transcendence-Immanence Contrast Perspective

Abdul Rahim Afaki

Abstract This paper focuses how Heidegger, owing to his project of truly apprehending the Being of beings, reinterprets the Platonic narrative of the cave (*το σπήλαιον*). It does not attempt to completely reinterpret the Heideggerian reinterpretation of the cave-narrative, but rather it expounds certain metaphors construed in the narrative for the elaboration of Heidegger's concept of the lifeworld (*Lebenswelt*) in relation to Gadamer's notion of tradition. That is to say, both Heidegger's world and Gadamer's tradition are reinterpreted in the nexus of the Platonic metaphor of the cave as portrayed in the allegory of the cave. The task here is to find a semiotic mutuality of the cave both with the lifeworld and the tradition in the nexus of the transcendence-immanence contrast which is to be expounded with reference to Husserl's transcendental phenomenology and Gadamer's philosophical hermeneutics. Submitting its principal thesis to the hermeneutical critique, I shall take Heidegger's work, *Vom Wesen der Wahrheit: zu Platons Höhlengleichnis und Theätet* (*The Essence of Truth: On Plato's Cave Allegory and Theaetetus*) as a reference and a guide for construing my argument. The other major references for this construing are Plato's *Πολιτεία* (*The Republic*) especially Book VII, Heidegger's *Sein und Zeit* (*Being and Time*) especially *Einleitung* and Gadamer's *Wahrheit und Method* (*Truth and Method*) especially Part II.

Drawing upon 'the problem of difference'¹ as a useful nexus for the analysis of various philosophical theories, this paper identifies the transcendence-immanence difference or

¹Jeffrey A. Bell's identification of the problem of difference as a philosophical framework used throughout the history of western philosophy is a particularly valuable technique of analysis and mutual and comparative study of various theories. He notes: "In the history of philosophy, one finds many examples of a fundamental distinction forming the cornerstone of a philosophical theory. There is Plato's distinction between knowledge (reality) and opinion (appearance); Aristotle's form/matter

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contrast as a perspective to account for the phenomenological interpretation of Plato's narrative of the cave. The prosaic structure of my reanalysis of Heidegger's phenomenological analysis of the narrative along with the pertinence of Gadamer's hermeneutics as an additional context in this regard remains metonymic, as the most pertinent way of interpreting the 'unsaid' of a metaphorical narrative may be one whereby the symbols and their references lie mutual in the interplay of meanings. Two poles of the difference namely transcendence and immanence are so dependently interrelated that the semantic space between them becomes a framework for not only Plato's original depiction of the narrative but also for how it is interpretable in the nexus of contemporary phenomenology. My whole argument in this regard is bipartite. Part I consists of illustrating the perspective of the transcendence-immanence contrast bridging three major phenomenological theories namely Husserl's transcendental idealism, Heidegger's hermeneutic-phenomenology and Gadamer's philosophical hermeneutics. Part II deals mainly with how one may find lacunae in Heidegger's interpretation of the cave-narrative if seen in the context of the transcendence-immanence contrast, and how this dissatisfaction further prevails if one also incorporates into one's analysis Gadamer's theory as an extension of the Heideggerian philosophy.

The Transcendence-Immanence Contrast Perspective

The Husserlian transcendence and the Gadamerian immanence are like two half boundaries of a conceptual space which potentially affords us with a field as a perspective for appropriating the relationship of the cave, the life-world and the tradition. In what follows I will first take up Husserl's notion of transcendence as he expounds in *Cartesian Meditations*.

"Transcendency in every form is an immanent existential characteristic, constituted within the ego."² The Husserl of *Cartesian Meditations* made this statement in the way of explaining his project of transcendental phenomenology as a form of "idealism." At first glance the statement, if taken out of the context, appears to be paradoxical, as transcendence and immanence, if taken in terms of their traditional senses, are 'mutually exclusive.' The former traditionally refers to something from without while the latter to something from within. This within-without or exteriority-interiority distinction strongly forces a bipolarity which does not allow any element to permeate from one pole to another. Husserl's transcendental idealism eliminates this mutual exclusiveness or impermeable traditional bipolarity between transcendence

distinction; Descartes's mind/body distinction; and Kant's *a priori/a posteriori* distinction. But the challenge of these theories, the problem that calls for the creativity and intellectual inventiveness of these thinkers, is to show how the two sides of the distinction are nevertheless related to and dependent upon each other. This is what I call the 'problem of difference,' and it is this problem which accounts for the most interesting and important aspects of the above mentioned theories. See Jeffrey A. Bell, *The Problem of Difference: Phenomenology and Poststructuralism* (Toronto, University of Toronto Press, 1998), p. 3.

²Edmund Husserl, *Cartesianische Meditationen (Cartesian Meditations)* (The Hague, Martin Nijhoff Publishers, 1960), pp. 83–84.

and immanence by introducing the porous structure of ‘transcendental subjectivity.’ The open horizon of the transcendental subjectivity makes such an act of cognition possible which penetrates the line of demarcation between transcendence and immanence. If one puts Husserl’s statement, as cited above, in the context of his transcendental phenomenology, one will find the paradoxical bipolarity diluted in the all encompassing domain of transcendental subjectivity.

Husserl does not state the terms, ‘transcendency’ and ‘immanent’ simply and straightforwardly in their traditional senses. Rather both the terms have the typical Husserlian connotations. Transcendency here does not refer to a human self’s deliberation to be a knowing subject intending to cognize the objective world on the plane of factuality (*Tatsächlichkeit*). It is an experience of the subject to acquire the status of an actively cognizing agent demarcating his self from the world as something objectively cognizable. In the Husserlian terms transcendence is not an experience of an actual subject in relation to a factual world as an object. Rather all transcendence takes place in the sphere of ‘fantasiableness.’ It is not ‘actuality (*Wirklichkeit*)’ but rather ‘unactuality’ or ‘possibility’ wherein all transcendence whatsoever happens to be.³

The exploration of the true meaning of transcendence here requires the nexus of Husserl’s phenomenological attempt to make the transcendental subjectivity available for the act of cognition. Following the Cartesian footsteps unerringly, which even Descartes himself could not make aptly, Husserl discovers the genuine form of radicalism. His emphasis on radicalism is more intense than that of Descartes’. He is not content to have simply ‘the ego cogito’ in the Cartesian terms rather he accepts it on his own terms in the guise of transcendental subjectivity. As a prerequisite to make the latter available I have to experience first the *epoché-reduction* simultaneity. Descartes’ methodic doubt, according to Husserl, is not a genuinely radicalist approach towards experiencing the true ‘parenthesizing of the objective world’ including I-myself leading towards the phenomenological *epoché*. This is the state of ‘universal depriving...of all positions’ taken towards objectively given world. The *epoché* is not the denial or doubt (as in case of the Cartesian method) concerning the existence of world. Instead, it is a ‘bracketing’ or ‘suspension’ ‘which completely bars’ the beginners of philosophy ‘from using any judgment that concerns spatio-temporal existence.’⁴

But this deprivation of knowledge or the presuppositionlessness *at par* does not lead me to “nothingness” rather to the unlimitedly rich sphere of the pure ego. The act of *epoché* namely the bracketing of the existence of world being an all inclusive sphere reduces me to pure ego again all inclusive, as it not only

³Roman Ingarden Comments on Husserl’s phenomenology: “The existence of what is perceived (the perceived as such) is nothing ‘in itself but only something’ for somebody/for the experiencing ego. ‘*Streichen wir das reine Bewusstsein, so streichen wir die Welt*’ (‘If we exclude pure consciousness then we exclude the world’) is the famous thesis of Husserlian transcendental idealism which he was already constantly repeating in lectures during his Göttingen period.” Roman Ingarden, *On the Motives which led Husserl to Transcendental Idealism*, trans. Arnor Hannibalsson (The Hague, Nijhoff, 1975), p. 21.

⁴*Op. Cit.*, Husserl, pp. 1–6.

makes me 'apprehend myself purely' as ego but also makes me understand how I am 'belonging to the world,' which is to say, how I experience the world, how perceive it, 'remember it, think of it, judge about it, value it, desire it' as it shows itself as it is in itself.⁵

All such experiences take place within the domain of transcendental subjectivity which being pure ego incepts this process of having epodictic evidences and then continue with this flowing stream of imaginative acts of cognition and constitution of the *Lebenswelt* (lifeworld) including I-myself. That is to say, whatever happens through the processing of phenomenological method, it happens immanently within the sphere of transcendental subjectivity. Even the act of transcendence takes place within the domain of consciousness, as it is the transcendence of ego from the actuality of I-myself and the factuality of the world which in order to be so requires the plane of possibility or 'unactuality' that again lies immanently within consciousness. In that sense Husserl pronounces that '[t]ranscendency in every form is an immanent existential characteristic, constituted within the ego.' So the Husserlian immanence is characterized by the within-ness of all acts of cognition-*qua*-constitution in the nexus of pure consciousness or transcendental subjectivity. In contrast to this, the Gadamerian immanence is characterized by the within-ness of all happenings in the nexus of lifeworld or the historicity of tradition. That is to say, in contrastive terms in case of Husserl's immanence all is cognized and constituted within pure consciousness while in case of Gadamer's immanence all is situated and cognized within the lifeworld.

The foci of objectivity and subjectivity are 'distorting mirror[s].'⁶ This statement aptly underlies the orientation of Gadamer's hermeneutics of tradition. It denies the factuality of cognition determined by the modality of the subject-object bipolarity. It dismisses on the one hand the Husserlian model of subjectivism that takes the immanence of transcendental subjectivity to be the only field of all cognition in absolute terms. On the other hand it suggests that all methodologies advocating an objectivist account of the meaning of lifeworld be recognized as distorting structures of how man belongs to the world. Gadamer critically undertakes the project of Enlightenment as such an account that excavates the objectivity of human reason free of all subjective prejudices while cognizing the world. Gadamer not only criticizes the Enlightenment's critique of prejudice as having a 'negative value' but he has also deviated from it in expounding his notion of tradition. The tradition is not, for him, a dead past, instead, it is a living continuity, a flow of 'effective-history' which encompasses not only the past but also the relevant present. So the functionality of human consciousness cannot in any way transcend this procession of

⁵In the nexus of the *Lebenswelt* Husserl says that 'Wir wollen auf die "Sachen selbst" zurückgehen (we must go back to the things themselves).' Edmund Husserl, *Logische Untersuchungen (Logical Investigations)*, vol. 2, Trans. J.N. Findlay (New York, Humanities Press, 1970), p. 252.

⁶I have stolen the phrase, 'distorting mirror' from Gadamer's statement: "The focus of subjectivity is a distorting mirror." He makes that statement while justifying the plausibility of 'prejudices' as the constitutive elements of man's being as an 'historical reality.' Hans-Georg Gadamer, *Wahrheit und Methode (Truth and Method)* trans. G. Barden and W.G. Doerpel (New York, Crossroad, 1975), p. 278.

history, on the contrary it is constituted through the very process. Thereby whatever is produced by human mind as a form of knowledge also owes to the historicity of tradition in this regard. It is the 'effective-historical consciousness' that has given rise to the human sciences as they are and as well as to the social structure as it exists. It is in the living process of tradition that we acquire our prejudices leading towards understanding a text, and again the text is to speak of the tradition that has already objectivated in it. This is what Gadamer calls 'hermeneutical situation,' that is, 'a situation in which we find ourselves, with regard to the tradition that we are trying to understand.' 'Effective-historical consciousness is the consciousness of the hermeneutical situation' that makes us realize that we are not standing outside the situation 'and hence are unable to have any objective knowledge of it.'⁷ Instead, we are always within the situation and the 'illumination' of it is a task which 'cannot be completely achieved,' as we exist as historical beings and all of our knowledge 'proceeds from what is historically pre-given.' The concept of situation is essentially concerned with the 'concept of *horizon*.' The hermeneutical situation, as shown above, determines the limits of the possibility of understanding the tradition in which we always find ourselves. 'The *horizon* is the range of vision that includes everything that can be seen from a particular vantage point.' Moreover, one's horizon makes one know 'the relative significance of everything' that is included within the horizon whether it is 'near or far, great or small.' When one acquires a horizon, one becomes able 'to look beyond what is closed at hand—not in order to look away from it, but to see it better within a larger whole and in truer proportion.' If we relate the notions of situation and horizon to that of prejudices as discussed above, we can say that it is our prejudices that, on the one hand, determine the hermeneutical situation in which we find ourselves. On the other hand, 'they constitute...the horizon of a particular present, for they represent that beyond which it is impossible to see.'⁸ As the hermeneutical situation, as discussed above, is determined by the effective-historical consciousness the operation of the prejudices in the horizon of the present is a continuous process. The significant aspect of this operation of the prejudices in a hermeneutical situation or within a horizon of the present is the encounter with the tradition which relates the horizon of the present to the historical horizon. 'Understanding...is always the fusion of these horizons.' It means that in the process of understanding, the historical horizon is projected to be fused with our present horizon and so it is no more there to be 'solidified into the self-alienation of a past consciousness.'⁹

The prejudice-tradition relationship is an indicator of the view that the beings of effective-historical consciousness and the lifeworld the consciousness is situated in are historical realities. Thereby the situatedness of functionality of the consciousness immanently within the historicity of the lifeworld implies the dismissal of transcendence in any form. This is to say, the bipolarity defined by the subjectivity of human consciousness and the objectivity of the lifeworld lies immanent

⁷ *Ibid.*, pp. 268–269.

⁸ *Ibid.*, p. 272.

⁹ *Ibid.*, p. 273.

correlative within the sphere of tradition. If one compares this with Husserl's phenomenology one may find that the subject-object immanent correlative lies within the structure of intentionality. Drawing from a Greek term, *νοῦς* (mind) Husserl calls this immanent correlative of intentionality the noetic-noematic correlative wherein noetic shows the subjective pole of consciousness and noematic is its objective correlate.¹⁰ This implies that the processions of cognition and constitution take their place in case of Husserl in the structure of intentionality lying mutually immanently within pure ego or transcendental subjectivity, whereas in case of Gadamer in the sphere of lifeworld lying immanently within the historicity of tradition. Thus, the intentionality-traditionality distinction defines the way of experiencing transcendence and immanence as two contrastive modes of cognition in the nexus of two different philosophical methodologies namely respectively Husserl's phenomenology and Gadamer's hermeneutics. In case of the former one is preconditioned to transcend the prejudicedness of tradition if one is to cognize the truth (*der Wahrheit*) within the *a priori* structure of intentionality¹¹ while in case of the latter one is predetermined by the process of historicity to remain immanently within tradition to experience the truth.¹²

Gadamer illustrates the phenomenon of one's finding one-self with regard to tradition or the historicity of the lifeworld¹³ through at least two major themes namely life and language. As regards the concept of life in Gadamer's *Truth and Method*, it illuminates in the light of Husserl's phenomenology. But the illumination of this concept should be considered distinct from the light which illuminates it. Referring to the phenomenological concept of the lifeworld Gadamer argues that the poles both of subjectivity of human consciousness and objectivity of the world dilute in the solvent of the lifeworld, as he conceives of it as 'the whole in which we live as historical creatures.' In this sense the lifeworld is always a 'communal world'

¹⁰ *Op. Cit.*, Husserl, pp. 36–37.

¹¹ Discussing the universality of transcendental experience and description being absolutely unprejudiced, Husserl writes: "This description is then called on to be the foundation for a radical and universal criticism. Naturally everything depends on strictly preserving the absolute "unprejudicedness" of the description and thereby satisfying the principle of pure evidence, which we laid down in advance. That signifies restriction to the pure data of transcendental reflection, which therefore must be taken precisely as they are given in simple evidence, purely "intuitively", and always kept free from all interpretations that read into them more than is genuinely seen." *Op. Cit.*, Husserl, pp. 35–36.

¹² "Consciousness of being affected by history (*wirkungsgeschichtliches Bewußtsein*) is primarily consciousness of the hermeneutical *situation*. To acquire an awareness of a situation is, however, always a task of peculiar difficulty. The very idea of a situation means that we are not standing outside it and hence are unable to have any objective knowledge of it. We always find ourselves within a situation, and throwing light on it is a task that is never entirely finished. This is also true of the hermeneutic situation -i.e. the situation in which we find ourselves with regard to the tradition that we are trying to understand...All self-knowledge arises from what is historically pre-given,...because it underlies all subjective intentions and actions." *Op. Cit.*, Gadamer, p. 301.

¹³ The way Gadamer conceives of the life world suggests that he is not alone in this line of speculation rather he finds himself aligned with a group of scholars like Ludwig Landgrebe, A. Schütz, G. Brand, U. Claesgens, K. Düsing, P. Janssen, and others. See n. 151 of Part II of *Op. Cit.*, Gadamer.

in which one always finds oneself in the nexus of other people. The inevitability of this togetherness of one with others in the lifeworld makes it implausible to abstract a transcendental subjectivity from the shared life world and then to take the 'validity' of the lifeworld as 'an achievement' of that pure subjectivity. Thereby 'the constitutive acts of transcendental subjectivity,' 'the Ur-ich (the primal I)', validating the life world hold no attraction for Gadamer. The functionality of the concept of life as it is performed in Husserl's phenomenology, Gadamer argues, appears to be a permanent threat to his framework of transcendental idealism. For, Husserl conceives of life as 'the transcendently reduced subjectivity that is the source of all objectifications' whose 'productivity' consists of revealing 'the unreality of the long-standing epistemological controversy between idealism and realism' as well as of thematizing 'the inner co-ordination between subjectivity and objectivity.' In other words man's 'comportment to the world' does not take its place 'in conscious experiences and their intentionality but in the anonymous "productions" of life.' So far so good but when Husserl has to solve the problems of intersubjectivity and definition of "Thou" as the other "I" or 'the alter ego' rather than simply an object of conscious experience, his framework of transcendental idealism seems to burst asunder. According to Gadamer, when Husserl tries hard to define Thou as something 'understood in terms of ego' and simultaneously 'detached from it' being independent like ego, the whole discourse remains 'oriented to the interiority of self-consciousness and fails to orient itself toward the functional circle of life' which goes 'far beyond consciousness.' The import of meaning of life remains undeveloped in Husserl's phenomenology whereby Gadamer owes to the referential fruition of Count York's fragmentary posthumous work while venturing into the meaning of life. Criticizing the fruitlessness of philosophical thinking within the sphere of a transcendental consciousness, York emphasizes the demand of philosophizing methodologically attached with rather than detached from the life comportment. He interprets human consciousness as a life comportment which shows constitutive traits 'in the area both of somatic and psychic articulation,' as the psychical processes of seeing, feeling, imagining, willing cannot 'exist without the existence of objects.' This psycho-somatic co-ordination cannot however be plausible if consciousness is seen detached from the life comportment. So the immanence of life affords us an historical or traditional abode wherein the human consciousness and the lifeworld appear to be the psycho-somatic co-relates that guarantee all acts of cognition and constitution.¹⁴

Like life, language also functions through vicissitude of the referential imminence of the historicity of tradition. Gadamer believes in the equation of life, language and tradition. The equation is a broad-brush sketch that depicts a grammar common to the illustrations of life, language and tradition in connection with hermeneutical experience. When one experiences understanding, as discussed above, in a hermeneutical situation the effective-historical consciousness finds its present horizon fused with the past horizon on the plane of tradition. This experience of

¹⁴For Gadamer's articulation concerning the concept of life as a critique of Husserl with the help of York see *Op. Cit.*, Gadamer, pp. 235–245.

‘belonging (*Zugehörigkeit*)’ of consciousness to tradition unfolds hermeneutically ‘from *language as a medium*.’¹⁵ The realization of the effect of history as the constitution of consciousness is not only a traditional procedure but a linguistic process as well. As regards the language-tradition equation it appears so obvious in Gadamer’s philosophy that if one replaces tradition with language or the vice versa in the remarks he makes about either there will be no change in the overall meaning of that remarks except the replacement. For instance, he in Part III of *Truth and Method* cites about language a remark drawing from Humboldt as follows:

...every language has a life of its own vis-à-vis what is said at any given time, so that in it one vividly senses “the way in which the distant past is still connected with the feeling of the present since language has passed through the sensations of earlier generations and has preserved their inspiration.”¹⁶

In this citation the word, language appears twice. If one replaces the word of language with that of tradition the same citation will read as follows:

...every [tradition] has a life of its own vis-à-vis what is said at any given time, so that in it one vividly senses “the way in which the distant past is still connected with the feeling of the present since [tradition] has passed through the sensations of earlier generations and has preserved their inspiration.”

If one reflects on this citation with a presumed replacement of language with tradition one will find that the meaning of the latter is like an image of the former in the context of Gadamer’s hermeneutics. This is to say, Gadamer conceives of language as something traditional¹⁷ and tradition as something linguistic. Hence the historical effect on human consciousness is a hermeneutic phenomenon of unification wherein linguistic form and ‘traditionary content cannot be separated.’ This implies that as the cognitive and constitutive acts of human consciousness are bound to the referential immanence of traditionary content they are as well immanently bound to lingual form. But my emphasis here on the language-tradition

¹⁵ *Op. Cit.*, Gadamer, p. 453.

¹⁶ *Op. Cit.*, Gadamer, p. 438.

¹⁷ Gadamer’s concept of language as tradition may be compared to that of the later Wittgenstein’s notion of language. The latter conceives of language as an activity or game with certain rules which are set and can be learned in the context of conventional and cultural life form. In this regard Habermas attempts to relate Gadamer to the later Wittgenstein. He appreciates Wittgenstein’s deviation from positivism by bringing to awareness the fact that one cannot master the grammatical rules on the symbolic plane of language itself. Instead, one can learn the rules in the cultural life form. At the same time he criticizes Wittgenstein for his positivistic shortcomings of neglecting the hermeneutical aspect of mastering the rules of grammar. Wittgenstein’s language game is, for Habermas, a sealed and ‘opaque’ bundle of rules which allows nothing to pass through and so the practice of the game is an ahistorical mechanism. Habermas, opting the hermeneutical dimension of language from Gadamer, transforms language from a ‘monadically sealed’ oneness into a ‘porous’ unit which is developed hermeneutically and historically in the making of tradition. See Jürgen Habermas, *Zur Logik der Sozialwissenschaften (On the Logic of the Social Sciences)*, trans. Shierry Weber Nicholsen & Jerry A. Stark (Cambridge, Polity Press, 1988), pp. 148–150 and also see Abdul Rahim Afaki, “Habermas’ Hermeneutical Project of Intersubjectivity: The Pragmatic-Analytic-Hermeneutic Approach to the Empirical-Analytic Sciences of Action,” *Phenomenological Inquiry* 36 (October 2012); pp. 101–124.

equation does not of course diminish the pertinence to life, as all process of the linguistic-traditional constitution of the life world is plausible by a persistent appeal to the magnificence and immanence of life.

Gadamer's triadic structure of immanence defined by the life-language-tradition equation is based upon Heidegger's phenomenological hermeneutics. This part of the essay explores how the superstructure of hermeneutic of tradition, as Gadamer expounds, is grounded upon Heidegger's project of hermeneutic phenomenology apropos of the issue of Being-as-time (*sein qua zeit*). Certain issues however do recur. In general terms, the argument here concerns the significance and location of *Sein* in Heidegger's phenomenological hermeneutics, its relation to the life-world, his reflection on language, the relationship in his philosophy of Being and time, of referential understanding of meaning of reality. If these issues appear germane, it is because Heidegger is at the center of contemporary discourse of continental philosophy and because a large measure of contemporary theories of phenomenology and hermeneutics derives from his thought. In the Heideggerian scheme of hermeneutic phenomenology, *Sein* (Being) is taken as phenomenon, as something that shows itself as it is in itself. But since Being is always the Being of some entity and every entity is a being-in-the-world (and so its Being is always the Being-in-the-world), it is therefore necessary to choose the most appropriate entity to attain this task. In this regard, the most appropriate entity is Dasein, the human self which can take the question of Being as an issue for it. It is the way of Dasein, the ontologico-ontically preferred entity, that Being shows itself as it is in itself, and this indirect showing of Being as it is needs to involve in the process of interpretation in order to make Being aptly known to human understanding. The most important aspect of Heidegger's phenomenological method inquiring into the question of Being it is that he takes both Being and Dasein as time or temporality. He does not take time as an entity or its character, that is, as something to be concerned with 'the what' of the entities rather he takes time as something to be concerned with 'the how' of the world. This is the same way as he conceives of Being. This equivalence of Being (as Being-in-the-world) with time or temporality is highly significant regarding the possibility of interpretation of tradition, as owing to this notion Gadamer attempts to interpret tradition in the nexus of life and language as we have already discussed above.

While exploring his project of hermeneutic phenomenology,¹⁸ Heidegger tends to formulate the question of the meaning of Being as the most fundamental question in a transparent way. He designs the structure of the question of Being as an 'inquiry' being a 'seeking (*Suchen*).' Attaining the transparency of the structure of the question of Being, he finds three constitutive factors of this inquiry as seeking namely 'that which is asked about (*sein Gefragtes*)', 'that which is interrogated (*ein Befragtes*)', and 'that which is to be found out by the asking (*das Erfragte*).' The third constitutive factor of the structure of the question of Being is its meaning, the goal of the inquiry that the Dasein intends to attain as a result of its seeking,

¹⁸ While pursuing this study of Heidegger's I shall take the *Einleitung zu Sein und Zeit* as a major reference and guide and other minor sources will also be referred accordingly.

which is to say, what is to be found out by the asking lies in what is asked about to be discerned by the Dasein (that which is interrogated) as a goal of the inquiry.

Dasein is an entity and it is ontically (i.e. on the ground of being an entity) distinct from other entities in terms of its very Being that 'is an issue for it.' When Dasein takes its Being as an issue for itself, it does not mean that Dasein is to develop a theoretical inquiry which aims at explicitly exploring the meaning of entities rather it simply signifies that Dasein is being such a way that it already has an understanding of Being. The important aspect of Heidegger's treatment of the question of the meaning of Being this way is 'to show that the central problematic of all ontology is rooted in the phenomenon of time.' In the procedure of conceiving Being in terms of time, temporal does not mean simply 'being in time', '[e]ven the 'non-temporal' and the 'supra-temporal' are 'temporal' with regard to their Being.' This Being-time equation may become more transparent if one focuses it in terms of the Dasein-time equation.

Drawing from his day's development of research in the field of physics particularly Einstein's relativity theory,¹⁹ he focuses 'the destructive side' of the notion that '[t]here is no absolute time, and no absolute simultaneity either', i.e., time is nothing, it instead 'persists merely as a consequence of the events taking place in it.' The fundamental problem with this physicist conception of time it is that it takes time as something measurable leading it to be necessarily 'uniform' and 'homogenous.' Out of this uniformity, Heidegger draws the arbitrariness of time in terms of 'now'. This is to say, time is to be measured in terms of two different 'now-points' coming one after another. This arbitrariness of now-point shows that if one is to come across an event with a clock, it does not indicate how-much is the duration of the event rather it 'makes the event explicit...with respect to its unfolding in the now.' He then questions taking the experience of now as experience of I am. So the question of now-I am equality points the Heideggerian inquiry into time 'in the direction of Dasein...the entity that we each ourselves are, which each of us finds in the fundamental assertion: I am.' Dasein's determining itself as "I am" is as fundamental as its being-in-the-world (*In-der-Welt-sein*) or its being-with-Others (*mit Anderen sein*) having the same world there with others.²⁰

The tone of this description of the meaning of Being in the nexuses of the world and the others suggests a distinct trait of Dasein of having an 'ontological determination' to be concerned with language. It reminds us of what we have already seen in case of Gadamer when he related the hermeneutic experience of life and tradition to language. The primary structure of Dasein to be in the world as having world shared with others is the verbal form or *sprache*. Speaking a language determines one's incorporation into life with others and Dasein's engagement in the dialogic process is not only an involvement in the discourse about world but it is also a

¹⁹ According to Heidegger, Aristotle perceived time in the way Einstein would later conceive of it. Heidegger cites from Aristotle's *Physics IV*, ch. 11, 219a, in which time is described as something "within which events take place." See Martin Heidegger, *Der Begriff der Zeit (The Concept of Time)*, trans. William McNeill (Oxford, Blackwell, 1992), p. 3E, also see translator's n. 5.

²⁰ *Ibid.*, pp. 3E–5E.

process of ‘self-interpretation of Dasein...which maintains itself in this dialogue.’ This is to say, ‘in all speaking about the world there lies Dasein’s speaking out itself about itself’ and ‘so all concerned dealing is a concern for the Being of Dasein.’ The most important aspect of Dasein’s self-cognition in the nexuses of the world and the others is to say: ‘I never am the Other.’ Thereby Dasein cognizes its own death (rather than the Other’s) as ‘the most extreme possibility of itself.’ Drawing from the concept of death as the most extreme possibility of Dasein, Heidegger extends the delineation of the Dasein-time equation. He thinks of having one’s own death as ‘Dasein’s running ahead to its past, to an extreme possibility of itself that stands before it in certainty and utter indeterminacy.’ He conceives of the different phases of time, past, present and future in terms of ‘how’-‘what’ distinction. The past is not a ‘what’ but a ‘how’ in the sense that ‘it uncovers my Dasein as suddenly no longer there; suddenly I am no longer there alongside such and such things, alongside such and such people, alongside these vanities, these tricks, this chattering.’ ‘This past is...indeed the authentic ‘how’ of my Dasein...to which I can run ahead as mine.’ The authenticity of Dasein’s past also uncovers everydayness in its ‘how’, as Dasein’s running ahead to past is also running up against death that makes it come ‘back to its everydayness which it still is.’ Hence the authenticity of past again guarantees the authenticity of its existence as being temporal, as Dasein’s running ahead to past is also running up against future through present and so ‘Dasein is its future, in such a way that in this being futural it comes back to its past and present.’²¹ This is the way past is ‘experienced as authentic historicity...something to which one can return again and again’ and this phenomenon gives rise to what Heidegger calls the first principle of hermeneutics that states:

The possibility of access to history is grounded in the possibility according to which any specific present understands how to be futural. This is the first principle of all hermeneutics. It says something about the Being of Dasein, which is historicity itself.²²

The significance of Heidegger’s conception of Being in terms of time is its concern with how- rather than what-nature of temporality that may have compelled him to seek such a method of investigation that too characterizes the how rather than ‘the what of the objects of philosophical research.’ Heidegger’s Phenomenology is such a method. He does not borrow the conception of phenomenology as defined by his predecessors, instead he develops his own version of it which, on the one hand, ‘comprehensively...determines the principles on which a science is to be conducted’, and on the other hand, it is ‘primordially...rooted in the way we come to terms with the things in themselves.’ The historical or temporal orientation of the Dasein and the world illustrates the fact that all acts of cognition of self and world are to take their places immanently temporally, as the inquiry concerning *what* the self and world are transcendentally in themselves is reduced by Heidegger to asking *how* they show themselves immanently *qua* time.

²¹ *Ibid.*, pp. 6E–19E.

²² *Ibid.*, p. 20E.

It is the all-encompassing temporality or historicity of the Heideggerian phenomenology which takes the form of overwhelming structure of tradition in Gadamerian hermeneutics. These thoughts mutually define human consciousness as a historical reality necessarily situated in the temporal lifeworld, which defines an immanence of finding both poles of reality coordinately existing *qua* time or tradition excluding every possibility of transcendental cognition or constitution of these co-ordinates.

The Sun to be Dragged into the Cave: Phenomenological Interpretation of Plato's Narrative of the Cave

Acts of consciousness and the lifeworld are, as discussed above, the coordinates of time in the context of Heidegger's phenomenological hermeneutics, and the immanence of time stands in an essential relationship to the *a priori* of Being-in-the-world. Being-in-the-world is a complex doctrinal fold in Heidegger's philosophy, forming various significant notions and alluding to the signature of the Heideggerian thought which marks the genesis of the new movements in hermeneutics together with phenomenology. In order to determine how much has he semantically extracted from the semiotic recipe of the cave-narrative, let us now turn precisely to Heidegger's phenomenological reinterpretation²³ of Plato's allegory of the cave. First, I will summarize the story of the cave and the sun in terms of the phenomenological diction typical of Heidegger's, as my interpretation aims at deciphering not only what these metaphors in particular mean in the context of the Platonic metaphysics but also and more emphatically so what Heidegger excavates from their 'unsaid'²⁴ meaning with reference to his phenomenological paradigm. Moreover,

²³I call it reinterpretation because Plato himself interpreted the allegory where he places it in *Πολιτεία* (*The Republic*), Book VII and Heidegger's phenomenological approach towards its 'unsaid' meanings is rather a second-order endeavour. In this regard my interpretation of Heidegger's reinterpretation of Plato's primary interpretation of the narrative is a third-order or tertiary discussion.

²⁴First I thought that what I meant by 'unsaid' seemed to be more close to what Ricoeur rather than Heidegger said about the 'unsaid' but later I realized that the most useful idea in this regard would be what they mutually said about the 'unsaid.' According to Heidegger, 'what a thinker left unsaid, whatever it might be, we have to consider what he said' in general or in particular. In this case an interpreter feels a little free about whether a concept is to be incorporated into or abstracted from the thinker's concerned scheme of thought. See Martin Heidegger, *Wegmarken* (*Pathmarks*), ed. William McNeill (Cambridge, Cambridge University Press, 1998), p. 155. Ricoeur while comparing the relationship between metaphor and narrative states that '[in] both cases, the new thing—the as yet unsaid, the unwritten—springs up in language.' Both metaphor and narrative show the phenomenon of 'semantic innovation.' In case of the former this 'innovation lies in the producing of a new semantic pertinence by means of an impertinent attribution' whereas in case of the latter the 'innovation lies in the inventing of another work of synthesis—a plot,...that is, a new congruence in the organization of the events.' Here the interpreter is a little unfree while interpreting the unsaid in the context of what has already been symbolically said in a metaphor or a narrative. See Paul

the cave and the sun metaphorically mark the lifeworld and the source of light in which things are to show what they are in themselves respectively, what happens in between fictitiously in the story is that what one may undertake as a heuristic framework to find answers to the further problematization in the course of interpretation. A paraphrased summary of the tale of the cave and the sun is in what follows:

Once upon a time there was a group of people imprisoned from childhood in an underground cave like dwelling. The exit of the cave was at some height to which it was not easy in ordinary terms to reach to get out of it. The prisoners were made sit in a row chained so tightly by the legs and neck that they could not even move their heads around to look at what was happening right behind them. They could only see what was in front of their faces. There was a wall of the dwelling cave in front of them like a big cinema screen²⁵; as if somebody were to cast light from behind them with the help of a film projector and they like an audience could see the images on the screen of the wall. There was a fire at some height behind them casting its glow towards their back. In between the prisoners and the fire there was a walkway and some people started walking there (and some of them were also talking to each other) holding statues and artefacts on their heads and shoulders. Of these walking people there appeared big moving shadows on the screen of which the chained people might think that these were the images of some big animals like camels and elephants moving behind them through the walkway. Suddenly, one of the chained prisoners was to somehow set free himself from the chains experiencing the pain of being forced to stand up, to turn around, to walk and to look at the fire producing the shadows. He obviously realized that what he was thinking of the shadows while he was chained were absolutely wrong opinions, as these were not the big animals rather the ordinary people who were walking along having artefacts on their shoulders (and some of them talking to each other as well) through the walkway. Now someone however forced to drag the unchained person away from his place pulling him up to the cave's exit to get him out of it into the sunlight. When the unchained person got out of the cave into the sunlight, the first thing he experienced was the glaring effect of the sunlight which made his eyes unable to look around the world outside the cave. After the laps of sometime he got accustomed with the world outside the cave in the light of the sun. And he got accustomed so gradually. The easiest things for him to see were shadows, and then the images of things reflected in water. And thereafter he would be able to see the things themselves in the sunlight and then finally the sun itself being not only a reflector but something in and of itself as a source of all reflections.²⁶

The most valuable of the body of secondary literature which has sprung up about the cave narrative is Plato's own suggestive hermeneutics that indicates various

Ricoeur, *Time and Narrative*, Vol. 1, trans. Kathleen McLaughlin and David Pellauer (Chicago, University of Chicago Press, 1984), p. ix.

²⁵In my paraphrased summary of the narrative I have deliberately replaced 'the screen above which showmen exhibit their puppets' with the cinema screen. This alteration in the material does not affect the meanings of the tale rather it makes the meanings more neatly graspable for the contemporary reader. Cornford also suggested the same as he notes that in this regard 'Plato could have found a neater analogue in the cinema.' See W. K. C. Guthrie, *Plato: the Man and his Dialogues: Earlier period: A History of Greek Philosophy*, Vol. IV (Cambridge, Cambridge university press, 1975), n. 3, p.515.

²⁶This paraphrasing is drawn mutually from the translations of the tale by Paul Shorey and Martin Heidegger. See *Πολιτεία (The Republic)*, Book VII, 514a–517a, in Plato, *The Collected Dialogues of Plato Including the Letters*, eds. Edith Hamilton & Huntington Cairns (New York, Bollingen Foundation, 1961), pp. 747–749 and *Op. Cit.*, *Wegmarken*, pp. 156–163.

directions and forms different philosophical links between hitherto unsaid meanings. In what follows I will paraphrase Plato's interpretation of the narrative through a dialogue between Socrates and Glaucon.

The text of the narrative indicates that 'the true analogy for' the 'indwelling power' of apprehension is 'that of an eye that could not be converted to the light from the darkness except by turning the whole body.' This turning around of the human self 'from the world of becoming' to 'the brightest region of being' makes him cognize the ascending path of the soul from mere ignorance to the ultimate truth. If the soul 'had been hammered from childhood, and had thus been struck free of the leaden weights, so to speak, of our birth and becoming, which attaching themselves to it by food and similar pleasures and gluttonies turn downward the vision of the soul'; if the soul is 'freed from these, it had suffered a conversion toward the things that are real and true, that same faculty of the same men would have been most keen in its vision of the higher things, just as it is for the things toward which it is' ordinarily turned. The sun being the ultimate object to be seen in the brightest region is the symbol of the highest idea in the light of which all other ideas can be cognized, and which is itself cognized as good. The idea of good, Plato imagines, is 'the last thing to be seen and hardly be seen' 'in the region of the known, and that when seen it must need point us to the conclusion that this is indeed the cause for all things of all that is right and beautiful, giving birth in the visible world to light, and the author of light and itself in the intelligible world being the authentic source of truth and reason, and that anyone who is to act wisely in private or public must have caught sight of this.'²⁷

Plato also fantastically suggests about the possibility: If one were to go back to the dark world of ignorance after having attained the height of wisdom in the world of knowledge, then what would happen to one? If one is made descend to the abysmal ignorance again, one will obviously refuse to abandon that feel of the uprightness that he has already attained in the brightest region. However if one is forced to do that, the perpetual prisoners of ignorance will judge of one that one has returned from one's journey of wisdom 'aloft with one's eyes ruined' because for some time one's vision will remain dim before one's eyes will be accustomed to the dark and so the journey will not be taken by them to be worth while and they will not prefer even to make any attempt to ascend to get out of the ignorance. Their distastefulness toward wisdom will be so intense that if one is to try to convince them to be released, they will kill one.²⁸

Seen from the perspective of 'the unsaid,' Heidegger's analysis of Plato's cave narrative has two important features: first, he attempts to discover the whole of what Plato really meant to say in the narrative and so he ultimately leaves out much of what Plato did really mean in terms of particularities; and second, he interprets the narrative in the context of not only the entirety of Plato's work but of the entirety of Greek philosophy and so he eventually covers up the individual narrative by his

²⁷ *Op. Cit.*, *Πολιτεία*, Book VII, 517a–519b.

²⁸ *Ibid.*, 517a.

reading of the whole Greek thought.²⁹ In case of the former, the irreducible characteristic of the narrative's particularities is sacrificed immediately to a coherent interpretation with respect to the doctrine of truth (*ἀλήθεια*) which Heidegger translates as unhiddenness (*Unverborgenheit*).³⁰ In the latter, the narrative, as particularly self contained repository of meanings, disappears into the larger context of Western adventure of truth. What Heidegger gains by his totalizing approach to the cave narrative whereby the meaning of particularities of the narrative is lost into the hermeneutic process of totalizing the semantic content with respect to the doctrine of truth? Heidegger conceives of the organization of all events depicted in the narrative as a path to be covered in order to arrive at the meaning of truth. Thereby he divides the whole narrative into the four stages of the occurrence of truth. Each of these stages is to have its own meaning of truth. The four stages³¹ are:

- (i) 'the Situation of Man in the Underground Cave'; the shadows (*σκιάι*) are what is the unhidden (*τὸ ἀληθές*) in the cave
- (ii) 'a 'Liberation' of Man within the Cave'; the unhidden is not the shadow but what the unshackled man sees directly in the light (*φῶς*) of fire (*πῦρ*)
- (iii) 'the Genuine Liberation of Man to the Primordial Light'; the unhidden reveals gradually in this sphere. First the released prisoner 'sees better by night, where vision slowly grows accustomed to the illuminated things—the smooth light, the unblinding light of the stars and the moon. When he gets used to this, he is able to see by day in the light of the sun, then the light itself. Finally he is able to see the sun as what *gives* the light, as what gives *time*, as what *rules over* everything, and which is the ground even of what is seen in the *cave*.' Thus the unhidden in this sphere is defined by the things that show themselves as images for the ideas, and the sun is something that 'makes all ideas visible', namely 'the idea of all ideas (*ἡ τοῦ ἀγαθοῦ ἰδέα*).'³²
- (iv) 'the Freed Prisoner's Return to the Cave'; the freed man comes back to the bondsmen (*δεσμῶται*) to tell them the truth, namely that what they are seeing on the wall as the unhidden is simply misapprehended. After having experienced the illuminated things, ideas and the ultimate idea, he has come to know the unhidden as he is now experiencing in the cave as 'co-belonging' to the hidden. Hence the unhidden of the fourth stage lies in the 'deconcealment' with 'respect of its essential relatedness to concealing and the concealed. Untrue *belongs* to the essence of truth.'

²⁹ While concluding his argument Heidegger's remarks encompass not only Greek thought but even the whole 'history of Western humanity' and not only its past and what is happening at present but what will happen in the future as well. See *Op. Cit.*, *Wegmarken*, p. 182.

³⁰ Martin Heidegger, *Vom Wesen der Wahrheit: zu Platons Höhlengleichnis und Theätet (The Essence of Truth: On Plato's Cave Allegory and Theaetetus)*, trans. Ted Sadler (London, Continuum, 2002), p. 7.

³¹ On the issue of the four stages see *Ibid.*, pp. 17–68.

³² *Op. Cit.*, *Wegmarken*, p. 165.

Heidegger's totalizing phenomenological-hermeneutic approach to the cave-narrative is characterized by excavating the meaning of truth overshadowing all other meanings hidden in the organization of events feigned as plot of the narrative. There lies the risk that occurs in analyzing the metaphorical composition of the tale, whose established meanings Heidegger has tried to destroy to preserve the extremely sound and incredibly clear meaning of truth joined to the phenomenological orientation of his thought. Here I intend to restore the meaning of transcendence in relation to immanence out of the Heideggerian ruins of the cave-narrative.

On its most obvious level, the allegory of the cave as a part of Plato's *Πολιτεία* is the story of an improvised side-show composed of two worlds: the dark cave wherein human beings are shackled with the conventional ignorance imposed on them by society and the bright outside world under the shining sun wherein everything shows itself as it is in itself. Overlooking this dark-bright couple of worlds, Heidegger, yoked with his phenomenological commitments, perceives the tale as a circular intellectual voyage of a liberated philosopher. It is a tragic journey incepted in the dark cave with the liberation of a philosopher chained with other men, culminates with the climax of cognizing the truth as shining sun outside the cave, and ends with the murder of the philosopher in the hands of the bondsmen in the cave. In my view the tale is not originally a tragedy and the intellectual voyage of the philosopher is not necessarily to be taken as circular as Heidegger perceives of it. The story is pleasantly improvised by the heroic acts of the philosopher first by unshackling himself from the conventional chains of ignorance and then by cognizing the truth at the climax. It is a happy ending of the linear improvisation of the tale. The tragic part of the story wherein the hero is killed by the villains should be taken as a fantastic postscript to the tale whereby the author wishes to teach the audience a particular lesson.

If one takes light from Heidegger's phenomenological hermeneutics to illuminate the pleasant linear improvisation of the cave-narrative, one has to distance oneself first from the lopsidedness of Heidegger's interpretation of the narrative loaded with the meaning of truth, yet one has to remain stuck to the Heideggerian diction of phenomenology. This sticking-avoiding simultaneity focuses on the double hermeneutic movement of revealing the meaning of transcendence-immanence difference in the context of two worlds and concealing the lopsidedness of the meaning of truth in the context of four stages; and it all operates within the framework of the ascending linear improvisation of the cave-tale. Revealing the meaning of the transcendence-immanence contrast, one has to interpret the narrative by discovering bridges between the two worlds of the dark ignorance and the bright truth so that the bridging permits passage of consciousness between them and thereby fixes the irreducible distance dividing them. It is not of the Heideggerian four stages but of the two worlds the context in which Plato's narrative makes sense of transcendence as associated with immanence. The sense can be made soundly only if the tone of the interpretation is set in terms of phenomenology and only if it is fixed in its appropriate context.

Heidegger's four-stage interpretation of the cave-tale depicts the universe of the narrative as comprising of four worlds with their respective truths, namely the

world of the shadows, the world of the fire, the world of the sun and the world of the conflict between the ignorance and the knowledge. Within this universe, the liberated man moves across the landscape from one world to another, in such a way that the mode of his “[trans]ascending” from one specific world to its adjacent world remains in the dark. The Heideggerian interpretation of the Platonic tale reveals these worlds as destinies that have always been present though access from one of them to the next may have been somehow obscured. And once a particular destiny has been attained, all difficulties one faces and all efforts one makes in [trans]ascending one world to attain the destiny are overlooked to illuminate a particular truth attached with that destiny. A study of this unsaid meaning of the [trans]ascending of the liberated man, which takes its place between two particular worlds, will permit us to explore certain thematic images as they structure the landscapes of the whole universe that will serve as the context of my interpretation of the tale. Yet my analysis will exclude the [trans]descending of the liberated man from the world of the sun down to the world of conflict between the ignorance and the knowledge, which finally leads the tale to a tragic ending with the death of the liberated man by the bondsmen.

The first is the lifeworld of ‘everydayness’—the world of shadows—wherein the conventional meanings are imposed by force on the prisoners, which they simply believe in without asking any question. The unquestionable acceptance of the imposed meanings illuminates an attribute of the shackled minds that they do not find the *question of Being* as an issue for them. In that sense none of them is Heidegger’s Dasein; and so the world of shadows is a Daseinless world. In this part of the cave-lifeworld the imposition of conventionalities through the process of history is so intensely hammered on human consciousness that man has become absolutely devoid of any sense of being deceived by the moving images appearing on the screen of everyday cinema. The determining effect of conventions on consciousness whereby man-in-the-cave is to perceive of meanings reminds one of the Gadamerian formation of prejudices in the effective-historical consciousness. In Gadamer’s case however the historical effect on human consciousness is not so harsh and strict that makes man merely a recipient of prejudged meanings rather in his traditionally shaped lifeworld man is able to distinguish illegitimate prejudices from the legitimate ones though the process of such subjective distinguishing occurs in the nexus of tradition. When the situation of the shackled-men-in-the-cave is compared with the position of Heidegger’s men-in-the-world, it encourages the shoots of intellectual speculation in order to establish their relation to Gadamer’s effective-historical consciousness lying in the way of tradition. One may find the cave-lifeworld-tradition equation a little nebulous at this stage of the argument, yet it becomes more transpicuous when one first turns from the world of the shadows to the world of the fire in the cave³³ and then [trans]ascends to the world of the sun in the end.

³³The bipartisan structure of the cave-world has various interpretations. ‘The chained prisoners represent ordinary uneducated humanity’ while the bipartite cave stands ‘for the whole world of nature’ so that the shadows ‘represent particulars and the artefacts that cast them the general notions abstracted from them by the uneducated.’ Keeping the purpose of depiction of the tale in

It may be easy for one who is analyzing the cave tale to turn imaginatively from the world of the shadows to the world of the fire, but this is not so easy for one who is bodily shackled with the chains of conventions in the cave. Every bondsman is so tightly chained by neck and legs that he cannot even turn around his head to see right behind his back. But according to Plato, one of the bondsmen somehow liberates himself, notwithstanding the shackles. There may be at least two reasons behind this unshackling of an individual and then his turning around to direct himself to the world of the fire. First, his view of the shadows rationally illuminates him that the dark shadows always appear on the screen with the bright patches of light; and he understands that a shadow is itself a darkness that lets the bright patch illuminate on the screen. Second, this extrinsic heuristic interplay of the dark shadows and the bright patches guides him to have a feel that the source of this interplay is behind him. This intrinsic feel coupled with some mystical extraneous force makes him so strongly curious that he finally succeeds to break his relationship with the world of the shadows and shackles in order to see the fire behind him as the source of the show on the screen. This is not simply an individual act of turning around rather it is a curious case of a shackled man who after leading a long life with dark conventions and misleading opinions finally liberates himself from this deceptive phase of everyday life. This is an initial stage of life of an ordinary man who partially transcends his everydayness to acquaint himself like a thinker with the illumination of ideas in this experiential world of the fire.

After having seen the fire emitting light whose obstruction through the people moving between the fire and the prisoners is making the shadows on the wall, the liberated man has a sense of accomplishment of his experience of the cave-world. This accomplishment has a series of cognitive experiences: that the prisoners are leading a life of ignorance and deception; that in the reality there is a bright light and its obstruction is to cause darkness which becomes shadow on the wall; and the source of all brightness is the fire. That is to say, the liberated man's passage from the world of the shadows to the world of the fire is an experience of conquest of this horizontal and penetrable landscape of the bipartite cave-world. But this short-term feel of conquest soon transforms into an unsatisfactory experience of cognition when the liberated man raises his head to see the bright opening of the cave at certain height. This unsatisfactory conquest embeds a desire of finding a gigantic fire outside the cave, as this expected fire may be making the opening of the cave bright from outside; and so the psychodynamic association of desire and narrative improvises the tale to the final phase.

Book VII of *Πολιτεία* in his mind, Plato might have referred to 'the whole field of *mimesis*' while conceiving of the bipartisan structure of the cave. The shadows are ordinary appearances and the artefacts are their artistic imitations; and since 'the artists do not understand what they are imitating' the level of reality of their imitations remains low. On this general discussion see *Op. Cit.*, Guthrie, pp. 512–517 and specifically on poetry as an art of producing 'only deceptive appearances of things' see Hans-Georg Gadamer, *Dialogue and Dialectic: Eight Hermeneutical Studies on Plato*, trans. P. Christopher Smith (New Haven, Yale University Press, 1980), pp. 39–72.

According to Freud, the essentiality of desire is its ‘mobility, the ease with which it passes from one object to another.’³⁴ Furthermore, desire seeks its satisfaction in repetition of the experience of pleasure one has already had in the past. Insofar as the liberated man’s attempts to [trans]ascend the dark cave in order to find the fire-like source of illuminations outside the cave are concerned, he postulates the end of desire as a re-experience of the same pleasure that he has already enjoyed in the cave after having conquered the cave by finding the fire as a source of light. This time in the new world outside the cave he is expecting to attain his goal by finding such a gigantic fire-like source of illuminations and such an intense view of brightness that the attainment would eliminate the need for further passage. This displacement in search of illuminations and, ultimately, the source of all illuminations, is an experience of transcendence. The liberated man’s project of transcendence recalls an earlier moment in the narrative while he was immanently in the world of the shadows. He had volitionally unshackled himself in a burst of naive cognitive enthusiasm. And very quickly he discovered the devastation and meaninglessness of his cognitive conquest in the world of the fire when he became aware of the reality of the show of the shadows and light on the wall. He felt his loss of innocence with respect to the shadows on the wall and that loss connoted to a gain of some vague cognition of illumination. This intellectual deflowering led to an arousal—the desire to escape the cave-world of everydayness, even if it meant to face the gigantic fire outside the cave which might burn him down to ashes. If one were to locate the beginning of events of the dark voyage impelling the forward movement of the narrative, one would have to situate it in this unfolding—the beginning of the liberated man’s discovery—of the illuminating nature of human cognition. The fire’s glow intensified the arousal of the true illumination and gives the narrative a new direction by opening up the possibility of finding the true source of illumination elsewhere by means of transcending to another world. The shadow-perceiver’s trip to the world of the sun was delayed by a transitional stay at the world of the fire. Although the transitional stay at the world of the fire maintained the urge to seek a brighter view outside the cave, the sort of clue for full-blown illumination the fire-perceiver discovered in the cave was revealing of the vanity of dim light in this transitional phase of his voyage. If the world of the shadows is a dark primitive world and the world of the fire is a dim old world, then the world of the sun is an expectedly most illuminated new world. The theme of illumination which has been associated throughout the narrative with man’s desire to see things transparently manifests itself in several ways. As a bright patch with the shadows on the wall it helps the bondsman in unshackling himself and then as a relatively dim light in the bipartite cave-world it serves as a clue of finding the brightest light outside the cave. Thereby, on the one hand, it exposes the vain prospects of cognition of truth regarding the immanent dim world of everydayness; and on the other hand, it points to the plausibility of the brightest illumination expected in the transcendent world of *ἰδέα*. Thus illumination as a catalyst of the fire-perceiver’s

³⁴ Sigmund Freud, *An Outline of Psychoanalysis*, trans. James Strachey (New York, Norton, 1949), p. 24.

escape to the new world serves to renew the arousal that stimulated his conquest of the cave; it finally closes the immanence episode as it opens the transcendence one, impelling the narrative forward.

After having transcended the deceptive or simply the ignorant world of everydayness the freed man finds himself in the brightest region of knowledge, i.e., the transcendent³⁵ world of *ιδέα*. This is the space of ideation wherein the things are to illuminate themselves as what they are in themselves. The *ιδέα*-illumination intimacy can be brought to fore through the metonymic exchange between Plato's depiction of eye as the indwelling power of apprehension and Heidegger's concept of idea. Owing to the platonic metonymy of eye, one may find one's understanding of something as an experience of seeing that thing with extreme transparency. This is to say, the seeing metonymically depicts the having of ideas. Heidegger defines *ιδέα* in the same way. According to him, when one has an idea of some 'being' one is able to see Being of that being in advance, which is to say, '[t]he idea allows us to see a being as what it is, lets the being come to us so to speak.'³⁶ It means idea is like light that lets thing be seen illuminated as what they are in themselves. This idea-light interplay becomes more illuminated when one links it to Heidegger's interpretation of freedom in the nexus of the cave-narrative. When the freedman transcends the dark and deceptive world of everydayness he did not only experience the negative freedom—the freedom *from* the deception; but this act of transcendence also a 'genuine positive freedom'—'the freedom *for*' the comportment to what will be illuminated. It means the freedman was not genuinely free when he unshackled himself in the cave because at that time he was unable to see things being illuminated in the light due to his being in the dark cave. But now as he has already transcended to be here in the brightest region, he is genuinely free; and his '[b]ecoming

³⁵The meaning of transcendence in the context of relationship between the cave-world and the world of illuminations is altogether different from what Husserl means by this term. In case of the latter, when one transcends the lifeworld one arrives at the empty abode of the transcendental subjectivity, and whatever thereafter one cognitively experiences it takes its place immanently within the same abode. Such an act of cognition is possible in the structure of intentionality. In the nexus of intentionality consciousness is always a consciousness of something, i.e., there are two poles of cognition namely the knowing subject (*noetic* pole) and its known objective correlate (*noematic* pole). Such a correlation is not possible in Plato's philosophy as depicted in the cave-narrative. When one transcends the cave-world, one observes the objectively existing illuminations which are absolutely independent of one's subjective cognition of them. This is to say, the Platonic *Ιδέα* is an objectively existing reality rather than simply a *noematic* correlate of the transcendental subjectivity.

³⁶Heidegger notes: "What emerged as the essence of light and brightness namely letting-through for seeing, is precisely the basic accomplishment of the idea. The essence of light is letting-through for sight. If light, as in the allegory, is meant in a *transferred* sense...*seeing* must correspondingly be meant in a transferred sense: the seeing of beings...What is seen in and as the idea is, outside the allegory, the *being* of beings. *Ιδέα* is what is sighted in advance, what gets perceived in advance and lets beings through as the *interpretation* of 'being'. The idea allows us to see a being as what it is, lets the being *come* to us so to speak. We *see* first of all from *being*, through the understanding of *what* a particular thing is. Through its what-being the being shows itself as this and this...Being, the idea, is what lets through: the *light*. What the idea accomplishes is given in the fundamental nature of light. See *Op. Cit., der Wahrheit*, pp. 42.

free means binding' himself 'to what is genuinely illuminating, to what makes-free and lets-through, the light.'³⁷

How does the *new* world of ideas or world of illuminations differ from the *old* world of everydayness? When the freedman arrives in the former he is both surprised and disconcerted by the natural landscape of this bright region as contrasted with the latter, its dark counterpart. The difference between the two worlds is conveyed by the metaphor of light. Whereas the world of everydayness is depicted as dark and dim in the presence of a small fire, the world of ideas, which the freedman expected to be simply less dark in the presence of a relatively big fire, turns out to be extremely bright under the sun. As an immediate effect of the sun the freedman's eyes appear to have been shut first in the world of ideas, and then open in part to the brightness of the landscape with its illuminating effect. Indeed, the scorching effect of the landscape on the freedman suggests that he has become, obviously temporally, blind, with all that this term connotes insofar as the successful vision through this pilgrimage is concerned. And the freedman may suspect that there is an attendant transformation of his indwelling power of apprehension, from dim vision to lost of sight, but when the next moment he opens his eyes he has surprisingly had a crystal clear vision of the landscape in the sunlight.

Another aspect of the new world experience reinforces the disparity between it and the old world in terms of the notion of time; and this disparity leads towards the hermeneutic finitude of Heidegger's phenomenology in interpreting Plato's cave-narrative. The cave-lifeworld is a temporal or historical world, whose temporality or historicity is defined by the everydayness heading towards the death. All acts of human consciousness takes their place within the sphere of the lifeworld; and both consciousness and world are the coordinates of time and the immanence of temporality, as discussed above, stands in an essential relationship to the *apriori* of Being-in-the-world. This is to say, the temporal orientation of Dasein and the lifeworld illustrates that all acts of cognition of self in the lifeworld are to take their place immanently temporally, as the inquiry concerning what the self and world are transcendently in themselves is reduced by Heidegger to asking how they show themselves immanently *qua* time. In this nexus the authenticity of one's being temporal is guaranteed by past, as in the continuity of everydayness one's running ahead to past is also running up against future through present and so one is one's future and being so one comes back to one's past and present. This is what Heidegger calls the first principle of hermeneutics, a phenomenon of experiencing past as 'authentic historicity... something to which one can return again and again' in the nexus of the lifeworld of everydayness. But Plato's narrative of the cave tells us altogether a different story. In order to experience all showing of things-in-themselves one has to transcend the nexus of the temporal and historical lifeworld of everydayness. All illuminations are guaranteed in the sphere of ideas whereat one may reach when one has already discarded his past, the continuity of having deceptions and misapprehensions in the sphere of everydayness. The most important question arises here is whether the transcendent world of ideas is temporal or not? The transcendent world

³⁷ *Ibid.*, pp. 43–44.

of ideas reflects the gradualness of illuminations—an ascending of human soul³⁸ through a hierarchical anchors of bright lights—leading the soul to the brightest of lights, the sun being idea of all ideas—*ἰδέα τοῦ ἀγαθοῦ*. This gradual movement of the soul from the mouth of the cave up towards the sun underlies a sort of temporality. But this sort of timing is not guided by the continuity of everydayness heading towards the death while continuously coming back to the past again and again. Instead, it is a temporality begins with transcending one's past of everyday life, and then proceeds with the gradual illuminations of ideation ends at the ultimate idea, the idea of good. This ultimacy of all illuminations reflects the infinite scope of the divine ideation, the eternal bliss of the divine illumination, as after having reached at this height when the soul looks back at all moments of cognition it realizes that it is the ultimacy of illuminations that has opened the soul's eyes to the infinite scope of all cognitions. This ultimate idea is, in Plato's own words, 'the cause for all things of all that is right and beautiful, giving birth in the visible world to light, and the author of light and itself in the intelligible world being the authentic source of truth and reason.'³⁹ It means in the transcendent world of ideas, the ascending soul's destiny is not the death, rather after having experienced several destinations the soul finally experiences the eternity of the divine illumination not as a closing end of Being rather an opening of infinite possibilities of human cognition blessed with the heuristics of the divine light.⁴⁰

Here one may understand the alleged hermeneutic finitude of Heidegger's phenomenological hermeneutics as regards his interpretation of Plato's cave-narrative. In Heidegger's hermeneutic-phenomenology the immanence of temporality of the consciousness and the lifeworld is the only nexus available for all acts of human cognition, whereas in the context of Plato's narrative the historical lifeworld lies

³⁸ Heidegger inevitably refuses in principle to incorporate such a concept of man-with-a-soul or man-with-a-personhood into his phenomenological hermeneutics. He Writes: "In our indicative definition of the theme of hermeneutics, facticity=in each case our own Dasein in its being-there for a while at the particular time, we avoided on principle the expression "human" Dasein or the "being of man." He further explains why this inevitability is there in his system of thought by referring to the originality of this concept of man with personhood. He notes that this concept of man 'arose in the Christian explication of the original endowments of man as a creature of God, as explication which was guided by Revelation in the Old Testament.' See Martin Heidegger, *Ontology – The Hermeneutics of Facticity*, trans. John van Buren (Indianapolis, Indiana University Press, 1999), p. 17.

³⁹ See note 27.

⁴⁰ Paul Ricoeur is also of the view that human temporality is more intensely justified and deepened with its reference to eternity. He notes: "This intensification does not just consist of the fact that time is thought of as abolished by the limiting idea of an eternity that strikes time with nothingness. Nor is this intensification reduced to transferring into the sphere of lamentation and wailing what had until then been only a speculative argument. It aims more fundamentally at extracting from the very experience of time the resources of an internal hierarchization, one whose advantage lies not in abolishing time but in deepening it." He further notes: "Indeed it was necessary to confess what is other than time in order to be in a position to give full justice to human temporality and to propose not to abolish it but to probe deeper into it, to hierarchize it, and to unfold it following levels of temporalization that are less and less "distended" and more and more "held firmly," *non secundum distentionem sed secundum intentionem* (29: 39). See *Op. Cit.*, Ricoeur, p. 30.

dark without any moment of such cognitive illumination. Instead, every act of cognition takes its place in the transcendent world of ideas being the only place immanently available for the illuminating ideation, as the sun being the source of all illuminations is shining in the transcendent world of ideas not obviously in the cave. So there are two options remained for Heidegger: he may devastate the whole mountain into which the cave has already been built as a prison of conventional givenness of meanings for ordinary human beings; or he may also drag the sun shining in the sky into the cave to make it illuminate. But for him both options are unlikely to execute. The former is the world he has opted deliberately in order to set meanings to be operational in the nexus of temporality and the latter is simply impossible to execute even in one's imagination.

The same sort of hermeneutic finitude would seem to belong to Gadamer's philosophical hermeneutics, if he were to interpret Plato's narrative in the specific context of his own philosophy. The functionality of human consciousness, as we have already seen above in case of Gadamer, cannot in any way transcend⁴¹ the procession of tradition constituted in the flow of effective-history encompassing not only the past but also the relevant present. Thereby whatever illuminations human mind experiences in the form of ideas owe to the historicity of tradition. On the contrary, Plato finds conventional or traditional meanings to be the shackles that keep man in the dark. The most one can do in this situation is to have a dim light partially showing the deceptiveness of traditional meanings, which guides man how to gauge the wastefulness of human intellect enclosed by the immanence of historicity of the cave-lifeworld. This wastefulness reveals to man the difficult project of transcending the cave-lifeworld being guided by the mystical overtones of the same extraneous force which already helped him in making himself free from the shackles and

⁴¹In a conversation with Riccardo Dottori, Gadamer, responding to a question concerning man's 'finite spirit' in relation to the possibility of absolute knowledge, explicitly said: "...what we must keep in mind here is that transcendence is not attainable anywhere. Transcendence is not simply believing in God. It is something incomprehensible, and this is true for Hegel as well. This is all we can say today. It's all true for Jaspers, who incorporated this form of transcendence into his thinking, but even for Heidegger. This is why we ourselves (Heidegger as well) have, for some time, been able to come to an extensive understanding with Jaspers...So I would basically agree with Jaspers that the *ignoramus* is the fundament of transcendence." And this *ignoramus* is 'the finitude beyond which we are not allowed to go.' See Hans-Georg Gadamer, *A Century of Philosophy: A Conversation with Riccardo Dottori*, trans. Rod Coltman with Sigrid Koepke (New York, Continuum, 2003), pp. 78–79. Gadamer forces his refusal to transcendence by his emphasis on immanence. Discussing the relationship between Greek philosophy and modern thought, he finds the theme of an 'enduring relevance' dealing with 'the integration of the magnificent results and the faculties/achievements of the modern empirical sciences into social consciousness, into the life experience of the individual and the group.' This integration, he further says, "accomplishes itself in the praxis of social life itself. It must always take back into its own purview that which has been placed in the power of human beings, and it has to vindicate the limits that human reason has placed upon its own power and recklessness. We require no proof to see that, for the contemporary human being as well (even as much as modern industry and technology are spreading across the entire globe), in this sense, the understandable world, the world in which we are at home, remains the final authority." See Hans-Georg Gadamer, *The Beginning of Knowledge*, trans. Rod Coltman (New York, Continuum, 2001), pp. 125–126.

shadows of the primitive world. And once man transcends the historicity of the lifeworld, his intellect becomes illuminated by the divine light leading him towards the eternal bliss of intellectual satisfaction.

Conclusion

In his cave-narrative, Plato exploits the phenomenon of illumination in the nexus of the two-world theory metaphorically delineated in terms of the dark-bright contrast of man's act of consciousness. Respecting the variable attributes of the two worlds, and profiting from the opacities and lacunae of the cave-lifeworld and the richness of ideation of the transcendent world of illuminations, he infuses the meanings of divine inspiration into the human discourse of intellectualism. Looking from the privileged viewpoint of contemporary phenomenology of Heidegger and Gadamer, Plato's narrative seems to be unjustifiably interpretable. The narrative is semantically multiform and self-perpetuating, may intricately mesh with the meanings that attempt to reshape it; a set of notions not merely twisted so that its inner-outer relationships reflect phenomenological concepts, but endowed with a capacity for hermeneutic underpinning beyond the limits of phenomenology. The settings of the tale are therefore not landscape of the transcendent world or décor of the cave; they are metaphorically functional and dynamically operative elements of Plato's philosophy. As regards Heidegger's interpretation of the narrative, it overlooks the incredibility of the meaning of transcendence as contained in the tale within the framework of his phenomenological hermeneutics under the pressure of an irresistible force of the doctrine of truth. The gaps in the material of his hermeneutical approach to the narrative constantly enlarge through the disintegrating power of the meaning of truth applied to the various elements of the tale. It is not only Heidegger's version of phenomenology that one confronts the unsatisfactory consequences if one interprets Plato's cave-tale; in case of Gadamer one also faces the same consequences. Recognizing these limitations of two contemporary versions of phenomenology and their interplay with certain elements of the narrative, this paper concludes that Heidegger's lifeworld and Gadamer's tradition both can be aptly aligned with the temporal cave-lifeworld as depicted in Plato's tale. Furthermore, the Platonic depiction of the transcendent world of illuminations forms a doctrinal fold, which remains incompatible with Heidegger and Gadamer both with respect to the way it discerns references to the climax of the tale and connections with the tale's principal theme of light and illumination, and the freedman's continuing ineffectual quest for the understanding of its meaning. Thus both Heidegger's hermeneutic-phenomenology and Gadamer's philosophical hermeneutics do not afford us an appropriate philosophical framework for accomplishing the task of complete discernment of the meaning of the cave-narrative. Therefore, if a contemporary phenomenologist insists on experiencing illuminations immanently within the sphere of everydayness, it means that he is dragging the sun into the cave.

***Wahdat Al-Wujud* and Logos of Life: The Philosophical Comparison**

Konul Bunyadzade

Abstract The article is dedicated to the philosophical comparison between the two important directions of idea which belong to the East and West: between ‘unity of being’ (*wahdat al-wujud*) and logos of life. Firstly, we have briefly analyzed these philosophical concepts. Then we have presented *wahdat al-wujud* as an idea which stands at the beginning and the end of the creation process directed from One to plurality, and the logos of life as the creation energy of the cognition-creation process directed from subject to object: from the human being to Creator or to a creation. And has become clear that the logos of life is the life energy within the unity of being. On the basis of these considerations, we have also investigated the idea, which claims that the human being is matrix, from two aspects. On the one hand, the human being is viewed as a microcosm which stands at the opposite pole from the Creator, and on the other hand as a return of the creation process to the process of cognition and as a changing point.

Introduction

The number of comparisons made between Islamic philosophy and phenomenology is increasing day by day. It is usually based in these comparisons on the philosophies of Shahab al-Din Suhrawardi and Mulla Sadra within Islamic philosophy. In other words, it is referred to an original idea of Islamic philosophy or to the philosophical expression of the Islamic principles. A more original idea of Islamic philosophy, which also underlies the philosophy of the most Sufi thinkers as well as the philosophy of Suhrawardi, is the doctrine of *wahdat al-wujud* – ‘unity of being’. Our aim is to compare the *logos of life* that can expand the human being’s creative force and

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limits of cognition to infinity with the *wahdat al-wujud* and to demonstrate that the *logos of life* is the important part of the *wahdat al-wujud*. The comparison also confirms a truth that thoughts are not separated at the level of ideas and every philosophical trend is a line that leads to the unit world of Idea. The ways to the peak could become closer to each other as well as the ideas that are the main essence of different philosophical trends beyond the framework of the time and conditions can be closer to one another and even they keep with each other in significant points.

***Wahdat al-wujud* as the Expression of Existence**

Wahdat al-wujud is the main idea and essence of the Sufi philosophy. Though this doctrine is attributed to the Sufi thinker Muhyiddin ibn 'Arabī, in fact, as a theory it has existed on the basis of the thoughts of the early Sufi thinkers like Abu Yazid Bistami, Mansur al-Hallaj and Shahab al-Din Suhrawardi.

Then what is *wahdat al-wujud* which now is considered as pantheism, and now as a philosophical trend developed as a result of the impacts of Indian or Greek philosophies?

The human mind is able to cognize within the limited time-space framework, and it perceives only what it can compare or to place in this frame. As the Sufi thinker Ayn al-Quzat al-Hamadani says: "Every meaning, which comes from *ma'rifa* (divine knowledge), could be described only by the means of allegorical expressions".¹ Considering this fact, it would be appropriate to present our thoughts by comparative method. Inasmuch as the human being possesses many divine qualities and he is "a true representative of God on Earth" (khalifatullah), we will make our comparison through man.

The main principle of Sufism is the principle of *Tawhid* – the expression of the oneness and uniqueness of God. *Tawhid*, which is expressed in different terms and methods, is basically considered in two aspects: the essence of God (Dhat) and the unity of the Creator and creation.

In the first case the Sufi thinkers, by referring to the Holy Qur'an, do not discuss God as an ultimate and transcendent one and as a being who stands beyond the mind and discussion. Mansur al-Hallaj, for example, says: "He (God) is beyond His creation, He does not mix with them, they differ from Him in their created characteristics and He differs from them in His eternity. His being is His proof. His divine knowledge (*ma'rifa*) is *tawhid* (oneness). His *tawhid* is His difference; every description of Him in minds contradicts Him. How can a thing, which takes its beginning from Him, mix (*hulul*) with Him? How can His creation reach Him?"² Similar thoughts can be found in the most Sufi thinkers. It means that God's Essence (*Zat*) is beyond the concepts of time and space as well as beyond recognition and cognition. It is called in Sufi doctrine **the world of Oneness** (*ahadiyah*).

¹ Ayn-al-Quzat al-Hamadani, *Zubdat al-haqa'iq*, ed. 'A. 'Usayran. Tehran: Danishgah, 1341/1962, p. 67.

² *Akhbar al-Hallaj*, ed. L. Massignon, Paris, 1936, pp. 31–32.

Every human being is unique in his “Ego”, essence, inner world, even in his body’s cells. It is possible to call it the human being’s world of oneness.

It is usually referred to the second aspect of *Tawhid*, that is, to the Unity of the Creator and creation. Consequently, the first aspect is left in the shadows or forgotten by researchers. Namely, God’s Essence also is considered in the context of the Unity of the Creator and creation.

The human being has certain qualities, characteristics, abilities and talents that introduce him as well as distinguish him from others. Some of them are necessarily related to man and are inseparable from him. They are the definitions of his humanness, and some of them can be created, changed or lost under a certain condition. It resembles the world of Unity (*wahdaniyya*) where all the names and attributes of God unite around the One Essence. Ibn Arabi says: “God is One in His Essence and Many in His names”.³ Or “The divine names are infinite as these names are recognized through their manifestation and their manifestations are infinite”.⁴ Therefore, although they have many different and contradicting attributes, they belong to the One Essence and this, in turn, does not mean that the Essence is inconsistent and can be divided into parts. The plurality and inconsistency are only in attributes and they are the characteristics which belong to the second world – *wahdaniyyah*.

As it is said in a sacred hadith (al-hadith al-qudsi): “I was a hidden treasure and wanted to be known, therefore I created (the world).” It means that the Creator is known by His creation. So in this unity, the Creator and creation are necessary for each other, the first as a source and another one as a means that introduces this source. Naturally, God wants to be known as well as created beings have a power and ability to know Him.

Thus, all the creation is the manifestation of the Same “Being” – attributes and names of the Truth, and the existence of the whole Universe and its improvement is realized in unity with this “Being”. As it is known from its definition as a term and from its interpretation as a concept, *wahdat al-wujud* is the expression of the second aspect of *tawhid*, that is, of the Unity of the Creator and creation.

Logos of Life: As the Force of Creativity

Logos of Life is a more modern term. As Anna-Teresa Tymieniecka writes: “No other philosopher in history better shows the progressive revelation of the logos of phenomena and the intrinsic continuity of its path than does Edmund Husserl”.⁵ However, Tymieniecka “pursues a path different from that of Husserl”: “I came over time to bring out the *crucially significant creative function of the human logos* and to substitute it for the all-dominating intentional consciousness of Husserlian analysis”.⁶

³ Ibn Arabi, *Fusus al-Hikam*, ed. Afifi, Beirut, 1946, p. 90.

⁴ Ibid, p. 65.

⁵ A-T. Tymieniecka, “The Unveiling and the Unveiled”, *The Passion of the Soul in the Metamorphosis of Becoming*. Edited by A-T. Tymieniecka, Dordrecht-Boston, 2003, p. XXXIII.

⁶ Ibid, p. XXXVI.

It should be taken into consideration that Husserl presents his philosophy for a human being who “have lost his faith ‘in himself’, in his own true being: “This true being is not something he always already has, with the self-evidence of the “I am”, but something he only has and can have in the form of the struggle for his truth, the struggle to make himself true.”⁷

Indeed, Husserlian man is the logical continuation of Kantian man: “It (a reason) must regard itself as the author of its principles independent of foreign influences. Consequently as practical reason or as the will of a rational being it must regard itself as free, that is to say, the will of such a being cannot be a will of its own except under the idea of freedom. This idea must therefore in a practical point of view be ascribed to every rational being”⁸.

It is not a coincidence that explaining Kant’s place in the history of philosophy Berdyaev writes: “Kant’s world is no longer that of the Renaissance; it lacks the joy of both knowledge and its infinite perspectives. It is bounded by the speculative awareness of the limitations knowledge and the necessity of its formal justification. This self-consciousness in the sphere of knowledge is a sure sign that the Renaissance spirit had exhausted its thirst for knowledge.”⁹

Indeed, the great ideas and the thirst for creativity existed in the Renaissance provided the human being with ample opportunity to search and cognize himself. The human being was in the struggle with himself by turning sometimes to reason and sometimes to religion. Naturally, the growing power of the reason decided the fate of this struggle. By declaring the divine world as transcendent and giving all the chance of searching the truth only to reason, as if Kant put an end to this struggle. Husserl went further and by using the transcendental reduction he actualized the importance of reaching the ‘pure consciousness’. Consequently, as René Guénon said, “Instead of raising himself to the top of the truth man lowers it to his own level”. It should be specially noted that by moving away from the surrounding world and from the all conditions and influences, and by giving the whole authority to his reason, the human being, on the one hand, has been deprived of his opportunities as a spiritual being and, on the other hand, he has lost his contact with the divine world which is the source of his creative power.

Tymieniecka’s Logos of life has opened, in some respect, a path from the secluded world of man to infinity: “The logos of life extends its relevancy toward its source, the Divine, on the one hand, and toward the immeasurable cosmos, on the other”¹⁰ It is more important that “the constructive logos of life is itself, as hinted at above, a fulgurating force, an ever renewed impetus that simultaneously races and harnesses it the equipoise of a relatively stable form of beingness.”¹¹ Although her

⁷ Husserl Edmund, *The Crisis of European Sciences and Transcendental Phenomenology. An introduction to Phenomenological Philosophy*, Evanston, 1970, p. 13.

⁸ Immanuel Kant, *Fundamental Principles of the Metaphysic of Morals*, translated by T.K. Abbott, Forgotten Books, 2008, p. 72.

⁹ Berdyaev, *The Meaning of History*, New Jersey, 2009, p. 162.

¹⁰ A-T. Tymieniecka, “The Unveiling and the Unveiled”, p. XXXVI.

¹¹ *Ibid*, p. XXXVII.

words “the unveiling of the hidden and yet so powerful logos of life is the work of the intuition of the human mind”¹² bring Tymieniecka closer to her predecessors, it should be taken into consideration that what is of concern here is the human being whose spirit is open for spiritual world and who is in contact with logos.

What is logos then?

As it was mentioned in our previous works, the development trajectory of idea is circular and, for completing the circle, the end should become united with the beginning. Ibn Arabi says: “The one who has a circular movement has no beginning, “from”, which clings to him, and no end, “to”, is judged of him. Thus he has the most perfect existence. He “is given all the words” and wisdoms.”¹³

S. Khalilov describes the processes in Western philosophy as follows: “The logical thinking is one-dimensional space process moving along a coordinate axis. ... As distinct from one-dimensional space (an axis of thought) there are many axes in two-dimensional space (sphere of thought). Axes are infinite. However, there are not crossings between these axes within logical thought. The existence of the vertical distinction requires passing from one level to a higher (or lower) level. In comparison with the physical world it requires energetic perfection (for rising) or energetic illumination (for lowering)”.¹⁴ In other words, the development in the one-dimensional space that became reinforced with Kant in New Age could not continue for a long time. Indeed, this form of development is alien to thought and soul as well as it is limited. Tymieniecka, through her logos of life, has transferred thought to the two-dimensional space and has “bended” it and “restored” thought’s moving trajectory towards the completion of circle

“Homeland” and “the Passion of the Earth”

According to Sufi philosophy, the highest point that man can reach in his trajectory of cognition in the divine hierarchy – *wahdat al-wujud* is the world of sovereignty (rububiyah) or, by reference to Ibn Arabi, *al-a‘yan al-thabitah* (the permanent archetypes).¹⁵ A man, who reaches this world that contains the essences of all beings, can become aware of the truth of the whole creation. The idea of “the confluence of drops with the sea”, which is often used in Sufism, is the artistic expression of our words. Ibn Arabi describes it as follows: « Indeed, the non-time pre-time is not recognized as god until that which depends on its being God is known. Thus it is a proof of Him. Then after this, in the second state, (3) unveiling accords you that the Real Himself is the source of the proof of Himself and His godness. The universe is

¹²Ibid, p. XXXII.

¹³Ibn Arabi, *Fusus al-Hikam*, p. 73.

¹⁴S. Khalilov, “Əbu Turxanın «fikir fəzası» təlimi”, *Fəlsəfə və sosial-siyasi elmlər jurnalı*, 2008, No 4, p. 159.

¹⁵The eternal essences of things which together form the world of Ideas or the spiritual world which is intermediary between God and the material world of sensible phenomena.

but His tajalli in the forms of their source-forms whose existence is impossible without Him. ».¹⁶ The permanent sources are the ideas arisen from the divine attributes and are a sort of their reflection: «Our names are the Names of Allah since everything is, without a doubt, in need of Him. At the same time, our sources are His shadow, and not other-than-Him. So He is our he-ness (هویت – huviyyā), and He is not our he-ness».¹⁷

So, *rububiyah* or the world of ideas or the permanent archetypes (*al-a‘yan al-thabitah*) is the emergence of plurality within the One. The ‘beings’ here do not exist while they exist, that is, they exist in the existence of the One but they do not exist in the material world. It appears that the human being is able to return, speaking in Sufi terms, to his “homeland”- to the world of ideas through his thought, rational and irrational cognition. It is important that Mawlana Jalaluddin Rumi begins his *Masnawi* with the home-sickness of the reed:

“Anyone one who has remained far from his roots,
Seeks return (to the) time of his union.”¹⁸

However, although this world is the peak point of the development of cognition, it is not the last instance, but it is the beginning of the process of returning to society.

Tymieniecka speaks in her philosophy about living beings` longing for the essence that they carried in “the world before this life”. Calling it ‘Passion of the Earth’ she explains it as follows: “Living beingness appears as carrying within itself the prolife schema and life requirements that mother earth possesses. Through this essential existential network, the project of life appears subtended by the earth’s participation in the forces of the universe, the cosmos. Hence, we may see living beingness as a filigree, a microcosmic counterpart of the great macrocosmic horizon”.¹⁹

Two important details should be noted about what have been said. Firstly, what is of concern here is the same structure and affinity of the Earth and living beings (two created ones). It means that both of the two created ones have a unit structure beyond the material world, or one of them is the integral part of another one. From this point of view, the search of the organic part for its place in the common structure and its desire to return there seems logical.

The second point that should be noted is that this common structure is the participant of “the project of life”: “Beyond constituting their own worlds of life? Living individuals essentially partake or participate in vaster areas of living existence”.²⁰

As is seen, although “homeland” and “the Passion of the Earth” are, in a certain meaning, similar to each other, there are also some important differences between

¹⁶ Ibn Arabi, *Fusus al-Hikam-The Seals of Wisdom*, p. 27, <http://www.sufi.ir/books/download/english/ibn-arabi-en/fusus-al-hikam-en.pdf>.

¹⁷ Ibn Arabi, *Fusus al-Hikam-The Seals of Wisdom*, p. 43.

¹⁸ *Dar-Al-Masnawi*. Translations with Nicholson’s Commentaries <http://www.dar-al-masnawi.org/book1.html>.

¹⁹ A-T. Tymieniecka, “The Unveiling and the Unveiled”, p. XXIX.

²⁰ *Ibid*, p. XXVIII.

them. Firstly, the “homeland” in Sufism does not have any material manifestation, while in the passion of the earth we are talking about a certain material place. It is true that Mawlana Jalāl ad-Dīn Rūmī describes reed bed as a symbolic image of “homeland”, however, what he means is the image of the place of idea and the spiritual world.

The second problem in this comparison is the direction of cognition. Thus, as it is seen from the known Sufi formula – *‘ilm al-yaqīn* (the knowledge of Certainty) – *ayn al-yaqīn* (the Eye of Certainty) – *Haqq al-yaqīn* (the truth of certitude) – the direction is from the external world to the inner world. In the phenomenology of life, on the contrary, the direction is from the inner world to the external world. Tymieniecka mentions that the direction of the process of self-individualization is spiral and directed from the inner world to the external world.²¹ It means that the starting point of cognitive process in Sufism is the material world and, by passing the divine world, it becomes completed in the human being, meanwhile, in the logos of life, this process begins from the human being and becomes finished in logos. It is, in fact, an infinite process and the completion is acceptable only for a certain period and circle.

It is an important case that both the notion of “homeland” and “the passion of the earth” have serious impacts, first of all, on the direction of man’s cognition and on the formation of the phenomenon of “Ego”.

The Perfect Grain of the Matrix Man

According to *wahdat al-wujud*, the creation process is covering the essence or idea gained from the divine world with layers. Every world in the hierarchy of creation brings an additional quality and additional layer. It should be added that covering the grain with layers indicates that every created being includes in itself the complex of ideas.

The human being is also one of the manifestations of the One in plurality. It means that, like other created beings, he has a main grain and auxiliary ideas. Indeed, any of auxiliary ideas can be actualized as a leading one in different conditions. By being a complex being, the human being combines in himself a number of ideas and all activities of the human being and his desire of life start to spin around this idea when one of the auxiliary ideas is actualized in his life. Salahaddin Khalilov writes: “As a manifestation of the One idea, the human being seems to be different in different time periods. That is to say, he is also a matrix. However, this matrix has a common regularity as well as he has his own foot and peak and own face”.

However, the grain is grain and the auxiliary idea is auxiliary. Their replacement manifests itself both in the cognitive process of man and in his formation as a person and thus the human being moves away from his essence. It is not a coincidence that

²¹ А-Т. Тумієнєцка, “Человеческое состояние в единстве всего живого”, *Феноменологические исследования. Обзор философских идей и тенденций. Российско-американский ежегодник*, № 5, 2004, Владимир-Наповер, p. 7.

in the philosophy of Khalilov, besides being a complex of certain ideas, the human being is also a beginning of another structuralization and is a matrix. Considering this idea, the philosopher divides the ideas of the human being into active and passive parts: “The human body is a part of the world’s idea and the idea reflected in nature; it is a bearer of passive idea. The soul activates it and thus life emerges. The body (human being) through his rational soul enters the world of active ideas.” Then, considering the qualities that man possesses as well as considering the complex of ideas, it could be said that man is the vital point of the complex of ideas that comes from the Divine One as well as he is the turning point of the creation process that originates from God. In other words, by including many qualities of the Creator, the human being, on the one hand, is a complex of ideas and, on the other hand, though within a limited frame, he himself is a creator.

The human being lives, walks, writes and acts according to his abilities and specificities, and in connection with all this, certain ideas are born in his mind. Some of them are real and some of them are far from reality. The probability of their realization depends on the wish and will of the human being. In other words, every activity of man is the reflection, formation and materialization of these very ideas. However, although the appearance is perfect, there are some parts of the essence that remain non-reflected; the manifestation does not wholly envelop the meaning. Consequently, the complete manifestation of the source of the ideas of material and non-material beings and the full revelation of their truth is impossible. According to the Holy Qur’an, the human being, who is a successor of God on Earth and is created in the image of the Merciful One and who all the angels are at his service, is the most beautiful and highest “idea” among the ideas of God.

The highness of the human being proceeds, first of all, from his potentiality of perceiving the reason of his own essence and existence. It is not accident that the perfect manifestation-place of the logos of life is also the human being: “The revelation of the logos of life in reality – and its conjectured reaching Beyond – is a unique state of individualizing/becoming in which the evolving logos of life acquires its existential plenitude within the full-fledged development of the human individual”.²² It means that by being a bearer of logos, the human being is also a possessor of its power and force, and through him logos acquires a new life.

As we noted above, the ability of recognition and cognition of the human being is in some respect the contrary process of creation. However, two important details should be noted here. Firstly, the human being should find his main idea – grain. Secondly, proceeding from this idea, he should advance to the Absolute. Indeed, the discovery of the grain is the beginning of cognition.

Both Christian and Muslim thinkers called the process of “the discovery of the grain” the opening of the inner eyes (basira = light of the heart) of man, who possesses holy attributes, and the illumination of the divine light in his soul. For example, Eckhart writes: “God is born in the soul; He creates His Word there and

²²Anna-Teresa Tymieniecka, “Before Entering into the Heart of the Matter (Legitimizing the Access of Truth)”, *The Fullness of the Logos in the Key of Life. Book 1. The Case of God in the New Enlightenment*, Springer, 2009, p. xxxiv.

the soul accepts Him and transfers Him to the force of the multiform appearances: at one moment in the form of wish, at the other in the form of good intentions, love or sense of gratitude or in any manifestation of Him. All His creation is His, not yours; you just accept it as something belonging to Him”.²³ ‘Ayn al- Quzat al-Hamadani, who says that the source of *ma'rifa* (divine knowledge) becomes apparent in the inner world of human being,²⁴ writes: “How much more you open your chest for the belief in unseen truth (gayb), your inner world will so much more illuminated with the light which you have never witnessed. Know that it is one of the traces of the extent revealed after the extent of reason”.²⁵

Tymieniecka, who writes about the communication of the human being with logos and divine power, adheres to this position. In the searching of the truth she takes, as a beginning point, a life which is compared with the “state cannot be identified with any one experience and yet it underlies all experiences” and which is the “spark of life”.²⁶ This state, in other words, the communication with logos is the creativity, as well as it is the return to his first essence.

Then, the process of cognition arises from the intersection and unity of the divine power with human consciousness. Simply, man should attempt to find this essence of him and to be ready for the state of intersection. It is not accident that Salahaddin Khalilov says: “The human being, who wishes to feel the world as a whole, should become a bearer of an idea on the universal scale. He should join in the absolute, infinite and eternal idea”.²⁷ In Sufi philosophy, it is the development and perfection of the soul (*nafs*) and the abstinence from all material pleasures. al-Hamadani writes: : Know that there are a lot of stages... It is important for the Truth that one of created beings, who still in this world does not depart from the veil of his heart (who is in the material world), reaches the stages beyond the mind. The thing that he reaches cannot be introduced to anybody neither in this world nor in the world to come. It is true, real and what Gnostics (*arif*) have witnessed”.²⁸

Similarly, the human being should pass some characteristics of his soul for recognizing logos: “The human soul, through which all has to pass, the mind, the intellect, may see the logos clearly or dimly, through a glass darkly, or deviate from its rays. Hence, numerous philosophical attempts reach it only fragmentarily. Yet logos is itself one.”²⁹

Thus, both in *wahdat al-wujud* and in the logos of life the soul is only the participant of the preparation stage of the process of cognition. Then it should remain far from the process or leave its place to the soul. If this does not happen and the human being can not correctly determine his point of departure, the process of cognition will be unclear and will not reach any result.

²³ M. Eckhart, *Духовные проповеди и рассуждения...*, p. 97.

²⁴ al-Hamadani, *Zubdat al-haqa'iq*, p. 67.

²⁵ Ibid, p. 92.

²⁶ Tymieniecka, “Before Entering into the Heart of the Matter”, p. xxxiii.

²⁷ S. Khalilov, “Insan-Matrisa”, *Fəlsəfə və sosial-siyasi elmlər jurnalı*, 2004, No 4, p.116.

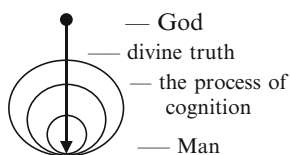
²⁸ al-Hamadani, *Zubdat al-haqa'iq*, p. 97.

²⁹ Tymieniecka, “The Unveiling and the Unveiled”, p. XXI.

The Development Trajectory of “Ego”

The second stage, that is, moving from the grain to the Absolute, has been differently explained by philosophers: the discovery of the inner truth of “Ego”, the recognition of the divine power and ideas and i.e. Indeed, they are various expressions of the One Truth. Moving towards the Absolute is the direct contact of God with the human being and the recognition of the truths of the world that is beyond our rationality. Referring to this thesis it would be appropriate to explain the process in detail.

The process of cognition that begins from “Ego” – from the main idea and grain of the human being rises to the crossing point with the divine truth and then returns back. A cognition circle is completed and a new one begins. The last moment is the unity of the end and beginning, the completion of the circle, the return of the human being, who is in unity with the absolute Being, to his essence and his beginning to a new process with a new beginning. Although the circle of every new stage of cognitive process coincide with the previous one in the initial and final points, it is, however, wider than previous one. At the same time, every new circle causes the unveiling of a higher stages of the diagonal line that comes from God to man. This, in turn, is the formation of the new vision to the first point and to self-cognition. Two processes are observed here. On the one hand, the human being becomes closer to his essence and discovers a deeper layer, and on the other hand, he rises closer to the divine truth. Tymieniecka calls it self-individualization, in other words, a living being individualizes itself through self-cognition and recognition its place in macrocosm. Two directions that regulate each other could be observed in this process: meeting with Logos and the discovery of the stages of man’s matrix. The creativity is between them, in their intersection.



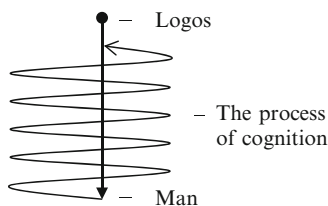
The process itself begins from a three-stage development of the soul. In the first stage, by thinking of itself and other living beings the soul asks the questions “Who am I?” and “Where am I headed?”³⁰ and identifies itself. In the second stage, the human being seeks the Supreme-Ideal one, “perfect beauty”, “ultimate truth” and justice. Tymieniecka writes: “Our being, once emancipated from routine opinions and charmed by subterranean fermentations, turns itself towards the infinite. Our ardor takes as its object burdens beyond the narrowness of ongoing existence; it is oriented toward more elevated goals than those of ongoing life”.³¹ In the third stage, – “in sum, the soul lays the groundwork for the life of the spirit”.³² Although the

³⁰Anna-Teresa Tymieniecka, *Logos and Life: The Three Movements of the Soul*, Book 2, Kluwer Academic Publishers, 1988, p. 53.

³¹Ibid, pp. 71–72.

³²Ibid, p. 87.

soul is humanly lonely here, it acquires a direct contact with the Divine. This development is recognized by means of the spiral line that lasts till logos.



An important point should be noted here: According to Tymieniecka, the soul in its development recognizes itself – its “Ego” in macro-world and rises beyond the material world, but does not return to itself. It is true that in the first stage the human being discovers “three generative matrixes . . . of life in becoming.” This is, however, a horizontal development of man. Why then horizontal? For these discovered matrixes complete each other, and in fine, perfect the life of the human being as a state which is limited by time and space: : “each of which originates a specific sphere marking the evolutionary type of beingness: first, the “womb of life” is found processing the organic forces from prelife conditions in attunement with the available generative material and with relevance to terrestrial and cosmic forces; second, there is the matrix of the “sharing-in-life”, which deploys the rationalities of the vital significance of living beings and matrix of the “creative forge,” which nourished by the bursting forth of human creative virtuality and spontaneity in the incessant inflow and outflow of intergenerative forces processed by the human mind, brings the logos of life to its climatic completion.”³³

Thus, in *wahdat al-wujud*, the human being rises beyond himself to find and cognize his “Ego” and, after crossing with the divine line, returns to himself with a new truth. This movement is circular. The final point of his rising is the first point of his existence. Indeed, the formula of cognitive process in Sufism ends with *Haqq al-yaqin* (the truth of certitude). It is not accident that Khalilov reproaches Sufi philosophy for its ending at the top: “Even though it is opened a new opportunity for activity (more honourable life) at a new level, the human being confuses his starting point with the final point and with death; and after he finds the Truth he wants to pass away from this world.³⁴ Considering the words of the philosopher, by analyzing the essence of Sufi philosophy from the different perspective, we indicate that the trajectory of cognitive process “falls down” after being at the top and thus man returns to his “Ego”.

Another important point in the abovementioned process is related to the culmination moment of human cognition. As mentioned above, in *wahdat al-wujud*, this moment is the crossing point of the trajectory of human cognition with the divine line. This point is the absolute unity and the contact with the divine truth as well as the witness of the One Truth. After this moment, the human being returns back and his every word becomes lower than the essence and does not include it completely.

³³ Ibid, p. XXXVIII.

³⁴ S. Khalilov, “Sufi zirvəsi: son, yoxsa başlanğıc?”, *Fəlsəfə və sosial-siyasi elmlər jurnalı*, 2006, No 3–4, p. 119.

For this reason, the descriptions of this state are advised to be kept secret in Sufism. We can assume that Hallaj's well-known phrase "Ana-l-Haqq" is the cognition of human being isolated in the world of idea from all external influences of his main idea.

The same process occurs in the recognition of Logos too. Tymieniecka writes: "The various levels of the logos, of the constructive logos of the phenomena, are uncovered in a progression that is, as it were, perpendicular to them; marking the phases of the itinerary, the progress 'onward,' so to speak, goes hand in hand with the horizontal discovery of the individualizing structures of living beings (their concatenations within an existential complex, etc.)."³⁵ It is important that the recognition appears on the perpendicular line and the individualization, in turn, in the horizontal direction.

At first glance the differences of two trajectories, which coincide with each other on all major points, can be misunderstood. Salahaddin Khalilov writes: "Thinking can continue till a certain limit or bound; the difficulties increase when approaching the bounds. Thinking becomes tight and screened and then returns back. (We do not even know when it returns). The advancing movement is transformed into the rotation movement. In fact, what is of concern here is may be the spiral movement. It means that both the advancing and returning components exist there."³⁶ Namely, the advancing and returning processes coincide in the development line. If we present man not as a point, but as a matrix, then the movement can appear to be spiral. As we mean the grain of the human being and describe him as a point in the scheme, the movement trajectory reminds us the concentric circles that become united in the same point.

Every new stage in both schemes is a more intense concentration of God-man contact and becoming closer to the Absolute Truth as well as is a chance of receiving more force from the divine power. According to *wahdat al-wujud* and the logos of life, the human being, by means of the power of the divine wisdom, has a certain power in the material world – in the last stage of the creation process – in the "life" that is limited by limited time and space. The approach is the more use of this power. Tymieniecka writes: "The force of the Logos manifests itself in the logos' effusion of life. It acquires "shape" in its performance and is then intuited through that performance, from the inside, as it were. First of all, logos, the reason of reasons and the sense of everything, is not simply a set of principles articulating "matter." It is above all a force, a *driving force* that through its modalities is accountable not only for the incipient instance of originating life in its self-individualizing process but also for the pre-origination, pre-ontopoietic ground and for the subsequent striving toward the abyss of the spirit".³⁷ Indeed, unlike her predecessors Tymieniecka keeps a path for the human being's mind to the world beyond the material and relates his activity and especially his creativity to logos and extends

³⁵A-T. Tymieniecka, "The Unveiling and the Unveiled", p. XXXII.

³⁶S. Khalilov, *Elm haqqında elm*, Bakı, "Azərbaycan Universiteti" nəşriyyatı, 2011, p. 308.

³⁷Anna-Teresa Tymieniecka, *The Fullness of the Logos in the Key of Life*, p. 33.

the sphere of thought. She writes: “From its creative fulcrum, human beingness as the microcosm brings about the world of life – the world of life stretching outward through the earth to the cosmos. And prompted by its growth as created by the logos of life, it brings its own spontaneities forth from its innermost core to surpass the world of life and advances toward the last horizon, one that escapes any phenomenal grasp.”³⁸ The force received from the Absolute – Logos becomes apparent both in man’s manner of life as well as in his cognitive process and creativity – thus the human being’s ability to create and present an idea closer to its essence increases.

The final point that should be noted is the limit of cognitive process – the rising limit of “Ego”.

As is seen from the schema of *wahdat al-wujud*, the Essence (Zat) of God is beyond the trajectory of cognition and He defines the limit of this process. It is worth reminding that the world of Oneness (*ahadiyyah*) is beyond all imagination and thought. As the Holy Qur’an says: “They encompass not a thing of His knowledge except for what He wills” (Koran 2/255). So, the human being knows only what He wills, and everything beyond it is essentially transcendent.

Similarly, the same situation is necessary in the logos of life. Even though logos is the source of man’s creativity “Yet logos is itself one.”³⁹

Conclusion

Thus, it becomes clear that there are many common points between *wahdat al-wujud* and the logos of life and this is, of course, normal. Since the paths leading to the truth and its essence, must necessarily unite. We should especially emphasize the essence of the phenomenology of life. Namely, the logos of life is the reconstruction of the “communication” of the scientific spirit isolated from the divine world and interrupted since Kant, with the Divine Infinite. On the other hand, it is a contact with the East and especially with Islamic philosophy. Indeed, the Absolute Truth is one and is not divided into parts; only its name and form of expression can change. Therefore, as a result of such a comparison, it is possible to put forward an idea that the logos of life is a new form of manifestation of *wahdat al-wujud* in accordance with the modern Western philosophical view.

³⁸A-T. Tymieniecka, “The Unveiling and the Unveiled”, p. XXXIX.

³⁹Ibid, p. XXI.

Consciousness of the Cosmos: A Thought Experiment Through Philosophy and Science Fiction

Sibel Oktar

I will use both philosophical and Science Fiction thought experiments as they help me to investigate the notion of “consciousness” in relation to the search for an absolute truth and/or good in the world, the doubt of an external world and of phenomena. General questions like, what is being conscious, what is being in the world, or better, what is being conscious in the world, will be narrowed down to the concept of self-consciousness. The awakening through such consciousness will take us to the concept of “absurdity” which I believe will pave the way to the understanding of our “consciousness of the cosmos.” What is the relationship of consciousness with our experiences of the external world? Does our existence make any difference in the universe? If our existence is not necessary for the existence of the world, if the cosmos is indifferent to our existence, is our existence just absurd as Sartre, Camus and Nagel have suggested through different insights? I will investigate these questions through the demonstration of thought experiments coming from both philosophy and science fiction and elaborate on the absurdity of our existence within the cosmos, whether it is our own inner experience regardless of the cosmos or is it the result of our embracement of the cosmos with a specific kind of consciousness. This will inevitably place the wondering about the meaning of life at the core of this investigation. I will conclude that, the absurdity of our existence in the cosmos which arises from the clash between the view from the inside and the view from the outside could be resolved with the embracement of the cosmos with a specific kind of consciousness.

Aristotle says that it is in our nature as human beings to seek for knowledge and we all began by wondering. We started to wonder about simple things that we have

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difficulties in understanding such as why something is as it is and “advanced little by little and stated difficulties about the phenomena of the moon and those of the sun and of stars, and about the genesis of the universe.”¹

Although ‘what human nature is’ is also the subject matter of our wondering and we might doubt whether wondering and seeking knowledge is in fact in human nature, here, following Aristotle, we will say that wondering and seeking knowledge is within the nature of human beings. Thus wondering is not specifically the realm of philosophers, but of all human beings. As in his *Theatetus* Plato also places wondering as the foundation of philosophy, to be precise the sole foundation of philosophy, Farah Mendlesohn locates ‘the sense of wonder’ as “the emotional heart of”² science fiction. Of course philosophical wonder applies a different method for analyzing knowledge of the subject matter of its wonderings and constructing a theory to explain it, the wonderings of science fiction quite often overlap those of philosophy. Both wonder on the nature of the human being, the nature of knowledge, the nature of reality, the nature of the universe and the meaning of life.

Not only is the subject matter of their wonderings the same, but also they use a common tool to visualize, conceptualize and investigate it; that is thought experiments. Thought experiments have often been used by philosophers for many purposes. They are commonly used for conceptual analysis, to clarify concepts or to demonstrate something through our mind’s eye, to construct and/or test a theory, to illustrate a theory and to support or attack a theory or view.

Some thought experiments deal with situations that can be demonstrated and even be tested. Some are concerned with situations that one cannot experiment with in real life. Like, Avicenna’s (Ibn-Sînâ 980–1037) “Floating Man” where you are encouraged to imagine yourself suspended in the air isolated from all sensations including your own body parts. Hilary Putnam’s (1926) “Twin Earth” thought experiment, where you are invited to imagine that there is a planet somewhere in the universe that is exactly like the Earth. Plato’s “Cave Allegory” where you have to imagine people that have only ever seen the shadows of objects and have never seen the sun. The famous “brain-in-a-vat” thought experiment, with its varied uses; you are requested to imagine that your brain rests in a vat while your body wanders around. Descartes’ “evil demon” thought experiment requires the supposition of an evil demon that has the ability to deceive us about all our perceptions about the world that we think of as real.

One can say that science fiction thought experiments are merely for entertainment but I think they share many common features with philosophy’s thought experiments, at least the same wondering and ‘what ifs’. The thought experiments that are concerned with the situations that one cannot run in real life are also widely

¹Aristotle, *Metaphysics*, in *Aristotle’s Collection*, trans. Frederick G. Kenyon (Kindle Edition), loc.13432.

²Farah Mendlesohn. “Introduction: reading science fiction” in *The Cambridge Companion to Science Fiction* ed. Edward James and Farah Mendlesohn (Cambridge University Press, Kindle edition, 2003), p. 3. Farah Mendlesohn is Senior Lecturer in American Studies at Middlesex University and she was the Chair of Science Fiction Foundation in 2003.

used in science fiction (SF). SF writers have used most of the thought experiments mentioned above when they have dealt with issues such as what reality actually is, what it is like to be a human being, the possibilities of alternate universes and our relationship with the world. For example, Locke's idea of personal identity and his famous body swap thought experiment about a prince and a cobbler became the SF theme in Philip K. Dick's short story "We Can Remember It for You Wholesale" which was later adapted as the movie *Total Recall*. Both "brain-in-a-vat" and "Twin Earth" thought experiments are used as a theme of many SF books and movies. SF writer Neal Stephenson in his 2008 novel *Anathem* supposes another planet that is almost identical to Earth in many aspects and he also elaborates on Tomas Nagel's question of "what is it like to be a bat?" in the book.

I will use both philosophical and SF thought experiments in this paper as they help me to investigate the notion of "consciousness" in relation to the search for an absolute truth and/or good in the world, the doubt of an external world and of phenomena. General questions like, what is being conscious, what is being in the world, or better, what is being conscious in the world, will be narrowed down to the concept of self-consciousness. The awakening through such consciousness will take us to the concept of "absurdity" which I believe will pave the way to the understanding of our "consciousness of the cosmos." What is the relationship of consciousness with our experiences of the external world? How can we relate our inner experiences to our experiences of the world? What is being conscious in the world? Is this consciousness something that we search for as the justification for our existence? Does our existence make any difference in the universe? If our existence is not necessary for the existence of the world, if the cosmos is indifferent to our existence, is our existence just absurd as Sartre, Camus and Nagel have suggested with different insights? I will investigate these questions through thought experiments that come from both philosophy and science fiction and elaborate on the absurdity of our existence within the cosmos, whether it is our own inner experience regardless of the cosmos or is it the result of our embracement of the cosmos with a specific kind of consciousness. This will inevitably place the wondering about the meaning of life at the core of this investigation.

What Do We Know About the External World? Descartes and Plato in the *Matrix*

To question what our place is in the cosmos is not a simple question in itself but it further complicated by far more implied questions. It takes us directly to the question of the meaning of life, which is a central problem of philosophy. What is the meaning of life? What is the meaning of the cosmos? A seemingly very simple moral question about the meaning of life is related to most of the grand philosophical questions. In order to provide an answer we should check what we know about the cosmos and about ourselves. To do this first of all we must ask what we really know about the external world and how we could justify this knowledge. Do the trees outside my window really exist or am I dreaming?

At this point, we can elaborate on some of the thought experiments provided both by philosophy and science fiction. I will consider three very well-known philosophical thought experiments on this topic of which two are provided by Descartes, the 'dream' and the 'evil demon' arguments, and Plato's 'Cave Allegory'. These thought experiments attempt to illustrate what we can know and questions whether our senses are reliable sources in our quest to understand the world. Are the things that appear to us real? Everything that we claim that we know could be mere illusion. On the science fiction side, Andy and Larry Wachowski's 1999 film *The Matrix* is a famous and fine exemplar of how Plato's and Descartes' thought experiments became the wonder of science fiction.

Plato, in *The Republic*, wants us to imagine a cave like under-ground chamber where prisoners have been kept since their childhood; they are tied up so that they cannot move their heads and only look straight ahead. Behind the prisoners there is road and beyond the road is a fire so they can only see the shadows on the wall which are the images of the objects that people are carrying while they pass on the road between the fire and the prisoners. Plato claims that in such conditions the prisoners would believe that these shadows were "the whole truth." If we trust our sense experiences, depending on our condition, we will believe that what we see is the whole truth.

In the film *The Matrix*, the protagonist Neo is not aware that what he thinks he is experiencing through his senses is a production of a computer generated matrix which he believes to be "the whole truth." It is almost the same as the shadows the prisoners are exposed to. Morpheus who wants to awaken Neo tries to tell him that what he sees is just the shadows and tells Neo that "It is the world that has been pulled over your eyes to blind you from the truth." "What truth?" asks Neo, Morpheus replies: "That you are a slave like everyone else, you were born into bondage, born into a prison that you cannot smell or taste or touch. A prison for your mind." Neo is puzzled and lost with the idea that what he thought of as real throughout his life are mere shadows, obviously it is not easy to accept.

Neo's puzzlement and loss would not surprise Plato, he tells us that if a prisoner was released from his bonds and manages to look towards the fire and told that the things that he used to see were only shadows, not real, he would be at a loss and think that what he is told to be shadows are more real to him. Plato says that "if he were made to look directly at the light of the fire, it would hurt his eyes and he would turn back and retreat to the things which he could see properly, which he would think really clearer than the things being shown him."³

That is exactly what Morpheus worries about and he warns Neo that: "After this there is no turning point. You take the blue pill the story ends, you wake up in your bed and believe whatever you want to believe. You take the red pill you stay in wonderland and I show you how deep the rabbit hole goes." Yet, Neo takes the red pill, since as Plato suggests ignorance would be enslavement, and he is taken to a new world which he is told is real. They want to show him how the matrix works and when he is put into a simulator he reacts like what Plato tells us the prisoner would

³Plato, *The Republic*, trans. Desmond Lee (London: Penguin Books, 1987), 515e, p. 257.

react if he had been made to look directly into the light of the fire and wants to run back to his cave “Let me out! I want out!” shouts Neo, “I don’t believe it.”

Plato’s story continues with the adaptation of the prisoner who looked into the light and his acceptance of the fact that what he used to think of as real was not. At this point the prisoner, with his newly acquired knowledge, felt sorry for his fellow-prisoners and wanted to release them. So does Neo. When he asks Morpheus why they do not unplug the others from the system Morpheus’ answer is “... most of these people are not ready to be unplugged. And many of them are so inert so hopelessly dependent on the system that they will fight to protect it.” Plato could have answered Neo’s question in almost the same way as Morpheus’, he says: “anyone who tried to release them and lead them up, they would kill him if they could lay hands on him.”⁴

As stated by Plato and demonstrated in the film, the idea that all you think that you know about the reality of the world might be an illusion is painful. Where does this doubt about the external world end? What if Neo finds out that the world that is presented to him as real after he has been unplugged from the matrix is also an illusion? Neo thought that he was having a real life in the matrix until he is told that his body was kept outside the matrix in a small compartment that was filled with a liquid that kept him alive to provide energy for the machines to survive. The actual reality of the machines seems more questionable to Neo than the reality he used to experience. He had been deceived by the machines all his life in to believing that he was having a good life, there are houses, trees an entire city around him, that he felt the heat of the sun and the taste of wine whereas in actual fact he was just a battery. What if these evil machines are still deceiving him? Does not Descartes warn us that it will be wiser not to trust entirely that that has deceived us before? That is the core of his ‘evil demon thought experiment. He asks us to consider an evil genius who is extremely powerful who “has employed all his energies in deceiving”⁵ us.

How could Neo be sure of what is real? In the film Neo touches the chair and asks “This isn’t real?” Morpheus replies “what is real?” he continues “If you are talking about what you can feel, smell, taste and see then “real” is simply electrical signals interpreted by your brain.” He touches the chair and feels it, but he cannot trust his senses which once deceived him. Could what he is experiencing be a dream and that he will wake-up and find out that everything is in place. In the film Neo experiences many dreams within dreams, he thinks that he opened the door to talk to his friend and finds himself waking up in front of his computer, he thinks that he is being interrogated by the agents of the matrix and has been implanted with a bug but then he finds himself in his bed indicating that has been dreaming. So Morpheus asks him: “Have you ever had a dream Neo, that you were so sure was real? ... How would you know the difference between the dream world and the real world?” takes us directly to the main question of Descartes’ dream argument. Descartes tells us

⁴*Ibid.*, 517a, p. 259.

⁵Descartes, “Mediations on First Philosophy” in *Key Philosophical Writings*, trans. Elizabeth S. Haddane and G.R.T. Ross, ed. Enrique Chaves-Arviso (London: Wordsworth Editions Limited, 1997), p. 138.

that we have dreams that are less likely to happen but some of our dreams can reflect the things that can happen outside the dream. How can we be sure that when we think we have just awoken we are not still dreaming? Descartes thinks that we cannot. He says: “that there are no certain indications by which we may clearly distinguish wakefulness from sleep ... And my astonishment is such that it is capable of persuading me that I now dream.”⁶

Now we end up with doubts about the reality of the external world. We could all be sleeping right now or be in a computer generated matrix and there is no tool that we can use to verify the reality of the external world. Can we wonder about the meaning of life while we doubt even the existence of the external world? Certainly we can. We can still wonder about the meaning of life. If nothing exists but myself what is the meaning of my life? If I am in a constant sleep or in a matrix what is the meaning of my existence in such a mode of existence?

David J. Chalmers provides another point of view on our doubts of our external world. If Neo was in a matrix all of his life, being in a matrix is not a skeptical hypothesis rather it is metaphysical hypothesis. He says that “it is a hypothesis about the underlying nature of reality.”⁷ This hypothesis tells us about the nature of the external world not that it does not exist; it gives us the information on what our world is. He explains the nature of world as: “First, physical processes are fundamentally computational. Second, our cognitive systems are separate physical processes, but interact with these processes. Third, physical reality was created by beings outside physical space-time.”⁸ How would this new knowledge about his world effect Neo? Would it change his interaction with the external world that is not made up of atoms but of bits? What would he do with this new consciousness of the world? Would he change all his beliefs about the external world if he accepts that he is living in a matrix? Chalmers suggests that that is not necessarily so. He says that: “At most they should come to revise their beliefs about the underlying nature of their world: they should come to accept that external objects are made of bits, and so on. These things are not massively deluded: most of their ordinary beliefs about their world are correct.”⁹ Thus, the chair that Neo was asking whether real or not, is real. The nature of the chair changes but not its reality, the chair exists, not made up of atoms but of bits.

Camus shares Chalmers’ idea that the knowledge that is provided about the underlying nature of his world will not change most of his beliefs about his world. He says that the science that provides him his multi-colored universe can be reduced to atoms and atoms can be reduced to electrons and a nucleus. That is not much different than knowing that external objects are made of bits. This knowledge of the

⁶ *Ibid.*, p. 136.

⁷ David J. Chalmers, “The Matrix as Metaphysics” in *Science Fiction and Philosophy From Time Travel to Superintelligence*, ed. Susan Schneider (Blackwell Publishing, Kindle Edition, 2009), p. 36.

⁸ *Ibid.*, p. 36.

⁹ *Ibid.*, p. 42.

nature of the world neither brings him to a conclusion about the meaning of life nor ends his wonder. Camus says that:

All this is good and I wait for you to continue. But you tell me of an invisible planetary system in which electrons gravitate around a nucleus. You explain this world to me with an image. I realize then that you have been reduced to poetry: I shall never know. Have I the time to become indignant? You have already changed theories. So that science that was to teach me everything ends up in a hypothesis, that lucidity founders in metaphor, that uncertainty is resolved in a work of art. What need had I of so many efforts? The soft lines of these hills and the hand of evening on this troubled heart teach me more.¹⁰

Thus, knowledge about the nature of the external world, although very doubtful, will not stop us searching for the meaning of life. Even if we do not agree with Chalmers that these thought experiments do not necessitate a skeptical hypothesis that doubts the existence of the external world, the idea that there is no external world might even trigger the urge to find a meaning of life. But what if not only the external world but also our bodies do not exist?

In all of the above thought experiments the doubt about the existence of our bodies was implied. This doubt is very important for us to understand what consciousness is, but I specifically leave the mind-body problem to the next section and elaborate upon it through different thought experiments.

The Brain-in-Vat: The Age of Death Ended

The doubt about the existence of the external world inevitably brings us to the doubt about the existence of our body since our body is thought to be a material thing which is the part of the external world. Descartes through his 'evil demon' thought experiment arrives at the famous conclusion "I think, therefore I am" (*cogito ergo sum*). Even if everything is an illusion that is created by the evil demon who wants to deceive us I must exist in order to be deceived. Although I cannot know the existence of my body, I can know my existence. Being able to think is a key element for the knowledge of my existence and this is nothing to do with my body. Thus consciousness does not require a body. Avicenna, long before Descartes, comes to the same conclusion with a different thought experiment.

Avicenna, in his *De Anima of the Shifa*, uses the Floating Man thought experiment to confirm the existence of consciousness without the need for the existence of a body. He says:

One of us must suppose that he was just created at a stroke, fully developed and perfectly formed but with his vision shrouded from perceiving all external objects - created floating in the air or in space, not buffeted by any perceptible current of the air that supports him, his limbs separated and kept out of contact with one another, so that they do not feel each other.¹¹

¹⁰ Albert Camus, *The Myth of Sisyphus*, trans. Justin O'Brien (London: Penguin Books, 2005), p. 18.

¹¹ Quoted from Lenn Goodman's *Avicenna*. Lenn Goodman, *Avicenna* (Florence: Routledge, 1992), p. 155.

Then Avicenna asks whether the Floating Man could affirm the existence of his self in such a condition. His answer to this question is affirmative, he believes, without doubt the Floating Man would confirm the existence of his self although he could not confirm the existence of external world including his body, inner organs, heart or brain. He concludes that:

Indeed he would affirm the existence of this self of his while not affirming that it had any length, breadth or depth. And if it were possible for him in such a state to imagine a hand or any other organ, he would not imagine it to be a part of himself or a condition of his existence.¹²

This suggests that our bodies and minds are two different entities. The body is a physical, material entity whereas the mind, the source of our consciousness is a non-physical entity. For Avicenna it goes without saying that affirming the existence of the body is not necessary for the affirmation of the existence of self. Also, Descartes claims that his ‘evil demon’ thought experiment smoothly takes us to the same conclusion. And he declares without a shadow of a doubt that: “It is certain that this I [that is to say, my soul by which I am what I am], is entirely and absolutely distinct from my body, and can exist without it.”¹³

Daniel C. Dennett says that the modern-day version of Descartes’ ‘evil demon’ thought experiment is the ‘brain-in-vat’ thought experiment. Although, the brain-in-a-vat thought experiments differ in their story settings, basically we are talking about a case where experienced neuroscientists disembodied a brain and place it in a vat which is filled with liquid to support the brain in this vat. The brain is connected to a computer that simulates the world, and just sends inputs to the brain and receives its outputs. Throughout the process the brain in vat thinks that everything is normal and usual and is not aware that it lacks a body. This is similar to Neo’s situation in *The Matrix* movie and the scientists deluded the brain as the evil demon does to Descartes.

The concern in this modern-day version, shifts from “proving one’s own existence as a thinking thing” to concern about what “we may conclude from our experience about our nature, and about the nature of the world in which we (apparently) live.”¹⁴ This paper is also interested in the implications of the knowledge about our nature and the nature of the world.

Both philosophers and Science Fiction writers explore many ‘what if’ scenarios and tell us what the nature of the world is in each ‘what if’ case. Thus, what will be the impact of having a physical and mortal body and a non-physical eternal mind? What will it tell us about the nature of our world? What is it to have a body without mind or a mind without body? What is it being a human being in these forms of existence? It is not so easy to determine that brain-in-a-vat thought experiments are science fiction or philosophy thought experiments. John Pollock’s “Brain in a Vat” begins like a thriller. Pollock tells us that on a rainy night his friend Harry’s wife

¹² *Ibid.*, p. 155.

¹³ Descartes, op.cit., p. 181.

¹⁴ Daniel C. Dennett, *Consciousness Explained* (Penguin Science, Kindle Edition, 1993), p. 3.

called him and told him that six hooded armed men had broken in, made sure that he was the right person, put him in an ambulance and drove away. When Harry's wife Ann called the police, two plain clothes officials arrived and told her to keep her mouth shut otherwise she would never see her husband again. As Ann wrote down the number of ambulance, Pollock was able to find out that Harry had been taken to a private clinic. After an adventurous search he founds Harry, but a surgical team had removed the top of his skull and had taken his brain out. The brain was placed in a stainless steel bowl and some tubes and wires connected to Harry's "disembodied brain." Pollock was himself caught and strapped to the operation table. He was told that Harry was not dead and that Harry's brain had been removed from the body and kept alive with a new surgical procedure developed by the best neuroscientists of the world. The wires which were connected to Harry's disembodied brain also connected him to a computer. This powerful computer provided input to the sensory cortex of the brain which was in the vat. Through these inputs Harry had a "fictitious mental life" which seemed to him as normal. He was not aware that he was just a brain in a vat. The scientists eased Pollock's apprehension that he too would go through the same procedure by telling him that there was nothing to worry about because they had already done this operation 3 months ago. They then let him go with all the doubts in his mind about whether he is a brain in vat or he is really going to his office and for him there is nothing there to confirm him whether it is the case or not.¹⁵

Science Fiction writer Greg Egan explores the idea of minds without bodies or bodies with minds that are supported by quantum computers in his *Schild's Ladder*. Twenty-thousand years in the future, human beings manage to come to a stage that embodiment becomes almost a preference. Those who are used to being corporeal insist on having a body. Cass, a scientist from Earth, travels 370 light years to Mimosa Station, a remote experimental facility, to conduct some experiments that might shed light on the physical laws that govern the entire universe. It is a custom that travelers leave back-ups of their minds in a safe place and travel to wherever they want where a new body is grown for them. Mimosans are a corporeal so they do not need a body, but, Cass, who used to have a body back on Earth, prefers embodiment for having honest perceptions of her surroundings. Six hundred years later this story is told to the protagonist, Tchicaya, by a Mimosan named Yann as: "When Cass came to Mimosa, she insisted on a body. We obliged, but we made it small enough to fit."¹⁶ Indeed the body they gave her was 2 mm long, a joke on her insistence for embodiment. The bodies are grown through a process called morphogenesis and they are made of flesh.¹⁷ But the brain is not flesh. The brain in the skull is linked to the person's Mediator which works via nerve and skin cells and the Mediator is connected to the Qusp (the quantum singleton processor) and in the

¹⁵ John Pollock, "Brain in a Vat" in *Science Fiction and Philosophy From Time Travel to Superintelligence*, ed. Susan Schneider (Blackwell Publishing, Kindle Edition, 2009), pp. 17–19.

¹⁶ Greg Egan, *Schild's Ladder* (Kindle Edition, 2010), p. 181.

¹⁷ Morphogenesis can be a long process if the basic DNA code used is the one the mind was born with or a three hours process if any other DNA code or even a perused body is used.

Qusp the mind is cocooned.¹⁸ What is the implication of being able to have a mind that can survive without a body, a mind that you can have back-ups of? There are several implications on our understanding of our nature and the nature of the world we live in. I will consider two. The first one is to understand what it is like to be a person as described in the *Schild's Ladder* and the second one is what it is like to have an eternal mind which is what it is like to live in the Age of Death Ended.

Is Tchicaya, while living on a Qusp, a person? What is it like to be a person? After having a problem in the space shuttle Mariama asks Tchicaya, 'Are you all right?' He replies: "that depends what you mean by *me*. My Qusp is fine. Parts of my Mediator got fried; I only have a short IR link left. My body's not a pretty sight, but it's recovering."¹⁹ So what makes Tchicaya Tchicaya? His digital brain, his Qusp, his Mediator or his body?

Dennett in one of his brain-in-vat thought experiments mentioned the brain-body- and self distinction. He says: "'Yorick,' I said aloud to my brain, 'you are my brain. The rest of my body, seated in this chair, I dub 'Hamlet.'" So here we all are: Yorick's my brain, Hamlet's my body, and I am Dennett. *Now, where am I?*"²⁰

Although, 'how and where does consciousness occur?' is not an issue that everyone agrees, there is no dispute that there needs consciousness to be able to affirm that we exist. Aristotle states that for all human activity, like hearing, seeing, walking and he adds:

[T]here is a faculty that is conscious of their exercise, so that whenever we perceive, we are conscious that we perceive, and whenever we think, we are conscious that we think, and to be conscious that we are perceiving or thinking is to be conscious that we exist.²¹

Thousands of years later, with the advancement of science which brings the knowledge of evolution and neuroscience, neuroscientist Antonio Damasio has arrived the same conclusion. He says, "[i]n the absence of consciousness, the personal view is suspended; we do not know our existence; and we do not know that anything else exists."²² This personal view that is provided by consciousness brings the concept of self. As John Locke states thinking is essential for consciousness and consciousness makes one what he or she calls self. Locke's distinction of man and person depends on consciousness and makes possible his notion of self identity. For Locke, man is "a living organized body ... nothing else but of an animal of such a certain form."²³ It does not have the concept of self. Whereas a person is "a thinking intelligent being, that has reason and reflection, and can consider itself as itself, the

¹⁸Greg Egan. op.cit., see pp. 23, 260, 277.

¹⁹*Ibid.*, p. 251.

²⁰Daniel C. Dennett, "Where am I?" in *The Mind's I: Fantasies and Reflections on Self and Soul*, ed. Daniel C. Dennett and Douglas R. Hofstadter (New York: Basic Books, 2000), p. 220.

²¹Aristotle, *The Nicomachean Ethics*, trans. Harris Rackham, (Hertfordshire: Wordsworth Editions Limited, 1996), 1170a, p. 248.

²²Antonia Damasio, *Self Comes to Mind*, (London: William Heinemann, Kindle Edition), p. 4.

²³John Locke, *An Essay Concerning Human Understanding* (John Locke Book Collection: Kindle Edition) Book 2, Chapter 27, sec. 8, location 5405.

same thinking thing, in different times and places.”²⁴ This understanding of person makes possible the ‘self,’ which one can distinguish herself/himself from others and this is what Locke calls ‘personal identity’. It is consciousness that makes personal identity. He defines it as “the sameness of a rational being: and as far as this consciousness can be extended backwards to any past action or thought, so far reaches the identity of that person.”²⁵

Thus the answer we could provide Tchicaya’s question, i.e., “what makes me *me*?” evidently depends mainly on our assumption of the unity or the dichotomy of mind and body. Whether we accept the unity or the dichotomy of mind and body, we will agree that first of all we need consciousness to be able to talk about our existence. Then, the inevitable question arises; where does consciousness occur? In the body, specifically in the brain or in the mind?

For Locke personal identity is not dependent on whether it is attached to “one individual substance” or it is “continued in a succession of several substances.” In the *Schild’s Ladder* when Tchicaya was provided a new body he tried to get accustomed to his body we are told that there is a “distracting sense that his own flesh was like poorly-fitted clothing.”²⁶ Metaphorically ‘cloth’ is also used by Locke, he says in case of change of substance a person will not become two people no more “than a man be two men by wearing other clothes to-day than he did yesterday, ... the same consciousness uniting those distant actions into the same person, whatever substances contributed to their production.”²⁷ For Locke, if you separate the body from the “thinking conscious self” personal identity will not change. “Self depends on consciousness, not on substance”²⁸ whether material or immaterial. Thus self does not depend on soul or body. Locke agrees that “consciousness unites substances, material or spiritual, with the same personality.”²⁹ Here, if we answer Tchicaya’s question what makes him him according to Locke’s argument, as Qusp is the recorded personality of Tchicaya it is his Qusp that makes him him.

Locke’s idea that consciousness unites substances is restated in its modern version by Damasio. He says that: “The idea that it is the entire organism rather than the body alone or brain alone that interacts with environment often is discounted, if it is even considered.”³⁰ Locke, considering how his thought experiments and his idea that consciousness does not depend on substances might be seen as absurd asks: “Did we know ... whether it could or could not perform its operations of thinking and memory out of a body organized as ours is?”³¹ This doubt is not baseless; we

²⁴ *Ibid.*, Book 2, Chapter 27, sec. 9, location 5441.

²⁵ *Ibid.*, Book 2, Chapter 27, sec. 9, location 5446.

²⁶ Greg Egan. *op.cit.*, p. 47.

²⁷ John Locke, *op.cit.*, Book 2, Chapter 27, sec.10, location 5467.

²⁸ *Ibid.*, Book 2, Chapter 27, sec.17, location 5548.

²⁹ *Ibid.*, Book 2, Chapter 27, sec.25, location 5629.

³⁰ Antonio Damasio, *Descartes’ Error* (New York: Penguin Books, 1994), p. 224.

³¹ John Locke, *op.cit.*, Book 2, Chapter 27, sec.27, location 5663.

can only separate “mind-self-body-brain” in thought experiments we do not know yet how they will function when we have the technology to separate them like the brain in vat thought experiments. With this scientific information, Damasio says that:

The idea that mind derives from the entire organism as an ensemble may sound counterintuitive at first... the concept of mind has moved from the ethereal nowhere place it occupied in the seventeenth century to its current residence in or around the brain – a bit of demotion, but still a dignified station.³²

He is not suggesting that the mind is in the body what he is suggesting is that “the body contributes more than life support and modulatory effects to the brain. It contributes a *content* that is part and parcel of the workings of the normal mind.”³³ Damasio says that mind occurs from “activity in neural circuits” and those circuits “contains basic representations of the organism” and as an answer to Locke’s question ‘whether it could perform its operations out of a body organized as ours’ he says that “if the basic topic of those representations were not an organism anchored in the body, we might have some form of mind, but I doubt that it would be the mind we do have.”³⁴

Is Tchicaya a person as we are and is his mind different than ours? Despite the fact that there are acorporeal beings in the book, the embodied beings like Tchicaya use bodies that are organic, which are made up by DNA code, and their Mediators work via nerve and skin cells. In a way their mind contains representations of the organism. They are consciousness and have a concept of self. Tchicaya is a thinking intelligent being, he has reason and reflection, and he considers himself to be himself and he is conscious of present and past actions. Thus, depending on Locke’s definition of person, he qualifies as a person. But what happens if he loses the memory of his past actions? For Locke, as memory and consciousness is the same, Tchicaya will not be the same person if he loses his memory.

Indeed, in *Schild’s Ladder* there are cases of memory loss where they must retrieve their back-ups. When there is a possibility of an explosion that might destroy everything in the experimental facility one of the Mimosans asks the protagonist Cass:

‘If the station is destroyed, we all have recent backups en route to Viro. What about you?’ She said, ‘I have my memories back on Earth. But nothing since I arrived here.’ The five years she’d spent among the Mimosans would be lost. It had still happened. She had still lived through it all. It would be amnesia, not death.³⁵

If we take memory as the fundamental criterion of identity we do not depend on body. Terence Penelhum in his article “Personal Identity” states that in such a situation “perhaps bodily death is merely one major event in a person’s history and not the end of him.”³⁶ Mimosans having recent back-ups would have survived death.

³²Damasio, op.cit., p. 225.

³³*Ibid.*, p. 226.

³⁴*Ibid.*, p. 226.

³⁵Greg Egan. op.cit., p. 40.

³⁶Terence Penelhum, “Personal Identity” in *Encyclopædia of Philosophy*, 2nd Edition, Donald M. Borchert, Editor in Chief, Vol 7. pp. 214–215.

Cass' condition is somewhat different since she will lose 5 years memory, when she retrieves her back-up she will have no memory of all these 5 years and she will not be the same person who she was in the last 5 years. When the acorporeal Mimosians worried about her bodily death Cass responded: "I'm embodied, not deranged! If a copy of my mind experiences of a few minutes' consciousness, then is lost, that is not the death of anyone. It is just amnesia."³⁷

At this point, it is better to start to evaluate the second implication, which is what is it like to be immortal, to have an eternal mind. In *Schild's Ladder* the time before the invention of Qusp is defined as the Age of Death. Descartes tells us that the mind is immaterial and eternal which suggests that there is no notion of death. If there is no notion of death how it will affect the meaning that we attached to life? What will be the meaning of life where we live in eternity? Camus tells us the absurdity of life and says that "like everything else, the absurd ends with death."³⁸ What is it condemned to live this absurd life forever with no hope that it will end with death?

Egan tells us the mixed feelings of the protagonist when he thinks that the woman he has loved for thousands of years might be harmed even knowing that she will not die, as:

The structure of his mind had been passed down with only a few small modifications from the original form, shaped by evolution in the Age of Death, leaving him with the choice between embracing its impulses in all their absurdity – ... – or struggling to invent a whole vocabulary to replace them.³⁹

Thus, we still have the choice to embrace life with all its absurdity or struggle to find a meaning for it. It is like choosing courage and reasoning as Camus' absurd man, but the main difference is here it will not be a protagonist's "revolt devoid of future and of his mortal consciousness"⁴⁰ since he has an immortal consciousness. Is it possible that it is a revolt of his immortal consciousness? What if he loses all the back-ups that contain the memory of the woman he has loved for all these thousands of years?

Although the end of absurdity depends on death, Camus and Wittgenstein agree that "there is no experience of death"⁴¹ and "we don't live to experience death"⁴² thus for an immortal being like Tchicaya embracing the absurdity will not be much different since the absurd man will not experience death either. They will choose life with the awareness of its meaninglessness, one with a limited life span one with a limitless life.

Bernard Williams has a strong and interesting suggestion that "[I]mmortality, or a state without death, would be meaningless, I shall suggest; so, in a sense, death

³⁷Greg Egan. op.cit., p. 22.

³⁸Albert Camus, op.cit., p.29.

³⁹Greg Egan. op.cit., p. 97.

⁴⁰*Albert Camus*, op.cit., p. 64.

⁴¹*Ibid.*, p. 14.

⁴²Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*, trans. D.F Pears and B.F. McGuinness (London: Routledge Classics, 2005), # 6.4311.

gives meaning to life.”⁴³ Although Williams provides a different line of argument to arrive this conclusion, I will take the liberty to consider what he says as a phrase to evaluate the concerns of an absurd life. In the light of the arguments on the absurdity of life it is understandable to say that immortality would be meaningless and although it is not easy to accept that death gives meaning to life it is hard to deny the strong connection of death to the meaning of life. The meaning of life is generally associated with our limited life span.⁴⁴ Within our limited life span all the searches for an answer to the meaning of life remain unanswered unless we believe that there is an after-life where our actions will be rewarded or punished. But if we take Thomas Nagel’s definition of death, permanent death, which is a state “un-supplemented by any form of conscious survival”⁴⁵ or as he later puts as a permanent nothingness, then with death everything ends. So what is this fuss about the meaning of life? Since, we are going to die all the activities to sustain us, to support a family, to pursue a career “is an elaborate journey leading nowhere.”⁴⁶ Nagel says that the arguments about the absurdity of life with its connection to time and space takes the form “we are tiny specks in the infinite vastness of the universe; our lives are mere instants even on a geological time scale, let alone a cosmic one; we will all be dead any minute.”⁴⁷ But he adds that if life is absurd it will still be “infinitely absurd if it lasted through eternity.”⁴⁸ Thus having an eternal life would not make any difference if life is absurd. Nagel suggests: “If *sub specie aeternitatis* there is no reason to believe that anything matters, then that does not matter either, and we can approach to our absurd lives with irony instead of heroism or despair.”⁴⁹

Since we have self-consciousness we have the ability to question our existence and our aspirations. Nagel says that we can view our life *sub specie aeternitatis* through our capacity to step back and survey ourselves, “we see ourselves from outside, and all the contingency and specificity of our aims and pursuits become clear.”⁵⁰ Here comes the absurdity. Nagel thinks that the absurd does not arise from “confrontation between the human need and the unreasonable silence of the world,”⁵¹ but “from a collision within ourselves.”⁵²

Whether absurd arises from a collision between our expectations and the world or from a collision within ourselves could be discussed but what is clear is that both

⁴³ Bernard Williams, *Problems of the Self* (Cambridge: Cambridge University Press, 1999), p. 82.

⁴⁴ After all, Camus defines the absurd man as one who ‘does nothing for the eternal’; with the awareness of his limits and his limited freedom Camus’ absurd man sees the “burning and frigid, transparent and limited universe.” Albert Camus. *The Myth of Sisyphus*, trans. Justin O’Brien (London: Penguin Books, 2005), pp. 58.

⁴⁵ Thomas Nagel, *Mortal Questions* (Cambridge University Press, Kindle Edition, 1979), p. 1.

⁴⁶ *Ibid.*, p. 12.

⁴⁷ *Ibid.*, p. 11.

⁴⁸ *Ibid.*, p. 11.

⁴⁹ *Ibid.*, p. 23.

⁵⁰ *Ibid.*, p. 15.

⁵¹ Albert Camus, *op.cit.*, p. 26.

⁵² Thomas Nagel, *op.cit.*, p. 17.

Camus and Nagel would agree that in order to be aware of the absurdity of life we should be able to view our lives from outside and this view is provided by our self-consciousness. Damasio says that the brain needs subjectivity in order to become conscious. He explains this as follows:

The decisive step in the making of consciousness is not the making of images and creating the basics of a mind. The decisive step is *making the images ours*, making them belong to their rightful owners, the singular, perfectly bounded organisms in which they emerge.⁵³

If subjectivity is what makes images ours and consciousness possible through this subjectivity then we can talk about a discrepancy between the images as they are and the images that we make ours. Indeed, Damasio says that “we adopt two sorts of optic when we observe our beings; we see the mind with eyes that are turned inward; and we see biological tissues with eyes that are turned outward.”⁵⁴

Wittgenstein states that “The usual way of looking at things sees objects as it were from the midst of them, the view *sub specie aeternitatis* from outside.”⁵⁵ Looking at things from outside gives us a different picture, a picture how things really are and looking at things from the midst of them provides a subjective view that is the picture of things that we make ours. And when these two pictures do not match we struggle.

Therefore, it is crucial to know from what framework we are conceiving the nature of the world we live in, the meaning of life. Our interaction with the world and the place we attribute to ourselves in the world is related to our standpoint. From the outside ‘the brain in vat’ is a brain in a vat whereas from the inside, or as Dennett puts it from the brain’s perspective, it has a body and it is wherever it wishes. From the outside Neo is in a small compartment that is filled with a liquid that keeps him alive, from the inside he is having a real life in the matrix. From the outside everything in the cosmos is arbitrary, from the inside it has a meaning. Since consciousness requires subjectivity, since we can only ascribe meaning to life with the view from the inside then the consciousness of cosmos depends on the view from the inside. The absurdity of our existence in the cosmos which arises from the clash between the view from the inside and the view from the outside could be resolved with the embracement of the cosmos with a specific kind of consciousness.

⁵³ Antonio Damasio, *Self Comes to Mind*, p. 10.

⁵⁴ *Ibid.*, p. 14.

⁵⁵ Ludwig Wittgenstein, *Notebooks 1914–1916*, trans. and ed. G.E.M. Anscombe (Oxford: Blackwell, 1984), p. 83.

Part IV

The Open Void – Embodiment and Experience – In Film/Video/ Numeric-Computer Art and Immersive Environments

Marguerite Harris

Abstract In non-Western cultures including those of the African and Eastern continents, the relationship of the individual self to the cosmos and the progression of life is established through spiritual and ritual practice. In Western cultures, the relation of the individual self to society as well as the notion of truth is based on empirical forms of knowledge. The following reading will discuss current trends in New Media theory, including computer technologies in film/video, digital and analog and their relational influences to non-Western forms of thought.

Referencing models of phenomenology and African and Eastern philosophies, the reading will draw a connection between current trends in computer and scientific systems of logic and the influences of non-Western forms of thought. Included are examples of various filmmakers and computer artists cited to establish the necessity for a critical framework which can construct a continental philosophical discourse toward New Media Theories.

We want to know how by its own vitality, and without carrying complementary material into a mythical unconscious, consciousness can, in course of time, modify the structure of its surroundings; how, at every moment, it's former experience is present to it in the form of a horizon which it can reopen--if it chooses to take that horizon as a theme of knowledge- (Phenomenology of Perception, M. Merleau-Ponty)

The computer has become the vast network of telecommunications shaping the lives of our world population daily. Mediated experiences through visual stimuli bombard our everyday experiences. The internet, cyberspace, AI (artificial intelligence), webcams, cellular phones, YouTube, interactive graphic displays, virtual realities are only a few which comprise the array of communication technologies.

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Idealism in the age of technology, constructs a language founded on the principles of empirical forms of gathering knowledge. It imposes the status of truth, relative to the process of human evolution.

Current models, based on empirical forms of knowledge also include forms of non-Western thought which have had a profound influence in the development of contemporary technological discourses and have also shaped the foundations of this phenomenon.

How do we begin a discourse of language, semiotic or structural models, which can complement empirical language, metaphysical language and intuitive processes of human awareness? In this model, creating a space for new forms of philosophical inquiry.

The beginnings of such inquiries can be found in the creative works of the experimental video-film community. As such, the following paper will discuss various filmmakers and artists and examples of their work which have been influenced by both Western and non-Western forms, seeking to understand the relationship between empirical forms of reason, and experiential forms of knowledge.

The discussion will divide into sections; beginning with Cartesian renderings, then interspersing the works of various filmmakers and artists and ending with technologies of the obsolete.

Immortal Beloved: Cartesian Renderings- the Mind/Body and the Apparatus in the Face of Immortality

“And, finally, on these grounds, we are necessitated to conclude, that all those objects which are clearly and distinctly conceived to be diverse substances, as mind and body, are substances really reciprocally distinct....“For we are not able to conceive the half of a mind, as we can of any body; however small, so that the natures of these two substances are to be held, not only as diverse, but even in some measure as contraries.....the human body is no longer the same if a change take place in the form of any of its parts: from which it follows that the body may, indeed, without difficulty perish, but that the mind is in its own nature immortal.” (Descartes; summary of the meditations; 1641)

Descartes can be interpreted in the following writings as putting forth the distinction of the mind – body and forming a foundation for the construction of a language based on logical empiricism, establishing this function of reason.

In the language of technology, “contemporary” culture, a body-consciousness can enter the virtual space of a computer, uncoded by signifying cultural markers, an anonymous identity, floating, traveling within the void of the virtual machine, the space and time continuum. An individual self creating a unifying consciousness transcending territorial and global boundaries. A form of thought based on the language of empirical idealism. These discussions have continued throughout technological discourses, and shape the current dialogue. The next passage is an example of this discussion in the community of experimental film.

The transition from a culture that considers leisure a ‘problem’ to a culture that demands leisure as a prerequisite of civilized behavior is a metamorphosis of the first magnitude. And it has begun. The computer is the arbiter of radical evolution: it changes the meaning of life. In laboratories all over the world, biochemists are drawing ever closer to the secrets of the genetic code. Younger readers may within their lifetimes, rub shoulders with pre-programmed humans. (pg 180; Gene Youngblood; Expanded Cinema; 1970)

This description of corporeal embodiment, resembles the final plane of immortality; a consciousness no longer bound to the adherence of its physical destination. A presence within an apparatus of mechanical form. The mirroring phase of the self reaching its potential as the disembodied project of thought.

The Status and the Function

The Status of Truth

It will be necessary to understand the empirical model which establishes this language of discourse, setting as its main function and status: knowledge and truth, as technology will continue to found its many principles on logic and reason. The following describes several examples of the status of truth in its potentialities of variation.

- (a) Universal truth; Truth as in universal law of the human condition. (Metaphysical model). One in which we seek to understand the human condition. A set of universal principles which order the human condition for all of humankind.
- (b) Truth investigated as the moral process of thought. If moral obligation = to the contemplation of the self = is relative to experience and existence, knowledge will be gained in the effort to understand the morality of the human condition, to which each being will transcend in the evolutionary process of humankind. A perception of truth in its idealist sense.
- (c) Empirical knowledge = the function; = in its pursuit of the language of truth; empirical knowledge as a variable in the pursuit of truth. (empirical model); logical empiricism. x to y = variable: proof and existence of a model of “truth”.

Thought and Its Processes of Investigation

The Mechanical Apparatus and Its Relationship to the Variable “truth”

The medium of video art is the psychological condition of the self, split and doubled by the mirror reflection synchronous feedback ...Implicit in this question is the idea that auto reflection and reflexiveness refer to the same thing, that both are cases of consciousness doubling back upon itself in order to perform and a separation between forms of art and their contents, between the procedures of thought and their objects. (Rosalind Krauss, Video: The Aesthetics of Narcissism, 1976)

The Film and the Photograph

The camera- photography, developed to render images of the real. Dating from the Age of Enlightenment in which scientific inquiry and rational thought became prevalent, forms of medical photography were used as an investigation of the human

form to current day uses of the photographic and filmic image which are to reveal “truth” of the real.

Although, current technological advances such as photoshop and other digital programs, have brought the proof of the so called “real” or “true” photograph into question, the camera is still seen as the instrument used for the purpose of presenting an image, a gathered form of knowledge.

The Computer

The speed of light does not merely transform the world. It becomes the world. Globalisation is the speed of light. Paul Virilio (Armitage 2000).

Speed: A form noted by the variable and duration of a quantitative element. One in which duration is characterized by spacio temporal movements. The phenomenon of speed; movement; characterize the collective consciousness and the machine. The faster the signal, the more vast its structure of movement, the more broad its territory. Here exists Knowledge in its pursuit of truth. The Form: consciousness = the variable Speed = the instrument = computing engine. A model of inquiry based on an empirical structure.

There is collective conscious beyond our grasp an innate, experiential knowledge of the self, attuned to each subject. It is with this realization of our intuitive experience that we perceive a model of philosophical inquiry which constitutes and adapts to our experiential understanding of the world, this plane of mirroring revealing a complex set of relations between thought in its symbolic form and its intuitive and experiential processes.

Consciousness and Its Methods of Representation – Intuitive Knowledge and the Symbology of Thought

Filmmakers and Artists-Creative Interpretations

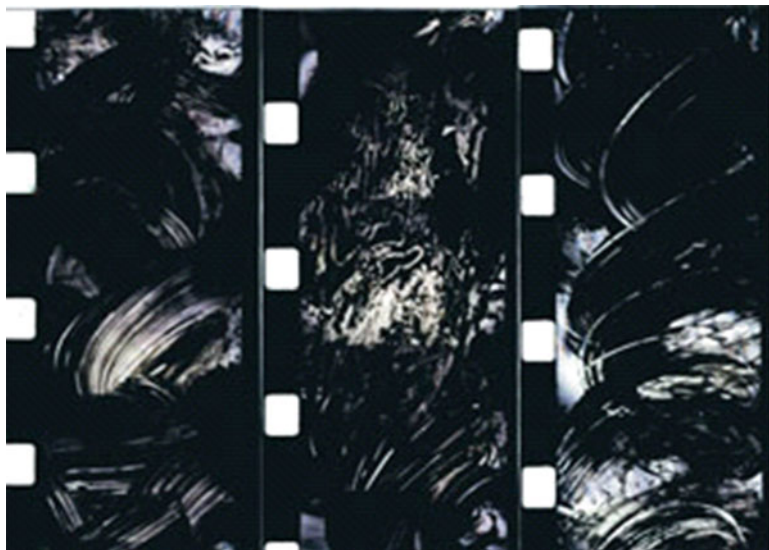
Filmmakers have continued in current times to present work which reflects the conceptual nature of the medium, responding to the medium as an apparatus which uses a material base to render an image. There are several categories of film which can be designated which include: Art Cinema; Interactive and Numeric Cinema and Live-Expanded Cinema practices also referred to as Performative Cinema. Writers such as Gene Youngblood, P. Adams Sitney and Annette Michelson have been key figures in writings on cinema as a form of expanded consciousness. The following sections will discuss filmmakers and video artists who pursue this medium in these forms of practice.

The Framework of Conceptual Language

Conceptual language is characterized by the intentionality of the artist, the approach to the medium, the direct use of the material base for the creative projects either in

sculptural form and-or dealing directly with concepts relating to the materials. In cinema, a breaking with the traditional cinematic codes such as; the stationery camera on the tripod, continuity in narrative editing structure and-or the 180° rule of cinema.

Art Cinema-Cinema as a form of expanded consciousness



Big band; de Marcelle Thirache, 2001, 16 mm, 3'



Marcelle Thirache

FORÊT FUGITIVE, LA-2010/Mini DV/Couleur/Silencieux/7

The conceptual, sculptural and painterly films of Marcelle Thirache use the camera to show imploding fragments of light in motion. Thirache's film takes the viewer

on a visual journey, by positioning the camera sometimes stationary and other times in movement. In the film, **LA FORÊT FUGITIVE**-2010, she spins the camera in a surge of circular movements, interspersing shots. Starting from a tree in a stable position and then continuing to rotate the camera creating floating fragments of light. The glowing patterns reveal the spaces between the static image of the camera in nature and the spinning mechanical device of the camera eye, taking us to another perceptual plane of visual experience, transcendental in nature.

Her films can be considered engaging, including both natural elements and forces of energy to create a fascinating display in the place where spaces converge between the sometimes static and moving image and the camera eye and the subjective space of the viewer. By Interrupting our stationary gaze of the image (a rule of cinematic code), and by rotating the camera eye, the viewer is placed into a space of transcendence and after, experiences a re-grounding into the “natural order” of visual representation. The work of Thirache, takes the viewer into spaces of transcendent experience.

The films of Frédérique Devaux;



K (ACUGHER3/ACIMI)

2008/16 mm/coul/son/8' 00

Frédérique Devaux

Filmmaker Frédérique Devaux uses direct application techniques to work with the film material. By altering various codes of cinematic representation, sometimes shooting the actual film itself at varying speeds, she creates a visual symmetry of moving images, challenging our notions of perception and cinematic representation.

“I think most of my works are like mosaics.” Devaux explains how she creates the film by placing one film, on another film and repeating the process, so on, creating a collage effect. “I like working on rhythm.” She explains this as a form of interspersing shots, from one shot to a double shot continuing with this effect. “Everything is handmade, the film itself. I make my own copy of the film, so everything in my films are handmade.” (Frédérique Devaux, [2012](#))

Numeric Cinema

The machinic apparatus – The Empiricist and The Metaphysician-Cinematic Illusion and States of vertigo



DVD Cosmogonies; 2007; HugoVerlinde

Verlinde actually reinvents a voluptuous and refreshing relation between the body and the cosmos. (DVD Cosmogonies; Lowave)

Numeric cinema, as is termed by the art world, uses written code and computational values to create flowing visual experiences for the viewer. Interactive and immersive environments place the performing viewer on stage with the actual image. Through this form of artistic interpretation, we see the continued merging of Eastern thought and Western models of empiricism. States of vertigo characterize this form of cinematic representation. In the writings on existence, Levinas states the following: “Nausea,” as a feeling for existence, is not yet a depersonalization... *Insomnia thus puts us in a situation where the disruption of the category of the substantive designates not only the disappearance of every object, but the extinction of the subject.* [Existence And Existents](#) by Emmanuel Levinas

If nausea and insomnia are given the status of disruption or distinction of the subject; how does the status of vertigo define the existence of the self and the nature of subjectivity? What assigned status is it given as a project of thought? These are the areas that filmmakers begin to explore in numeric installations. The following show examples of the works of artists through the past decades to current times which center on this language.

We are witnessing a growing hybridisation of physical space and the virtual sphere. This is the objective assessment to which digital technologies are driving us. Let’s try to make a link, for this juxtaposition of the visible and the invisible has a precedent: that of (principally

Chinese, Indian or Tibetan) representations of the human body. In these Eastern traditions, the physical body is crossed by a web of energy, invisible to the naked eye, made up of major and minor centres. There are also thousands of secondary centres irrigated by channels of invisible matter. (The visible and the invisible; Hugo Verlinde; La Cube Review; Creation and Digital Society; March 2012)

Verlinde works with numeric code to create visual installations and projections which immerse the viewer in visually moving environments. Upon entering the space, the viewer is submerged into a space of vibrating and flowing visual imagery.

The Cosmic Cinema of Jordan Belson: Film-Allures; 1961

In the work of filmmaker Jordan Belson, Gene Youngblood describes the work, “The films are literally superempirical- that is, actual experiences of a transcendental nature. They create for the viewer a state of non-ordinary reality, similar in concept at least, to those experiences described by the anthropologist Carlos Castaneda. He regards the films not as exterior entities, but literally as extensions of his own consciousness.” *ibid* (pgs. 158–159). Gene Youngblood; Expanded Cinema

Youngblood continues to describe Belson as a practicing Mahayana Buddhist. Here we see the influence of Western and non-Western forms of thought, through the use of mandala symbols and references to metaphysical language, visually represented in the analog computer film works. Once again, the mechanical apparatus of the machine used to convey a form of extended conscious awareness, as described through the language of Eastern theologies.

The Films of: James Whitney: Film-Lapis; 1966

“In general the term Lapis held the same meaning for the ancient alchemists that the mandala holds for the Lamaist, tantrist, taoist Hindu: a kind of ‘philosopher’s stone’ or aid to meditation.” *ibid*; G.Youngblood. According to Youngblood, the film, Lapis was created on an analogue computer, in 1966. Visual images are created to show the model of the mantra, a symbol for the plane of finite and infinite.

Expanded Cinema Practices: Expanded Consciousness: Thought and the Symbolic Plane

Film Artists: Hyperbang; Trinchera Collective; Scratchbursts; Sally Golding; Bruce McClure- Performance events staged: 2006–2012- Region: Paris, France

The expanded cinema practices of the following groups can be characterized as such: Experimentation; elements of chance; random events; experiential happenings; the body as a site of performance; the Intuitive.

The discussion will focus on the film group: Hyperbang. The collective, a live performative film group, uses raw stock and found footage along with built -constructed cinema environments using everyday materials. The exhibitions comprise of live performances; real time events. The live performances are an open stage for chance, random events creating a space which challenges the viewer to go beyond patterns of thought, relying more on intuitive experiences. Much of their work can be traced to artists of the Fluxus movement.

Flickering light and flashing optical effects are part of the performance. Cinema is brought to its basic material form, the projection of light and images on perforated surfaces through the mechanized apparatus. In one section of the performance, the hand of the filmmaker shadows the screen, creating an awareness of the operational values inscribed as cinematic code. Thought, in its wake of intentionality- anticipation, derives from its symbolic sense, an awareness of the self and its signification as a project of symbolic thought.

In my own work I began looking at the body as a point of reference, to explore structures of corporeal embodiment. Mounting visual live feed and interactive situations in which the perceptual space of the viewer is enhanced through the use of live video signals. I also began downloading video signals and using digital materials from the web. And returned to the kinesthetique, cameraless film a way of dealing with the computer at very different bodily experience.

The tactile experience of the handmade film, cameraless film, created a new way of sensory perception, working directly with the materials, with more of a sense of touch, and then loading them onto computer graphs. It produced a very different challenge between the kinesthetique and meticulous form of the actual film object itself and the more visual language of the computer graphing system and keyboard circuitry. I also began the use of West African cloth, sewn directly onto the film and re-photographed. This was in an effort to better understand, or come to terms with the absence of my own cultural, ritual knowledge of the continent. In this respect, I began to notice the patterns on the African cloth, the formation of symbols and fluctuating geometric patterns and shapes. I was intrigued upon reading the following statement comparing computational algorithms and African patterns.

Fractal geometry has emerged as one of the most exciting frontiers in the fusion between mathematics and information technology. Fractals can be seen in many of the swirling patterns produced by computer graphics, and have become an important new tool for modeling in biology, geology, and other natural sciences. While fractal geometry can take us into the far reaches of high tech science, its patterns are surprisingly common in traditional African designs, and some of its basic concepts are fundamental to African knowledge systems. (Ron Eglash; [African Fractals, Modern Computing and Indigenous Design](#))

Here begins a mathematical model of analysis. There is still yet another cultural and philosophical model which would describe a complex order of inter-related movements of form. Were they symbols of ritual? A gestural symbology of language, specific to a form of cultural ritual and-or the establishing of a system of logic based on principles of organization. Those of the structures of a thought pattern in relation to a system of ritual, linguistic or gestural knowledge and spiritual symmetry.

It is evident that there is a very strong connection between the striking figures of the cloth patterns and symbolic systems of logic in mathematical and diagrammatic sequences. An obvious relationship between Western Empiricism and African systems of symbolic logic. But, the larger question to pose is what are the philosophical models on which the principles are based? These questions must be explored to have a greater understanding of a philosophical model which can constitute a complex array of various forms of perception.

Techologies of the Obsolete

Picture a vast wasteland of computer bits, parts, keyboards, circuit boards, hard drives. A deserted plane where the space is populated with disposable technologies of the obsolete. Scattered film canisters, raw film footage, old Cd's, DVD's, cassettes, no longer functional as the current machinery no longer supports their timely use. A deserted plane, like the vast desert of the Sahara or Death Valley. Unpopulated by life. A ghostly presence envelopes the landscape, like a haze painting the air in varying hues of color, rising in the form of an ascending phoenix, its wings arched in the frame of the landscape, sculpting the wind, capturing a flustering moment in the open void.

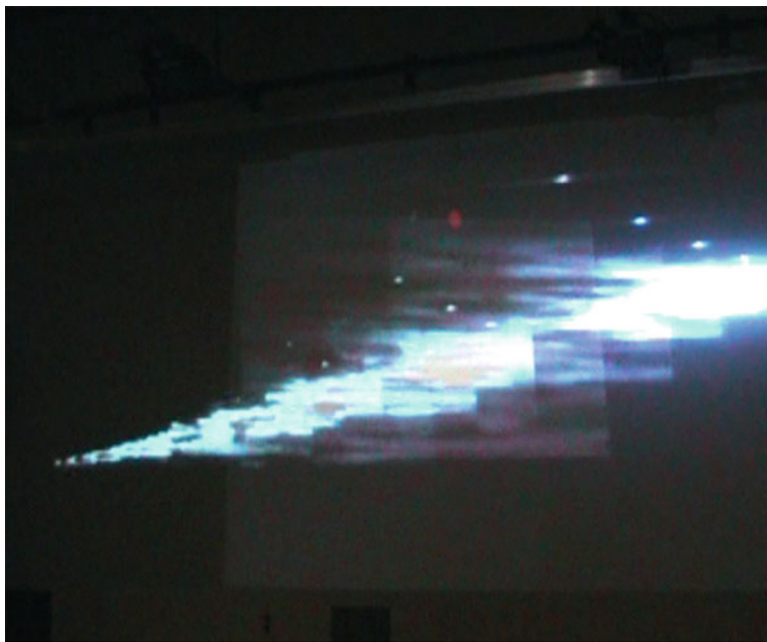
Creative Projects

Images from the Series: Vanishing Point: 2010; *Marguerite Harris*

The following are images-installations, created through live visual feed.



A series of downloaded video signals from the internet broken down to their basic form through re-recording several rotations of the looped image.



Downloaded video signal from the internet: computer visual images. Stretched video signal from internet set at various speeds from none to rapid movement.



Film Groups

Hyperbang; Trinchera Collective; Scratchbursts; Sally Golding; Bruce McClure; Silvi Simon; Lumiaks-Performative Video Installation

Film Collectives

Experimental Film Collectives (Paris, France): CJC/Collectif Jeune Cinema; Braquage; L'Etna.

Marguerite Harris
 Film Theory/Criticism- Indiana University, Bloomington
 MFA- San Francisco Art Institute
 Paris, France 2012–2013

Writer's Note

This is a continuation of the first publication: Thought, Object and Experience. I have borrowed from this writing and continue to expand on the concepts.

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Ontopoiesis of Eidolon and Transcendental Schematism in Cassirer and the Concept of Ontology in Meinong and Quine

Giuseppina Sgueglia

Abstract We mean in this contribution to discuss Cassirer's analysis of the Platonic function of the eidolon with a particular focus on the Marburg interpretation of this issue in a thinker such as Paul Natorp ever so important to Cassirer.

Furthermore, we are going to inquire into the function of transcendental schematism with a focus on the cognitive operation of (the) schematism that is determined through the ontological perspective that becomes apparent from reflections such as we can envisage in both Meinong and Quine.

On our way we shall confront the issue concerning nowadays ontological treatment of conceptual schematism and its possible semantic-cognitive interpretation. In this regard, the starting point will have to be Cassirer's analysis of schematism, namely of the 'depictive' and productive conception of transcendental schematism, especially in order to outline the conceptual analysis of the theory of judgement and knowledge.

We mean to consider the following phases: (1) The Marburg derivation of Cassirer's way of conceiving of and treating a schematism of Platonic-Aristotelic origin, with a particular focus on works such as "*Substance and Function*"(1910) and "*Eidos und Eidolon: das Problem des Schönen und der Kunst in Platons Dialogen*" (within the framework of Cassirer's dialogue with Bauch reference will be made to the development of the former's analyses of Kant's philosophy; (2) Meinong's ontology of relationships and complexions and expressions of the meaning of 'transcendental schematism'; (3) the interpretation of conceptual schematism in analytical philosophy with reference to the issue of semantic intensionality starting from Quine's conceptual schemes.

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The Objectivity of Natorp's Schematism in Cassirer

The elaboration of a critical concept of objectivity allows to envisage both in Natorp and Cassirer a progressive realization of reason, within the description of the eidolon, as a task (*Aufgabe*) with a moral connotation to it.

What comes to be structure is the formal and functional expression of the relationship between thought and being, insofar as the objective character of the a priori permits an analysis of the relationship between theory and experience: "The procedure of the 'transcendental' philosophy can be directly compared at this point with that of geometry. Just as the geometrician selects for investigation those relations of a definite figure, which remain unchanged by certain transformations, so here the attempt is made to discover" (Cassirer 1910, p. 268) those universal formal elements that remain unchanged by how particular contents of experience might vary.

Cassirer's analysis of transcendental philosophy as applied to conceptual and cultural objectifications of schematism hinges upon Kant's conception of imagination as the faculty to represent within the mind an object in its absence as stated in his *Pragmatic Anthropology* and in Aristotle's *De Memoria et Reminiscentia*.

In this respect, the necessity of image appears as fundamental to the function of thinking: the articulation of Aristotle's concept of *phantasia* is presented within the resumption of the notion *phantasma*, namely the function that illuminates form until the representation of an appearance, as becomes evident through the analysis of reproductive imagination. The *eidōs* in the light of the *phantasma* stands for the ontological analysis transcendental philosophy does of the condition possibilities of thought.

In this regard, starting from the eidolon we arrive at the presentation of the synthetic function, deriving from Leibnitz, of the deductive process and the analytic element of knowledge which melt in Kant's thinking by means of symbolism and the *Wirkung's* function of understanding and productive imagination.

Cassirer, following his Goethian inspiration of the link between intuition and image and despite his reading of Cohen (which of course inspired his interpretation of the relationship between imagination and understanding in Kant) is willing to confront the issue concerning the 'intuitive filling' of the symbolic pregnancy of expression, the intensional greatness of reality as he focuses on the development of the relationship between form and matter.

In this direction the author outlines an analysis of the morphological statute of 'invariants', namely specific conceptual categories, or transcendental function of an 'original unity' of consciousness with regard to its objects. Thus a search for objectification is outlined which starting from Natorp's ontology of form and its transformations presents an analysis of Plato's doctrine of *eidōs*.

The interpretation of the essence of form in its objectivity allows for a confrontation with the "symbolic ideation" of concepts and their schematism.

The existence of a symbolic pregnancy as an expression of schematism is outlined through an irreducibility of form to the representation of the "ideal unity" of the empirical-psychological apperception and of the eidetic analysis of the essence of sensible experience.

Transcendental schematism¹ in its exhibition embraces the scope of action of imagination, so the quality or *Merkmal* of empirical concepts may be stressed.

The analysis of empirical concepts in their logical openness allows for a reference to a cognitive kind of utilization and to a convergence of meanings which only schematism renders as the very set of tasks making up the complexity of the relationship between our language and the world (see Braitenberg 2004).

The conceptualist theory of meaning and the possibility of categorising by conceptual prototypes guaranteed for in Cassirer's conception of symbolic pregnancy² faces the possibility of interpreting the concept of *Normalidee*, namely a treatment of empirical conceptual schemes, faithfully following the function of examples as in Kant's third Critique.

The issue about the identification of empirical concepts according to their meaning, the interpretation of the issue concerning the semantic of their reality is substantially different from the analysis of the semantic level of their significance. The issue concerning the semantic vicinity of such terms as scheme, *Normalidee*, (*KU* §17) and *Gestalt* allows us to compare our analysis on the importance of form in its connection with the matter of symbolization, within reflections regarding the possibility in Cassirer's philosophy of the function of productive imagination and the relationship with concepts. The cognitive procedure and the shaping of a conceptual content refer to schematism as an on going process and the gestalt nature of its cognitive content and then the possibility to analyse a product of imagination and subsequently its intuitive application to objects. The meaning of the awareness of the linguistic character of categorization is of the utmost importance for the analysis of transcendental schematism and shows a link between the function of concepts and of empirical intuitions.

The issue concerning homogeneity (*Gleichartigkeit*) between concept and intuition reposes the question of schematism, so as to stress the cognitive power of a relationship between perception and language. In this perspective we mean to confront the issue concerning the semantic competence of images and their relations with concepts. Indeed in the interpretation Cassirer provides of transcendental schematism many different elements from the Lockean notion of "general idea" as well as the *Normalidee* in its genetic function intersect; the constructive aspect of schemes for empirical concepts thus come to light.

¹Cfr. Christian Möckel, *La teoria dei fenomeni di base di Cassirer e il suo rapporto con Husserl e Natorp*, in Besoli, Stefano – Ferrari, Massimo – Guidetti, Luca (eds.), *Neokantismo e fenomenologia. Logica, psicologia, cultura e teoria della conoscenza*. Atti del convegno internazionale. L'Aquila, 29–31 marzo 2001, Macerata, Quodlibet (Quaderni di Discipline Filosofiche), 2002; Helmuth Holzhey, *Il concetto kantiano di esperienza. Ricerche filosofiche delle fonti e dei significati*, Le Lettere, Firenze, 1999; Werner Flach-Helmuth Holzhey, *Erkenntnistheorie und Logik im Neukantianismus*, Hildesheim: Gerstenberg, 1980; Ernst Cassirer, *Substanzbegriff und Funktionsbegriff*, Darmstadt: Wissenschaftliche Buchgesellschaft, 1969, trad. it. di Eraldo Arnaud e Gian Antonio De Toni, *Sostanza e funzione. Sulla teoria della relatività di Einstein*, La Nuova Italia, Firenze, 1999.

²Cfr. Ernst Cassirer, *Filosofia delle forme simboliche*, 3, I, cap V; Ernst Wolfgang Orth-Helmuth Holzhey, *Neukantianismus. Perspektiven und Probleme*, Würzburg: Königshausen und Neumann, 1994; Gianna Gigliotti, *Avventure e disavventure del trascendentale*, Guida, Napoli, 1987.

From this perspective two conceptions of reality gain visibility: on the one hand, we see the establishment of a nexus between consciousness and percepts, and therefore the possibility of a unification of perception data, which leads to sharing cognitive operations in their generality; on the other hand it is not said that concepts of the many different natural genera must entail intersubjective sharing, therefore the issue regarding concept application reconsiders the analysis of possible cognitive renderings of representations.

Cassirer's interpretation of *exhibitio symbolica*³ as it confronts the issue of the application of concepts determines the function of imagination and the consequent linguistic and cognitive relationship implicit in the function of schematism. We will have to consider the importance of the intelligible or noetic content of material and perceptible sensations, which represent the descriptive reality of Cassirer's analysis as he outlines the relationship between the objective and subjective deduction of apperception.

In this perspective we can retrieve a whole Kantian tradition and Brentano himself as we refer to the originality of consciousness and its contents and the consequent possibility of showing the importance of a genetic succession in all psychical phenomena.

Indeed the intentional interpretation of the eidolon is fundamental to the grounding of a *Lebenseinheit* immediately referring to the validity of perception data within the expressive forms in which those are already given and that are thus their conditions of objectivity (*Filosofia delle forme simboliche* III, 1).

In this respect, the interpretation of psychical causality must consider the interaction between the psychical subject and the transcendental schematism of concepts, the objective trustworthiness of sensibility and thus lastly with the subjective-conscial givenness of sensations in their intensity.

Natorp's analysis of eidolon represents for Cassirer a starting point for the confrontation with the multidimensionality of the spiritual, so that it may become possible to identify an interpretation of the objectivity of its form and expression, not merely abiding by the signifying function of language, but in the pursuit of consciousness and its symbolic articulation.

The psychological-transcendental analysis of schematism is structured on the basis of a correlation between form, condition of the content and its knowledge and the conceptual and symbolic content (Bauch 1917–1918).

On this basis we can understand the issues regarding "internal perception" and the importance of the essence of counterfactual intentionality in relation to the external environment regarding percepts as connected to the "infinity of the original unity", both in Natorp and in Cassirer's analysis of the "regulative function" of the

³Cfr. Massimo Ferrari, *Ernst Cassirer. Dalla scuola di Marburgo alla filosofia della cultura*, Olschki, Firenze, 1996, particularly chaps. III; V; VI e VII; Ernst Cassirer, *Philosophie der symbolischen Formen*, Oxford, Bruno Cassirer, 1923, ital. transl. by Eraldo Arnaud, *Filosofia delle forme simboliche* III, 1, La Nuova Italia, Firenze, 1989; Ernst Cassirer, *Zur Metaphysik der symbolischen Formen*, Hamburg, Meiner, 1993, ital trans. by Giulio Raio, *Metafisica delle forme simboliche. Il problema del simbolo come problema fondamentale delle forme*, Sansoni, Firenze, 2003.

idea, the cultural phenomenon and “presupposed synthetic unity” (*Metafisica delle forme simboliche. Sui fenomeni di base*).

Cassirer’s interpretation of the eidolon can be understood through the structural *Erlebnisse* of consciousness and the adequacy between meaning and reference, considered as central to the analysis of the psychological-real reproduction of the image in the relevant section of *Symbolic Pregnancy (Philosophy of Symbolic Forms, III, 1)*.

This is how we can formulate the issue concerning a kind of objects that does not stand for reality, and therefore an idea of a kind of intentionality that asks about the sense of the act with regard to the object hints at the important knowledge-theoretical issue concerning the relationship between objectivity and the identity of content.

The idea of perception as the truly transcendent side to what is experienced puts into question the issue about givenness, so much so as to stress the distinction between reality and intentionality of contents, so there seems to be some sort inseparability between the noematic and the hyletic-noetic moment.

The noetic-noematic correlation allows for the establishment of a meaning (*Bedeutung*) which in its noematic ideal character stresses the sense of an intentional object (*intentionaliter Gegenstand*) that is about the cultural phenomenon.

We deem it useful to state that the correlation between the world and the “subjective fashions of givenness” (*Gegebenheitsweisen*) represents the transcendental and synthetic aspect of an overall perception of the world starting from the meanings of object contents and therefore also the specific character of cultural objects, namely of a more aware structure, their *Darstellung* as identified within the perceptual modalities of the subject.

The consciousness of objectivity in its continuity is taken by Meinong in his analysis of the relationship between understanding and perceiving, so that the interaction between the individual sphere and the formal, between *abstractum* and *concretum*, is maintained.

In this sense, another possibility for the transcendental regarding the objectivity of its meaning relations is opened.

The *Gegenstandstheorie* Ontology in Meinong

The problematic within Meinong’s object theory becomes apparent throughout the interpretation of the philosophy of empiricism, precisely when the philosopher analyses the concept of perception in his *Hume Studien II*.⁴

The fundamental issue about the relationship between “relations of ideas” and “matters-of-fact” is outlined through the analysis of the a priori character of the

⁴Cfr. Alexius Meinong, *Hume Studien II: Zur Relationstheorie*, ital. transl. by Roberto Brigati, *Empirismo e nominalismo. Studi su Hume*, Ponte alle Grazie, Firenze, 1991; Cfr. Albertazzi Liliana- Jacqueline Dale- Poli Roberto, (eds.), *The School of Alexius Meinong*, Aldershot, Agate, 2001.

relations of ideas, with reference to the theory of abstraction of perceptual contents only depending on what is called the unity of consciousness. Within the “representative theory of abstraction” derived from Berkeley it is possible to outline the transcendental sense of the “extension (*Umfang*) of the concept”, which is constituted from an empirical point of view. It is thus possible to define psychological acts in a confrontation the “empirical extension” of concepts, which was the functional knowledge-theoretical and ontological outcome of the empiricist tradition.

And indeed Meinong’s analysis of the empiricist interpretation of knowledge was focused on the function that the generality of ideas and *abstracta* has, and thus on the relationship between the individual and “the infinite number of its attributes”.

Therefore, representation as “abstract concept” and “concrete representation” determine a kind of meaning which is in relation with the intensionality of the concept as related to a particular idea, so that it may be possible to stress the function of concept extension in the identification of an associative connection between abstract representation and the given moment of the individual.

We must underline Meinong’s insisting on the notion of “individual concepts”, derived from the empiricist tradition, in order to characterize the meaning of the knowing act and thus widen the reflection within the logical ideal of concept extensionality,⁵ namely the particularity of concepts and of the *concretum* in all of its manifold characteristics.

The issue concerning concept extensionality is here dealt with since it is about the dispositional capacity of representation, according the function of the associative habit of abstraction and in relation to single attributes, produced by attention to what is called “imaginative intension”.

The comparison between perceptual “individual data” represents the deepest meaning of Hume’s ‘rational distinction’ (*distinctio rationis, distinction of reason*) and of the possibility to envisage “resemblances between object is not currently represented by the knowing subject” (*For the history and critique of modern nominalism*).

The issue concerning the possibility for a given content in itself undetermined and unparted to a manifold of resemblance groups correlates with an analysis of experience and empirical use of concepts in Meinong’s *Abstrahieren und Vergleichen*: the authors confronts the issue of the recognition of present contents as the same and different at the same time.

Thus the issue concerning the relationship between universals and particulars becomes fundamental to the outline of Hume’s rational distinction, so that it is possible to see the diversity between the pitch and the intensity of the tone, not in these or those particular tones, but in general, so that we may compare the various representations, even from the point of view of their extra-sensory character.

⁵ Cfr. Armstrong David Malet, *Nominalism and Realism*, vol. I: *Universals and Scientific Realism*, Cambridge-London- New York-Melbourne: Cambridge University Press, 1977; Kenneth Barber, *Meinong’s Hume Studies Part II. Meinong’s Analysis of Relations*, in “Philosophy and Phenomenological Research”, 31, pp. 564–584.

If we examine Meinong's reflections about the perspective determined by the identification of a concept meant as "abstract individual", we can establish the characteristics of universality and particularity (within British empiricism) that presuppose the extensionality of a concept, whereas the reflections upon content are focused on representations in their possible abstraction and concreteness ("of individual concepts, that must be *abstracta*") and it is in this sense that we may find reference to Meinong's two masters, namely Twardowski⁶ and Bolzano.

We are now facing Meinong's notion that there may be a kind of undetermined character to objects, consisting in space and time data, and that it is necessary to think of the contraposition of concept function and object, so far as to investigate the issue concerning the intuitive filling of the knowledge act of a given representational content.

In this way we come to conclude that the product of the concept, an abstract individual, is defined through the formulation of a question about the possible reciprocity of "concrete concepts" and the particularity of individuals or ideas (as was shown by traditional empiricism).

Traditional empiricism had not found an answer to this question and Meinong's statement about the identification/individuation of the concept is in this respect ambiguous, as most notably appears from the confrontation of a few passages in his *Hume Studien* II where, noting that concepts of individuals must be abstract, all relevant attributions take on a subjective character, and thus "the a priori character of representation" seems to characterize the outcome of psychical activity as 'transcendental ideality of the causal relation', so that it is possible to define the relationship between subject and object.

The ontological issue in Meinong must necessarily come to grips with the interpretation of extensionality as connected with the givenness of all resemblance relationships, and it must thus with the possibility of intensionality within concepts, in order to prove nominalistic once and for all.

Thus, the issue concerning the internal character of content comes to light and so emerge its "relational nexuses" starting from the "relevant determinations" which will therefore have to be about the concept too and not merely its representation, as Berkeley put it. The hypothesis that possessing the representative datum we must consider through the *distinctio rationis* the possibility to confront a limitation of extension in order to grasp the intension of concept at hand seems thus plausible. On the one hand we state the "composite" nature of all representations and thus the concept seems to be distinguishable on the basis of its "well outlined parts", as in an intensional fashion and thus such as to produce a "sensible picture". Therefore the characterization of immanent contents from a sheer psychical point of view represents the most conspicuous result for the self of Hume's empiricist investigations, whereas extensionality in its reality is independent of consciousness: "every individual that contains in itself all attributes that make up its intension" shows its ontological features; thus, in Hume's empiricism no particular attention is bestowed upon the notion

⁶Cfr. Stefano Besoli, *La rappresentazione e il suo oggetto: dalla psicologia descrittiva alla metafisica*, in Kazimierz Twardowski, Quodlibet, Macerata, 1988.

of extension. We may consider the ontological aspect on the issue concerning the theory of relations and judgement in Meinong's work *Hume Studien II: Zur Relationstheorie* in order to confront Locke's conception of relations in terms of comparisons between ideas and thus resume the analysis of the *fundamentum relationis*. From an ontological point of view relations will thus represent the being-so (*Sosein*) of the object; the idea of ontological foundations is tightly connected with relational data and thus to the relationship between "psychical reality" and the object, and so Meinong proposes an analysis of transcendental ideality with reference to the causal relation. The reference to representational contents are connected with compatibility relations of existential judgements, which are about contents, and what is known as the aim,⁷ which in Meinong's analysis determines the object of the judgement. We can state that Meinong's interpretation of causal relations represents the fundamental function of his theory of knowledge within the framework of the *Gegenstandstheorie* in as much as they stand for the relation to the notion of "existential judgement". In this respect the idea on the basis of which the foundations of relations are connected to the structure of conscious states so much as to determine the psychological analysis of relational phenomena is fully relevant. Indeed, the issue about the qualitative resemblance between red and blue calls for the importance of Locke's *relata*, so the idea that it should be possible to establish a link between the resemblance and the qualitative continuum is from a critical point of view in the history of philosophy fully a part of the empiricist tradition, but lets Meinong confront the question of the existence of objects beyond mere shape and colour. From this perspective the reference to Hume and to the sensory perception of identities is quite telling, precisely because in this resides the analysis of the most important relation. At the same time the issue concerning memory is linked to the analysis of judgements of existence and of phenomena of conscious states: the evidence of judgement *Erlebnisse* represents a kind of "partial and dependent" content in the material classification of consciousness data and relevant judgements. We thus have to analyse Meinong's interpretation of independence of existence which characterized Hume's approach to ideas and their sceptical outline; it is therefore fully legitimate to consider the issue regarding the foundations and thus reference to objects *relati*, in order to account for qualitative relational complexes, and thus develop a certain kind of realism, despite the relentlessly inexhaustible character of the applicability of relations.

We would thus deem important to underline the substantially objective character of the psychical and the importance of "indirect representations", in as far as it is a "necessary succession" and therefore it substitutes for the causal relation in its possibility to access external things. Therefore, in this perspective we will have to consider the importance of the possible "variable" of the intentional act towards the object and the comparison with the psychical image in us of the real and transcendent object.

⁷Cfr. Marina Manotta, *L'obiettivo di Meinong tra proposizione e stato di cose*, in "Discipline filosofiche", VII, 1997, pp. 211–237; Michele Lenoci, *La concezione dell'obiettivo in Alexius Meinong*, in "Discipline filosofiche", VII, 1997, pp. 259–279; Johann Christian Marek, *Meinong on Psychological Content*, in Albertazzi-Jacquette-Poli, (edd.), op.cit;

The interpretation of concept intension and the logical function of the act seem to represent the sense of “a dichotomy between the psychical and the sphere of objects”: the extension represented does not possess all the properties that may be attributed to the real extension. In this respect Meinong’s notion of an a priori rooted in the sphere of being after he started with Hume with the a priori character of relations between ideas might have us think of the duplicity of knowing and thus that determinations of judgement are simply added to objects. On the one hand we must speak of the modal properties of the objective through judgement and ask about the sense of an *Erlebnis* in judgement that is focused on the object and on the other we must consider the nexus binding the judgement of objective and the one about the objective. The issue concerning the evidence of content is structured starting not from the judgement about the objective alone (*Urteilung*), but rather from the very question about one such judgement (*Beurteilung*).

It is now necessary to state the importance of the issue regarding the qualitative properties of the objective and the distinction between being and not being, as modal moment is crucial in the penetrative foundation of judgements beyond assuming that these be relevant.

According to this interpretation of the concept of truth and its relational modal connections it is necessary to pose the problem of the justification (*Berechtigung*) of judgement and that of the evidence by supposition in the analysis of which are set judgements of and about factuality.

The conception of judgement as assumption of a state of affairs judged as true represents the qualitative modification and the *raison d’être* of the “freedom to assume the as-if” in the prospect of the transformation of the mental and its psychical reality through the transformation in a reality of the state-of-affairs left undetermined for too long.

These important aspects of Meinong’s analysis of judgement are about the interpretation of Kantian lines of thought in their a priori character and are about equality, resemblance and causality and refer back to a “sign system” (causal or substance signs), and suggest “relational representations” with a decomposition of perceptual impressions.⁸

The reference to Brentano’s⁹ *psychognosia* included the notions that psychical states have their phenomenal existence for the activity of representing and deducing acts of judgements and shaping general concepts based on Kant’s category of relation.

Not only does the issue about perception appear as a phenomenon determined by its complexity, but the very presence of a spontaneous-productive element (which determines the perceptual aspect of the phenomenon), most of all in a

⁸The relationship with Hume in contrast to the analysis of the perception in Lockean sense was the main topic of Meinong’s essay *On the theory of relations*. Cfr. Alexius Meinong, 1882, pp. 75–195, particularly p. 90 and ss.

⁹Albertazzi Liliana-Libardi Massimo- Poli Roberto, (eds.) *The School of Franz Brentano*, Dordrecht- Boston- London: Kluwer, 1996; Vincenzo Fano, *la filosofia dell’evidenza. Saggio sull’epistemologia di Franz Brentano*, Clueb, Bologna, 1993; Francesca Modenato, *Coscienza ed essere in Franz Brentano*, Patron, Bologna, 1979.

reproductive-associative fashion, seems to establish that whatever is experienced is in itself provided with a judgemental element.

So Meinong's interpretation of complexions (*Komplexion*) in its subjective and voluntary characterizations is tightly linked with the issue about the intellectual-imaginative faculty.

Besides, Meinong's interpretation of intellectual relations as "representational and a priori contents" establishes itself either on the side of "complex" ideas or through the psychical act of putting things in relation with one another. And indeed the issue of a "relation already given in consciousness contents" allows for an analysis of the importance of the compositional and constructive aspect of the representational activity: no complexions of contents found shows in the imagination, without it having been given as perception before (cf. *Phantasie_Vorstellung und Phantasie*, p. 209).

In a certain sense in judgement the *Erlebnis* of knowing and the *Objectiv* of what comes to be known meet, since the subjectivity of what is experienced and the analysis of meaning in its objectivity determine the sense of the "empirical possibility" for an object to be judged. As a matter of fact, there exists a relationship between an external physical reference and an immanent object received through an "internal perception": "the being extends beyond our perceptual capacities" and has an independent beyond-being¹⁰ existence.

With regard to this important issue Meinong critics have focused on the ontological and epistemological element of the logical function of the intentional relationship between content and represented object.

In Meinong's interpretation there is room for a reality independent of representation, which de facto is characterized by a kind of content connected with the reference to the unity of consciousness, namely to the psychical and individual moment as opposed to the transcendent object (cf. *Zur Psychologie der Komplexionen und Relationen*, 1891). We already know that the deepest meaning of the internal perception¹¹ and its imaginative representative is fixed through a representational doubling of the representational production (*Vorstellungsproduktion*) urged by the psychical content.

In this respect, confronting the open question about the a priori synthetic is possible through the equalization of the evaluation of judgements upon relations with those regarding "internal perception" in his *Kants analytische Urteile und die Lehre von Universalbegriffen*, 1876.

This goes back to the issue regarding the subjective criterion by which internal perception abides and the one about the applicability of abstracting activities to psychical phenomena and to concepts analyzing imaginative representations (*Einbildungsvorstellungen*).

¹⁰Francesca Modenato, *Meinong and Husserl on Objects and Meaning of Expressions*, in *Axiomathes*, n. 8, 1997, 143–162; Ead., *L'obiettivo e la fattualità secondo Meinong*, in "Rivista di Storia della Filosofia", n. 3, 143–162; Massimo Libardi, *Psicologismo logico e logiche psicologiche*, in "Axiomathes", 8, pp. 307–366; Luigi Dappiano, *L'idealismo di Oxbridge tra Lotze e Meinong. A proposito della filosofia analitica*, in "Axiomathes", 5, 2–3, 279–304.

¹¹Cf. Alexius Meinong, *Gli oggetti di ordine superiore in rapporto alla percezione interna*.

Meinong's solution, in contrast to the one proposed by another of Brentano's disciples, Kasimierz Twardowski, focuses on outlining through content the analysis of the object removing the hypothesis of an attribution to the intentional object of a psychological in-existence, but considering the aspect of being liable to perception, as much as the objective subsistence almost of an eidetic "vision of essence" (*Wesenschau*) of the object and its content.

In this interpretation clearly the issue concerning a possible objectivity of transcendental schematism is confronted and the truth or falsity of it depends on the affirmative or negative of the judgement, such that a priori rational knowledge in its objectivity confronts the characterization of an empirical a posteriori knowledge with a subjective character (*Annahmen I*, 1910).

And indeed Meinong tried to confront the relationship between the a priori and reality so as to outline a kind of adequation of things to understanding and thus propose what ultimately amounted to a rethinking of the a priori issue of the subjectivity or relations.

There exists, at any rate, a connection modality between objects the reality of which involves the structure of being and thereby an acceptance of "a priori" easy to recognize amongst relations.

The intuitive-symbolic component of *Erlebnisse* of relation and internal perception are an expression of the synthetic-original unity of apperception that reminds us of the analysis of the form in Gestalt psychology, through figural psychological functions, so as to represent the identification of a part-to-inner relationship within the structure of being.

Ontology and Meaning in Quine

The issue concerning ontology in Quine is tightly linked with the importance of the ontological decision, as it is easy to understand in the reading of *Word and Object* and *On What There Is*, with a focus on the nexus involving the ontological aspect of general terms and the interpretation of meaning according to his denotative characterization.

The sheer Fregean issue of the identification of properties and attributes as *denotata* or *predicates* is extended so as to comprise the whole of ontological references in *Two Dogmas of Empiricism*, in order to distinguish meaning from the question regarding the referential and denotative function of language: the only ways in which people talk about or seem to talk about meanings are reducible to two – having a meaning, namely significance, and the identity of meaning, or synonymy.

The nominalistic approach to the problem of meaning underlines the lack of identity criteria that may be applicable to the semantic aspect of meaning: no entity without identity.¹² In this respect, the analyses interpreting belief in terms of the

¹²Cf. Willard van Orman Quine, *Word and Object*.

relation between one person and a proposition¹³ are specified through the use of intensional objects that do not clearly appear in conditions of identity.

In this perspective it is easy to understand Quine's analyses in *Word and Object*, and the phenomenon of the *Gedankenexperiment*, of radical translation, the function of classes, concrete objects, in order to analyse categories in their epistemological and ontological meaning with reference to an ontology of conceptual schematizations regarding physical objects such as postulated entities, beliefs and the scientific theories that can best make sense of experience.

The confrontation between empiricism and pragmatism permits us to make reference to Locke's analyses of "general terms" and those Hume makes of sense data, while on the other hand allowing to pose the question about individual concepts and value statement with reference to the analysis of intensional entities and the negation of the explanatory power of intensional semantics in comparison with the reference semantics for extensional entities.

Furthermore, the fundamental issue outlined is that "meaning postulates", with their extralinguistic identifications, may be severed from empirical theories as empirical postulates, namely from factual sensory evidence.

From this situation branch out the issues regarding semantic indeterminacy of translation schemes of interpretative and descriptive theories and the analysis of the empirical under-determination of theories.

The legacy of empiricism with regard to experience and sensory stimulations allows to think of a verbal-structure-based perspective that could be endorsed by all the sciences involved in the comprehension of the stimulus/meaning in its affirmativeness and an observation statement according to an disposition-based internal mechanism of analysis of reality.

The confrontation with Carnap's thinking in *Empiricism Semantics and Ontology*, namely with the identification of a linguistic structure or framework for new entities allows Quine to define the semantic and metaphysical aspect on the ontological question in his *On Carnap's Views on Ontology*, 1951,¹⁴ and thus formulate external ("there are numbers") and internal questions ("there are prime numbers greater than one hundred") rather than merely referring to Carnap's analyses of the logical types of particular entities internal to that framework.

The problem concerning a possible semantic Platonism as an outcome in the use of inter-linguistic "propositional constants" urges the use of the semantic indeterminacy of theoretical statements (as opposed to the quasi-complete determinateness of observation statements) as a criterion of analysis and as a tool for the formulation of philosophical questions. This would thus permit to make more explicit the relationship between stimuli/meanings and the translation of a physical theory¹⁵ over another in an inter-linguistic framework.

¹³R. M. Montague *Pragmatics and intensional Logic*.

¹⁴Cfr. Willard van Orman Quine, *The Problem of Meaning in Linguistic*, 1951; *Speaking of Objects*, 1958, reprinted in *Ontological relativity and Other Essays*, New York, Columbia University Press, 1969; *Meaning and Translation*, 1959.

¹⁵Cf. Willard van Orman Quine, *On the Reason for Indeterminacy of Translation*, in "Journal of Philosophy", 67, 1970, p. 179 and ff.; *Ontological Relativity and Other Essays*.

The issue concerning the presupposition of the existence of an only correct inter-linguistic synonymy relation for analytical stimulus-statements is here not topical, all the more so with regard to the translation of theoretical statements, in which the arbitrariness of choices in their identificational indeterminacy prevails.

In this ontological situation of a naturalistically analysed epistemology it becomes apparent that a kind of conceptual schematism must be applied whose implications concern a of nominalistic analysis of meaning based on behaviour, and one that should be non-mentalistic of simple pre-existence of the relations of meaning.

The verification theory of meaning as outlined by Quine originates in Locke's and Hume's empiricism and through the interpretation of radical reductionism in *Two Dogmas of Empiricism* points out the holistic function of the theory/observation relationship as what allows for this operation.

The issue regarding a factual and a linguistic component of the knowledge of reality is outlined through a critical possibility of the pragmatic conception of truth, namely through an interpretation of theoretical language in a reduction to observational language.

The intensional notion of meaning is rejected on behalf of a kind of externalist interpretation of naturalism in concept analysis: the analytical and the a priori have become coextensive, thus suggesting an interpretation of the linguistic situation in terms of extensional semantics.

The analysis carried out in *Word and Object* resumes some of the aspects of the behaviourist interpretation of meaning already dealt with in *Two Dogmas*, so it is possible to avoid the mentalism implicit in intensional semantics.

In this regard, we can envisage the possibility for an epistemological development of externalism and the issue concerning the behaviourist definition of analyticity.

The issue concerning the criticism of the analytic-synthetic distinction and a naturalized epistemology shows a relationship of language and conceptual schematism with the world according to the evidence from which in gist depend the meanings of all of our statements and knowledge, given by the stimulations of our sense organs.

Empiricism as an analytical perspective is determined as a theory of evidence through the analysis of experience and sensory stimulus so that it is necessary to underline the possibility of a well-founded belief and the search for a relationship between scheme and content.

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Dia–Log(os): The Genesis of Communicological Virtues in the Phenomenology of Life, with the Reference to the Advaita Vedānta of Ādi Śaṅkara

Olga Louchakova-Schwartz

Abstract A problem of successful communication of philosophical knowledge is especially present for the ontologies whose insight into the real has grounding in first person experience. I will show how this problem is solved in the Phenomenology of Life of Anna-Teresa Tymieniecka, by comparing the central principle of her philosophy, sentience, with the *sat* of Śaṅkara's Vedānta. The communicological properties of the Phenomenology of Life have to be understood within the framework of human science and not the positivistic studies of communication. The discourse of the Phenomenology of Life implies not only consumption of ideas, but a visceral repositioning of direct intuition of the reader towards the Logos of Life, the ever-present Other in Tymieniecka's interrogation. Thus, a spectrum of communicological virtues in the Phenomenology of Life can be outlined, beginning from a participatory quality, to the anchoring of interrogation in the embodied sentience, to following the living logos with its *novum*-s and emergencies, and to the dynamic unification. The traditional forms of communication, such as Hindi *satsang* or Islamic *sohbet*, help us to understand that realization of the full potential of the Phenomenology of Life depends also on the cultivation of particular virtues in the readers, e.g. receptivity, sincerity and willingness to reorient their awareness from static ontological schemata of the natural attitude towards a gestalt of the living, evolving logos.

This is a lecture given at the Seminar III. Post-Metaphysical Dialogue, Theme: «About communicative being in post-metaphysical times/Dell'essere che si comunica nel tempo della Post-metafisica». March 28, 2012, in the University of Macerata, Italy. I am grateful to Professor Daniela Verducci, who organized the seminar, for proposing the theme.

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From Husserl's *Arbeitsprobleme*, to Merleau-Ponty's elegant communicological insights, to reification of language in Heidegger, philosophers search for the best way to communicate their knowledge. I first read Tymieniecka while transitioning from the writing scientific papers to phenomenological depictions of the Prayer of the Heart (Louchakova 2006) with its deep intimations of embodied subjectivity. This new way of writing eluded me. I tried all the familiar tricks, – getting up early, writing in long and in short periods, writing from the heart, free flow, attending writing groups and retreat – nothing worked. Then I read Tymieniecka, and the writing started pouring out of me. It was an emergence, a *novum*. As Pushkin says:

With fainting soul a thirst for Grace,
I wandered in a desert place,
And at the crossing of the ways
I saw a sixfold Seraph blaze...
And bending to my mouth he wrung
From out of it my sinful tongue,
And all its lies and idle rust,
And 'twixt my lips a-perishing
A subtle serpent's forkèd sting
With right hand wet with blood he thrust.¹

Reading Tymieniecka has a full-being effect, a visceral liberation of the words. In Christian-Islamic mythos, the theophanic agency behind expression is the archangel Gabriel who announces the birth of Christ and instructs the Prophet to recite the Qur'ān. According to Jungian psychology, an actualization of such an archetype in the psyche deploys psychological universe of its own, a new consciousness which replaces the intentional worlds of the past.² The revelatory heralding of the new epoch, the New Enlightenment, in the Phenomenology of Life³ and Tymieniecka's charismatic image are oozing archetypal presence of some kind, be it the archangel Gabriel, Greek Aphrodite Urania or Indian Sarasvati. However, there is more to the liberating effects of the Phenomenology of Life than an archetype-inspired expression: the incremental, medicinal chemistry of its living semiotics is not locked in its own intentional world; rather, it *reorganizes* all of such worlds. I propose to call this intelligence "Dia-log(os)," or the logos of dialog in the Phenomenology of Life. In this paper, I shall examine the roots and branches of Dia-log(os) answering the question of what makes Tymieniecka's metaphysics into a means of creativity for the reader.

The Phenomenology of Life in a Communicological View

In the positivistic view, communication is a mere exchange of the referents of thought. This all too familiar reduction ignores the fullness of communicational experience by treating it not as a value in itself, but as a means to a more substantive end. Consider a statement from the National Communication Association

¹ Pushkin, "The Prophet", retrieved from <http://www.artofeurope.com/pushkin/pus1.htm>

² For the example of deploying the archetypes, see Louchakova (2007).

³ For more on the New Enlightenment, see Louchakova-Schwartz (2012).

(USA, #418): “The field of communication focuses on how people use verbal and non-verbal messages to generate meaning within and across various contexts, cultures, channels and media. The field promotes the effective and ethical practice of human communication.” This definition reminds us of the legacy of the seventeenth century, the Enlightenment thinking that we are autonomous monads, i.e. disembodied, complete entities which move around in objectified reality using language and communication as their primary tools. Our effectiveness in such moves is equated to ethics (Eicher-Catt et al. 2008). This approach would give us no insight into the communicational virtues of the Phenomenology of Life; on the contrary, it will obfuscate or destroy them. *Reductio ad ideam* to be passed on by means of postmodern rhetoric never worked with phenomenology, and will not exactly work with the Phenomenology of Life.

In contrast with positivistic studies, in human science communication is first of all lived experience of the *ensouled* body, a dynamism of tangible topography of meaning which is spanning the participating subjects and the space in between them. In this scheme of things, Tymieniecka’s text should be viewed not in object-like isolation, but as a field of meaning which embraces and pervades both the philosopher and the reader. As a complete and fully developed *lived* ontology,⁴ the Phenomenology of Life dwells in the ontological underpinnings of the factuality of *being there* in one’s experience, i.e. in presence and presencing, and not on the isolated meaning of existence. As a text to be communicated, this embodied meaning informs the language of the Phenomenology of Life: what speaks is the stratum which is ontologically prior to the embodied meaning. Therefore, Tymieniecka’s text is not a Derrida-esque random flux whose fleeting being consists only in its relation to the receptacle of the ear, but rather, a flow of sensible expression that unites the origine and the receptacle.

In Husserl’s view, expression has its origin in the transcendental intentional unity from which the ideal signification emerges into real existence and appears as a set of symbols, i.e. language. In Merleau-Ponty’s view, “the miracle of the real world is that in it significance and existence are one” (1962, p. 323; Dillon 1988), i.e. signification is implicitly real, and emerges in and is a part of the real world. Albeit more radically, Tymieniecka also treats language as real: language is the mode in which the real, i.e. life, accomplishes its self-ciphering. Hence, the philosophical expression articulates not only the meaning sedimented in the body but rather, life and its whole primary ontological horizon. Thus, the philosophical expression is a *modus operandi* of the ontological substratum perse.

Tymieniecka does not reduce the subject matter of her philosophy, which is life, to the meaning of life; neither does she abstract life through definitions. Indeed, in abstraction, can one step outside of life? The significations of life follow its patterns, which are weaving the matrix in which the reader’s subjectivity, the philosopher’s subjectivity and the text are all nested. Tymieniecka’s discourse brings out of anonymity the ontological horizon in the reader herself, including the sense of the sacred, and the wholeness of all constitutive properties and processes of life in the phenomenal field. Via the worlds and their meanings,

⁴For more on ontology in the Phenomenology of Life, see Khalilov (2012).

the medium of direct intuition is activated, whereby ideas are captured not in isolation from the living whole, but rather, in the fullness of their intentional ethos. Hence, the first communicological virtue of Phenomenology of Life is the invitation *to participate*. Following the skillful web of phenomenological argument is not enough: one has to become immersed in living thought and be confronted, face-to-face, with life in its first person givenness (Cf. Levinas 1963/1973).

Following a monumental epoché on the whole of Euro-po-genic⁵ philosophical heritage, Tymieniecka repositions the subject matter of philosophy, brings up a novel categorical apparatus, and transposes direct intuition of the inquiry. Instead of examining consciousness or being, direct intuition zooms towards life's phenomenal field (Louchakova-Schwartz 2013). In this scheme of things, communication relates to the constitutive embodiment of life per se, therefore, a new philosophical expression emerges which is intended to pass on this new gestalt. This expression happens in sweeping motions: a virtuoso in the phenomenological method, Tymieniecka is not confined by the latter and skips over the details towards the end-result of her explorations, which the systemic description of life's logoiic networks. For a reader accustomed to the meticulousness of Husserl's exposition or the nuanced particularities of Merleau-Ponty, such expanse can be hard to follow phenomenologically, and easy to mistake for abstractions. Tymieniecka's recognition of life itself to be the ground for any philosophical exploration retrospectively highlights the attainment of early thinkers, e.g. Heraclites or Suhrawardī, which is otherwise overshadowed by the dominant contemporary rationalistic discourse in the occidental philosophy. Conversely, their early insights shape the exegetic framework for understanding the sweeping moves of Tymieniecka's account. This transtemporal dialogical quality is one of the appeals of the Phenomenology of Life. In the spirit of such complementarity, I'll take the opportunity to reach out to the 8th century Indian polymath Ādi Śaṅkara for the clarifications of the origins of communicological virtues in the phenomenal field of life. I will establish the grounds for commensurability via a brief outline of some distinctive features of Tymieniecka's metaphysics.

Logos of Life Versus Being

Philosophies of life mostly define what life is; even neurophenomenology of Maturana and Varela (1980) has a trace of such ratiocination. To the contrary, Tymieniecka's abstractions de facto are explications. Unsurprisingly, she makes discoveries which escaped the reason-only-driven thinkers. In Tymieniecka's view, life not only creates its own structures, but is also *ontopoietic*, i.e. logoiic. The structures of life are *what is*, as real as reality itself, to the conceivable maximum that the constitutive potential of the human mind can take us. In such a view, there is no

⁵ Euro-po-genic is a term that I am introducing here to denote cultures and philosophies whose intellectual and spiritual genealogy involves European roots to a significant extent.

distinction between the essence, the manifestation, and the thing itself. The measure, proportion and intelligence of life are not in the meaning that human consciousness bestows on the inert world, but in life itself. Intelligence is inherent in the structures to life, like wetness in water, or heat in fire. This logoc aspect makes life as such immediately available in presentive intuition, which in this case will be the intuition of life. Following Husserl's (1983) emphasis on eidetic intuition, nobody in phenomenology dissociated eidetic intuition from the intuition of life (Tymieniecka 2009, p. 73). In the seed form, this idea appears in the work of Levinas, who says:

Concrete life, the source of the existence of the world, is not pure *theory*, although for Husserl the latter has a special status. It is a life of action and feeling, will and aesthetic judgment, interest and indifference etc. It follows that the world which is correlative to this life is a sensed or wanted world, a world of action, beauty, ugliness or meanness, as well as an object of theoretical contemplation. All these notions constitute in the same measure the existence of the world. *They constitute its ontological structures in the same measure as, for instance, the purely theoretical categories of spatiality.* (1973, p. 45).

This idea receives its full development in Tymieniecka's new philosophical dimension with regard to the problem of being, captured before succinctly by William James: "How comes the world to be here at all instead of the nonentity which might be imagined in its place? ... from nothing to being there is no logical bridge." (1916, p. 38, p. 40). What logic cannot conceive, life reveals: as a measure-forming absence, jamesian "nothing" basks in the logos of life and is therefore available to human consciousness.

The existential expressions of life draw the logoc patterns in the immediacy of one's own manifestation. Life means sentience; in human condition it's a self-transcendent subjectivity of intentionality, i.e. awareness. Ādi Śaṅkara conducted extensive philosophical reflections on sentience in pure subjectivity, as it is given in immediate intuition. These lead to differentiation of the ontological intuition of being, *sat*, from other kinds of intuition of pure subjectivity, which is a move similar to Tymieniecka's differentiation of intuition of life from eidetic intuition. As it is for the ancient Greeks, for Śaṅkara philosophy carries an emancipating impulse; it's a path of personal transformation towards ultimate human fulfillment. Śaṅkara's method brings out of anonymity the living referents of ontological intuition, to be grasped in first person experience. In Śaṅkara's instructions to self-contemplation, self-awareness transitions from its existential condition of bondage to *moksha*, liberation (Sanskrit). To that end, Śaṅkara writes not as a pure philosopher, but as a practical philosopher-*ācārya* (teacher). His writings communicate to the reader a means of direct recognition of being in one's own self-consciousness.⁶ Śaṅkara's very concrete reductions of first person consciousness towards the direct apperception of *sat* are intended for the reader to follow empirically. The outcome of these exercises is helpful in finding the experiential correlates of Tymienieckian life-logos, and further, in deciphering the genesis of communicological effects mentioned in the beginning of this paper.

⁶For an example, see Śrī Śaṅkarācārya (1978).

Śaṅkara's Sat

Ādi Śaṅkara follows the Upanishadic definition of reality as *sat* ('being, truth, real', Sanskrit) – *cit* ('consciousness, awareness') – *ānanda* ('fullness-joy'), whereas each signification points to an aspect of reality represented in first person experience. The reality has to be recognized through the direct intuition of either one of these three aspects (Vidyārāya 1967) in pure subjectivity. A referent of *sat* has to be found within the subjectivity and then recognized as the being of the world.⁷ Importantly for us, it is not a purely semantic but an embodied act of reduction. The residue of reduction will be awareness=being purified of objects, spanning and transcending subject–and–object polarities, undifferentiated in the time and space, and best characterized as “tangibility itself.”⁸ This backdrop underlies all cognitions, and is the bottom line of every experience (Louchakova 2008).

Afterwards, a recognized presence of *sat* prevails through all the experiences. Perhaps its persistence also points to the biological underpinnings of *sat*, or being, in the cognitive architecture of the brain (for the latter, see Damasio 2010; Newberg et al. 2001; Newberg Andrew 2010). While the being addressed by scientists may not be exactly the same as the one meant by Śaṅkara, it is clear that the deep-seated, natural and constitutive ontological intuitions of the natural attitude may as well have the biological correspondents. Such presentive intuitions contain the referent of “is”-“are”-“am,” which surprisingly hasn't yet been addressed by phenomenology. To the contrary, Śaṅkara views them present pre-reflectively in any act of cognition. Ontological intuition not only has its constitutive roots in the natural attitude, but can be differentiated for the clear seizing of its referent. This brings us from Śaṅkara's *sat* to Tymieniecka's view on sentience.

A Communication of Sentience

Like Śaṅkara's meditations on *sat*, the semiotics of the Phenomenology of Life has to invoke the reflections on presentive intuition of life: whatever epoché takes place in bringing the structures of life out of anonymity, it has to take place in the reader. Following Śaṅkara, we discover is not just consciousness as such, but being-consciousness: we do not suspend the ontological judgment as does Husserl in phenomenological reduction, but rather, leave it in place as the discriminating intuition

⁷ Ādi Śaṅkara's teachings are passed down both through the textual tradition with the interpretive commentaries, and through the oral tradition of recitation and commentaries frequently memorized *verbatim*. Hence, the contemplations remain the same as they are passed down from teacher to disciple (Carol “Radha” Whitfield, a teacher in traditional Advaita Vedānta, pers. comm., 1994–1999). *Pramāna*, the logic behind the recognition of *sat*, is preserved both within the oral tradition and in the texts, such as Śaṅkara's commentaries to Bhagavat Gītā (Warrier 1983).

For more on the teaching tradition of Advaita Vedānta, see Swāmī Dayananda Saraswati (1993).

⁸ Tony Varner, a.k.a. Ganga ji, a neo-Vedanta teacher, pers. comm, 1994.

carries on its work. The reduction of the meaning of being happens not independently, but in the embodied tandem with perception. If we do not analytically split this gestalt into separate modalities of being and knowledge, do not attribute to these modalities the separate ontological statuses, and do not reflect on these principles as separate in their actual givenness, we discover the referent of the reduction is the same as Tymienieckian sentience.

A gentle preservation of the natural connotations of sentience is of the central importance for the formulation of the phenomenological ontology of life. It is only in the analytical exercises of objectifying reason that the existential givenness of sentience is split by thematization into as intentionality, being, knowledge etc. on the contrary, in order to grasp its tender beingness, one has to keep it in the natural attitude. Then, sentience is visible as a hallmark of life, and in its temporal extension, as life's logos. This is the ground in which both intra-subjectivity and inter-subjectivity emerge, and all constitution of meaning takes place, including the living semiotics of the Phenomenology of Life. Sentience is the generative womb of communication.

Tymieniecka follows the living thread of sentience through the networks of life. Whereas sentience is the primary referent on which all semiotics in the Phenomenology of Life is built, the discourse emerges out of the phenomenological fidelity to sentience. It is hard not to mention in this context the Kashmiri Shaivic theory of speech, according to which all meaning emerges from the reality, *sat*. The difference between the Abhinavagupta's Trika (Shaiva philosophy) and Śaṅkara's Vedānta is that the latter carries more of a static quality, while the Shaivic notion of reality is closer to Neoplatonic emanationism and incorporates both being and becoming. According to Trika, speech emerging out of the real is initially preverbal and is turning verbal in the process of being deployed. In both Vedānta and Trika, the words always point out to the meanings beyond, and in the ultimate analysis, to "what is". Likewise, reading Tymieniecka invokes an embodied semiotic presence whereby meaning emerges from the phenomenal field of life as shaped by sentience.

Having made a connection between semiotics and living sentience, I shall now proceed to communicological virtues, first, in their dialogical quality, and second, in their transformative potential on a cultural scale.

Dia-Log(os)

Out of all the possibilities in the phenomenal field, at every given moment direct intuition highlights a new horizon, and creates a different clearing. In this live spectacle, sentience is like the light in the arabesques of a kaleidoscope. The patterns of sentience are the live flow of logos. The impetus of Tymieniecka's interrogation makes one follow these patterns.

At first glance, the ebb and flow of sentience is devoid of self-ordering: in the messiness of experience life appears chaotic. However, human intelligence itself is a result of this patterning. The light of intelligence and the light in the patterns are

the same; the patterning is implicitly intelligent. Both stochastic and orderly, logos manifests life's ontopoietic possibilities. Logoic self-ordering shows up in the interconnectedness of emerging themes, in the dialectical relations between ontological and epistemological foci of inquiry, and in the spontaneity of epoché whereby pre-reflective data are interlaced with reflective awareness. Themes in such inquiry are not derived theoretically, but intuited in the pre-reflective horizon. A surrender of deliberation to the flow of logos creates thematic sequences in philosophies of direct intuition. For example, Husserl's shift from ontology to epistemology is not deliberate but dictated by the innate logic of the inquiry. Likewise, Suhrawardī's shift from the natural philosophy and logic to egological metaphysics of Part 2 of *Ḥikmat al-Ishraq* is not logical but logoic. The logos of Tymieniecka's inquiry follows the self-articulation of life in the inward and outward expanses which bring the logos of life to the full visibility.⁹

The interrogation is a dialogue. Tymieniecka's wording communicates this by using such terms as "self-articulation" (of life or logos) and "interrogation," as opposed to "examination," "reflection," or "analysis". In the engagement with the phenomenal field of life ego ontologically is a derivative of life. In all transactions related to knowledge, the ego is in dialogue with the sentient Other, the pervasive sentience-intelligence in the manifold patterns of life which inspire every motion in the interrogation. Since the logos totally informs everything, there is nothing outside of its domain (Tymieniecka 2009, p. xxvi). Opening to the flow of life, the philosopher partners up with life's logos as the Other. Guided by the logos, the inquiry is its self-disclosure. Tymieniecka's interrogation is both a *dialog with* and a *manifestation of* the logos of life.

Tymieniecka's persistent articulation of this hermeneutics enhances the communicability of her philosophy. In theory, systematic phenomenological investigations attend to the pre-reflective level of consciousness. However, the actual practice of inquiry involves shifts from pre-reflective to reflective data, to logical conclusions, to synthesis, and then back to the pre-reflective data of experience. This hermeneutics in phenomenological inquiry is frequently taken for granted. By contrast, Tymieniecka always takes her bearings amidst the switching vistas of life, and always identifies the horizons she navigates. These horizons are not only eidetic but also existential, empirical, embodied. As she states: "Through the embodiment of beingness, the logos of life performs the crucial operation of life—*its positioning*." (2009: xxviii). Positioning involves all phenomenological horizons, including fleshiness, tangibility, affective and cognitive expressions, i.e., full constitutive spectrum. The fact that consciousness constantly switches its horizons is well known in phenomenology; however, the generative, systemic, perceptual or embodied contexts

⁹Cf. Husserl 1983, p. 39 (*Ideas* 1, para. 21): "[T]here is something such as pure intuiting as a kind of givenness in which essences are given ordinarily as objects entirely in the same way that individual realities are given in experiential intuition; it is not recognized that every *judging process of seeing* such as in particular, seeing unconditionally *universal truths, likewise falls under the concept of presentive intuition, which has many differentiations, above all, those that run parallel to the logical categories*".

of this shifting have not been examined. In the *Phenomenology of Life*, articulation of the locus of inquiry in its fully fleshed out hyletics consummates the relationship between the philosopher and the logos. Tymieniecka writes: “[T]he acquired findings of today’s philosophy lack universal significance because it is still necessary to verify them as being part and parcel of the vast context to which they belong and in which they find grounding.” (2004, p. xiii). And so she does it.

Cornell West once said: “We live to correctly position our awareness”. Tymieniecka’s strategy of expression reminds me of this saying. In the *Phenomenology of Life*, the awareness of life coincides with life’s agency of awareness. Therefore, the act of transmission of awareness from the philosopher to the reader is an act of life’s unification. In its receptivity to the prompts of logos, the awareness transcends the aporia between the logic of essences and the logic of contradictions (for an example, see Tymieniecka 1998, p. viii). This unifying holistic impulse restores the wholeness to the reader. Thus, a spectrum of communicological virtues can be outlined, beginning from a participatory quality, to an anchoring of interrogation in the embodied sentience, to following the living logos with its *novum*-s and emergencies, and to the dynamic unification. Dynamic unification of life in the process of reading is what appears to be another communicological virtue, which, along with the virtue of participation, revitalizes the reader.

Revitalization Through the Dynamic Unity

Tymieniecka’s dialogical logos is grammatically a noun, but its phenomenology is that of a process. The logos is visible in what is dynamic, becoming and unfolding; therefore, it is semantically a verb. In the positivistic attitude, the focus is on what is static creating an impression of things actually being static. However, the phenomena of life only *appear* static due to the objectification by the mind. Tymieniecka says:

Given the spontaneous tendency of the speculative mind to seek a point of vantage from which the all-embracing intuition could be obtained, the cognitive mode of the mind is led to focus on the static, stationary circuits of the artifacts of the lifeworld that the human mind itself establishes. (2000, p. 22).

In order to see the true character of life, this tendency has to be suspended. Therefore, the language needs reification, e.g. not being but beingness, not thoughts and things, but rationalities and virtualities. Tymieniecka’s language is both dynamic in itself and signifies the dynamisms of life, like a river being named a thing and meant as a flow, or the electron being a particle and a wave at the same. The text reorients direct intuition of the reader towards the phenomenal correspondents of becoming, emergence, and transformation. Phenomenal field is captured not through a series of snapshots, as in a slowly running film, but through the awareness of continuous transformations of a nearly alchemical nature, as in bread being baked. From that, there emerges a temporal unity, leading to the unity in relationship. Language is the body of sentience, of the combined dynamic quality, as the

intelligence, the apperception, the awareness, both objective and subjective, and on both ends of the vector of intentionality. Tymieniecka says:

...Sentience is the conductor of the unfolding of the sacred thread of the logos in its progressive revelation. Sentience leads the constructive forces of life... culminating in human experience – in beauty, love of the other, sacrality. It reacts to the experience in the *ex-stasis* [italics mine] of life in the Divine Fullness. (2009, p. 99).

In the actual practice of reading, the Phenomenology of Life induces in the reader the intuitional tracking of the *unfolding manifestations* of sentience, thus canceling the obsessive-compulsive objectification. Psychologically, this leads to the decrease of the fear of impermanence, and the increase of the trust in life. The reader intuits and follows life's growth cone, its ontopoietic front, i.e., the fine clearing in which the new virtualities and rationalities are born. Even though they appear as deployed from the transcendental subjectivity or from absolute being, their origin is not in the pure transcendental consciousness but within the logos of every preceding stage of the unfolding life. Tymieniecka's dialogue with the logos is a matter of intimacy: she is always connected to life's ongoing ontological self-poesis. The "ontopoietic intuition" seizes upon the warp and woof of the creative matrix of life.

The analogous instances of dynamic awareness are described in the metaphysics of Shakta-Vedānta, whereby one finds a set of meditations on the dynamic origin of things (for an example of such meditations, see Singh 1979). A similar kind of developmental awareness take place in the process of spiritual emergence (Louchakova 2007). Both in spiritual emergence and in Shakta-Vedānta, the emergence of new perceptions has to be accompanied by the rise of a new meaning. As these new energies appear, life has to give rise to new rationalities of meaning-making; otherwise, there will be a cognitive conflict. The coherence of the self depends on the simultaneous transformation of being and understanding. For the reader, following the dynamic emergence of virtualities (i.e. sentience in its aspect of beingness) and rationalities (i.e. sentience in its aspect of knowing) in the pre-reflective horizon creates an advantageous position for synthetic reflection. Therefore, reading the Phenomenology of Life encourages a sense of certainty, not via the Cartesian atoms of separate experiences, but through a systematic and persistent following the life of logoic sentience, i.e., through the integration of totality of perceptual possibilities and ontological intuitions. The numerous virtualities of life and rationalities of logos bask in the indivisible dynamic unity, whereby every step is conceived within the preceding steps and connected with myriads of potentialities within a sentient whole.

Such discourse is revitalizing because the focus on the process annuls the perennial metaphysical problems. The metaphysical oppositions between materialism and idealism and between essence and existence breed on the analysis of static categories objectifying the fleeting moments of life. In the horizon of dynamic sentience, the virtualities and rationalities are unified. This is integrative ontology, with the matching communicological virtues which support the cultural transmission of this integrative ontological gestalt. Communicological apparatus imparts the living ontological vision, which is very different from transactions of mere ideas. Interestingly, Husserl's phenomenology faced a similar communicative challenge;

Embree echoes this problem by drawing the difference between a mere scholarship of ideas and a practice of phenomenological philosophy and research. In some ways, Husserl's tasks were easier than Tymieniecka's, because of his suspension of ontological questions. Even so, the misunderstandings of Husserl's phenomenology are widespread and very familiar to those teaching phenomenological philosophy. In order to ease understanding, Tymieniecka uses common-sense language, but the task of communicate the living ontology remains always a challenging one. In order for this living philosophy to carry forth discoveries, it has to meet the challenge of delivering its living semiotics in an otherwise disembodied, mentalized culture, entrenched in a traditional objectifying mode of thought.

A similar challenge to communication of living ontology was overcome in the traditional maieutic forms such as Indian *satsang* and Islamic *sohbet*. Both practices engaged the living ontology: *satsang* ('association with the truth' Hindi) – by the direct transmission of ontological intuitions, *sohbet* ('conversation' Arabo-Persian) – by invoking the gestalt of ontological ground. I will briefly review these communicological practices in order to draw parallels with the transmission of the Phenomenology of Life on a larger cultural scale.

Communicological Virtues in Cultural Contexts

Hindu *satsang* is a metaphysical dialog which causes the insight of *sat* in its participants. The *satsang* guru uses formulas of traditional reflective logic which is supposed to invoke in the participants self-awareness with the direct apperception of *sat*. The emergence of such awareness of *sat* depends on the capacity of the individual mind to discern (*viveka*, Sanskrit) between the real and the unreal, as well as maturity of the character and dedication to the process of enquiry. By contrast, in the West there is no consideration for such mental readiness. Experience of the many centuries of practice in the transmission of Indian philosophy oral tradition may be useful to communicate the Phenomenology of Life. Perhaps, if the reader can follow Tymieniecka in dissociation of eidetic intuition from the intuition of life, the success is guaranteed. If such differentiation is unavailable, good understanding is problematic.

Islamic *Sohbet* ('conversation,' Arabo-Persian) culminates in "intuition of existence", the instances of which facilitate understanding of various complex issues. For this to happen, the practice has to include the values of sincerity, self-awareness and awareness of others, patience, empathy, abstinence from psychological agendas and personal attacks, and engagement of the embodied sense of the self. Via this intuition of existence, the dichotomizing zig-zags of reason transition into a new synthetic meaning in a following manner: the conflict resolves into a state of perplexity (*barzakh* 'impasse', Arabic), followed by the experience of embodied ontological ground, out of which the clarity of understanding emerges. Two crucial communicative virtues of *sohbet* are the embodiment of semiotics leading to the instances of intuition of existence, and the attentional focus on the dynamic emergence of embodied meaning. However, these emergencies take place only in the

presence of the above-mentioned values. The latter should be considered with regard to the ethics of communication necessary for the integration of the Phenomenology of Life in larger cultural contexts.

In conclusion, I would like to set forth the directions of integration that I see as essential for the Phenomenology of Life to achieve its full cultural potential. The Phenomenology of Life reaches out into the areas of human knowledge that are crucially connected with the re-sacralization of science and development of new bioethics, with the introduction of a new clinical theory (Louchakova-Schwartz 2013) and a consequent reshaping of the healing systems, and on a larger scale, with the reshaping of focus of human consciousness from trauma and discord towards emerging developmental possibilities. I see this happening only if the Phenomenology of Life will be moved forth not as just a philosophical metaphysical system, but as a practical human science shaping first person consciousness. Within itself, the Phenomenology of Life contains the seeds of communicological approaches which can effectively mediate this move. Thereby, its main communicative virtue consists in reorienting the living consciousness from its static ontological schemata towards a gestalt of the living, evolving logos.

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The Cosmos and Bodily Life on Earth Elucidated Within the Historicity of Human Existence

Konrad Rokstad

Abstract My paper will examine the relationship between what might be called the Cosmos and the Life of Human beings particularly as it is bodily situated and lived. The Cosmos is not, then, primarily regarded in its astronomical sense, but more like what Husserl speaks about calling it the Earth which is the fundamental environment from which we as bodily situated individuals can never departure. We can, of course, departure from the earth (by getting into a flying plan or even travelling to another planet) but that is not the point – there is another way in which we cannot possibly leave the Earth – it has to do with some inescapable “origin” (the historical Life-world) and it is about it our paper will be inquiring. We start elucidating by shortly taking in the Ancient Greek philosopher Anaximander, then we move on to Husserl and finally comes some synthesis of Merleau-Ponty and Husserl particularly how they view nature in its genuine phenomenological origin.

We will start with what may appear a pretty naïve question:

When I wake up in the morning, am I then responding to Nature or even to the Cosmos? This may appear a puzzling question but it might be easy to realize how my waking up in the morning when time passes and it is getting light, is a response to Nature. If you by ‘nature’ understand what is going on in my surroundings relatively to the functioning of my body, its perceiving, moving, getting tired, laying down resting and regaining strength again, digestion and hunger etc. – i.e. all the more or less regular functions the body within its surrounding is lived by. Living and being bodily alive involve both sleep and waking up and all this do, of course, include regularities which in some way or another are founded and depend on “something” (I don’t know what?).

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One explanation which, however, seems as obvious as it is trivial is that the regular functioning of the body is founded in and dependent on time – and as then the cosmos is the ultimate constituent for time, it is the cosmos which is grounding it all. It is the basic universal that is governed by the astronomical laws which are ruling the universe all through – from its smallest elements up to the ordered totality itself. The pure Space is defined by a conception of unlimited extension within which stars and planets are the primary things and they are in this space now, then, entailing forces which are working in and on human life. Pertaining to this humans also tend to pose questions about origin and we speculate and theorize about this origin – is it provided by some almighty God or is it most adequately understood by some “Big Bang” theory – then bringing it into some explanation which might be either spiritual or it might be based upon some conception of the ultimate matter?

We have, of course, long traditions for this and might wonder what the difference between explaining by God and by some “Big Bang” actually would be. But we shall not now recur to any of these alternatives; we will follow another path grounded in the phenomenological philosophy of Husserl and Merleau-Ponty (M-P) for answering the origin-question, then also including some elements from the classic philosophy of the Ancient Greeks.

There will be three levels in our interrogating exposition asking for origin, the first, then based on the constitutional analyses of material nature in the *Ideas II*, this leading over into a second such as it even in the context of *Ideas II* include the concept of the Life-world and thirdly M-P such as he uses analyses by Husserl for inquiring into the constitution of space now, then, with its origin in our experiencing upon the Earth. But we start by first taking in elements from the very old Pre-Socratic philosopher, Anaximander.

As we all know, it is his concept of ‘apeiron’ being the core of his philosophy and it is interesting in our context now because of its very elementary character reflecting regularities we all are familiar with and experience as we are living on the earth. The ‘apeiron’ in its “elementary” special “universality” starting the western philosophical tradition, is a dynamic concept which reflects regularities we find on the earth as it is experienced by humans. Within the scope of this concept we might experience and describe how things are coming into and getting out of existence following some necessity in which things – due to their “un-justice,” are punished and pay compensation to one another as they are following the order of time. Time and existence now, however, having no actual beginning or end as “origin” is undecided, not representing any particular kind of thing (such as Thales’ water) – only opening for the plurality of things such as they exist and are experienced on the earth – this thus providing some new kind of the philosophically “true” origin.

This may also be described by saying the cool warms itself, the warm cools, the wet dries, the dry gets wet etc., it is thus about some *dynamic equilibrium* embodying a regularity which might as well reflect the regularities of nature in the sense of earth, such as day and night, the season-variation etc. which finally might be explained by the laws and forces of the cosmos. Of course, no one will dispute the fact that human life and our bodily organisation is influenced by day and night, season-variation and in this regard the bodily human life embody responses to this whole equilibrium system which are as obvious as anything can get. Now, then, and

quite independent of how it actually was for this Anaximander, the philosophical significance of it is that this might provide us with a genuine *phenomenological conception of origin*. And it is upon this that our exposition will continue trying to exhibit central aspects of how Husserl and M-P think about it.

To catch up with a phenomenological way for inquiring into origin, let us start with a closer look into some aspects of *Ideas II*.¹ In that book Husserl is most broadly examining what is nature and he is conducting constitutional analyses investigating not only nature, but also what is called the spiritual world – not, however saying anything in particular regarding the cosmos making up some ultimate horizon for everything that is. Since the text is starting with material nature, you might expect those other regions built on that, and, of course, it might be quite natural to think the material “first,” as something foundational for both the animal nature and the spiritual world. This would also have been in accord with some commonly held scientific or even materialistic conception. But in the end (Section Three) we learn it is the spiritual that has an ontological priority. Thus, we might spot some tending towards what may be a theological or at least an idealistic-ontological influence.

Quite generally spoken, there are, however, two movements going on in the text at the same time, and going, so to speak, in opposite directions: the one “from below,” the other “from above.” And then, on a more close inspection, it is neither material nature nor the spirit which is “first,” but it is the *animal nature* which in its appearance as *the human body within its surrounding world*, is grounding. In close connection we also find Husserl speaking of “the subject of life” and even in this *Ideas II* context this includes talk of the *Life-world*.

Given this general perspective, Husserl starts by exposing ‘The idea of nature in general’ within an analysis providing a ‘preliminary delineation of the concepts of nature and experience’. It is, thus not nature “in itself” which is delineating and grounding but it is examined together with experience – so to speak upon our experiencing life. And realizing this, we also realize how our scientific conception of material nature entails an act of excluding meaning predicates, such as these are commonly, in everyday experience, mixed into our experiencing the phenomena of nature. Upon this the natural scientific attitude is seen as a theoretical attitude, and there are analyses of theoretical attitude and interest, distinguishing them from other kinds of interests. And – in spite of this distinguishing, the objectivity of the theoretical “is already consciously constituted *prior* to these theoretical acts, through certain *intentional lived* experiences.”² This even more explicitly and clearly stated,

[...] one must make clear to oneself that it belongs to the peculiar character of the theoretical attitude and its theoretical acts [...] that, in them, objects which for the first time will become theoretical are already, in a certain manner, laid out there in advance. Thus objects are *already constituted pre-theoretically*; it is only that they are not appropriated theoretically and are not Objects intended in the pre-eminent sense, and *much less are they Objects of theoretically determining acts*.³

¹Edmond Husserl: *Ideas pertaining to a pure phenomenology and to a phenomenological philosophy*. Second Book, Kluwer Academic Publisher 1989 (hereafter *Ideas II*).

²*Ideas II* p. 6, my italics.

³*Ideas II* p. 8, italics by me.

Thus, even in this first constitutional analysis for material nature the awareness of the experience of the subject of life is quite explicit and therefore the next step is to clarify concepts like ‘spontaneity’ and ‘passivity’ in relation to the actuality and inactuality of consciousness, and it is further necessary to distinguish between a transition into the theoretical attitude and a transition into reflection. As thus also objectivating and non-objectivating acts with their correlates are made thematic, the *sense-objects* are regarded as *primal constitutive* objects. This, thus, opens for posing a question after origin upon sensing our earthly surroundings.

Other distinctions are further laid open and explicated, and finally, then, grounded in what the constitutional analyses have provided, the conception of nature as sphere of *mere things*, is explicated. Thus, we might probably say, the analyses expose some *genesis* of (the concept of) ‘mere things,’ and it is basically provided by *constitutional analysis* correlating some *pre-theoretical objectivity*, then analysing fields of phenomena that are well known (to people living in the world) – also explicating intentional functions that are constitutive to this whole picture. But this is only the first part chapter “[Communicative Virtues of A-T. Tymieniecka’s Phenomenology of Life](#)” in the analysis of ‘material nature.’

In the continuation chapter “[Towards a Phenomenology of Life and the Invisible: Generativity and Sonship in the Thought of Michel Henry](#)” ‘the ontic sense-strata of the thing of intuition as such’ are examined and explicated. First, then, in the analysis on *material* nature – the distinction between material *and* animal nature is made, and the significance of *extension* for the structure of “things” in general – *and*, *also* specifically of *both* material things *and animalia*, are clarified. Then the essence of materiality may be constitutively determined, and it is important that there are “links” connecting those two aspects that constitute animal nature, the one being the material aspect, the other the psychic. The psychic does not belong to the material but to the animal “in its full sense.”⁴ And the *living body* constitutes the “link” by *functioning quite naturally* with its both psychic and material aspects. What is, then, constitutive in this regard?

First, it is the *givenness* of the thing that provides a way towards determining the essence ‘material thing’:

The task is to presentify to oneself [...] series of perceptions connecting up together in a continuous way, in which the perceived object is one and the same and thereby shows, in progression of perceptions, in an ever more perfect way, what lies in it, what belongs to its essence.

Thus, as the phenomenological reduction now is working in the constitutional analyses, the *noema* becomes given, and it is

only if one interrogates the thing-noema itself [...] by bringing it to a givenness which unfolds itself in all directions [...] and] the answer comes from it itself [...], only then does one actually gain the essential components of thingness and the necessary essential interweavings, without which what is meant by a thing at all cannot be thought.⁵

⁴Paraphrasing *Ideas II* p. 36.

⁵*Ideas II* first p. 37 and second p. 38.

“This method,” Husserl further says, “[pursued] in extenso, would result in very many foundational constataions [...],” and he will restrict himself to “a few especially remarkable ones.”

What are, then, those aspects of thing-given-ness that he now finds “especially remarkable” and interrogates further? It is such as the mobility and alterability of things that turn out to be constituents of the essence ‘material thing.’ But also the thing’s dependence on circumstances is taken into account. And finally, then, he analyses the constitution of the properties of the thing in multiple relations of dependence – and, in a manner, summarising. Chapter “[Towards a Phenomenology of Life and the Invisible: Generativity and Sonship in the Thought of Michel Henry](#)”, by looking into the concepts of materiality and substantiality, thus concluding the second step in his analysis on material nature.

The third and final step is interrogating given in chapter [Intentionalité, Telos, Transcendentalité en tant que forces Ontopoiétiques du Cosmos](#) into the ‘aestheta in their relation to the aesthetic body.’ First it is the analysis on how intuitive qualities of material things appear in their (inter)dependencies on the experiencing subject-body. Issues like normal perceptual conditions and psychophysical conditionality, are also considered with their significance for the various levels of constitution. And, then, the concept of ‘physicalistic thing’ is given a preliminary explication, leading on to an examination of the possibility of the constitution of “objective nature” on the solipsistic level. This motivates a transition from solipsistic to intersubjective experience, then yielding the field for the more precise characterisation of the physicalistic thing, thus considering the possibility of the constitution of an “Objective nature” at the level of intersubjective experience.

Regarding the concept of ‘objective nature,’ with its core ‘physical thing’ that, of course, has essential significance to our whole argument, let’s finally present Husserl’s concluding remark on that:

In physics as the mere natural study of the intersubjective-Objective thing existing “in it self,” the thing is Objectively determined as an empty something, determined through the intersubjectively constituted forms of space and time and through the “primary qualities” related to space and time. All secondary qualities, indeed precisely everything that can be given intuitively, including all intuitive spatial and temporal forms which are quite unthinkable without secondary filling, all differences in orientation, etc. – these do not belong there.⁶

⁶In more detail these are some of the steps bringing him to this “conclusion”. First, it is “only from the appearances (and intersubjective nexus) that we can draw the sense of what a thing is in “Objective actuality;” [...]. But] The Objectively real is not in my “space” or in anyone else’s, as “phenomenon” [...] but exists in *Objective space*, which is a formal *unity* of identification in the midst of changing qualities. [...]. *Pure space* [...] arises out of my appearing space *not through abstraction* but *through an Objectification* which takes as “appearances” any sensuously appearing spatial form endowed with sensuous qualities and posits it in manifolds of appearances which do not belong to an individual consciousness but to a societal consciousness as a total group of possible appearances that is constituted out of individual groups. Each subject has the totality of space [...]. In principle, the thing is given and is to be given only through appearances, whose appearing contents can vary with the subjects. [...]. subjects stand in a relationship of empathy and, [...] can intersubjectively assure themselves of the identity of what appears therein. [...] the

Thus, the ‘physical thing’ (“in it self”) as the core of ‘objective nature’ (in the natural scientific sense) is something which conceived “in it self” is an abstraction. It can, however, obtain concrete sense through the constitutional (and genetic) analyses exposed above – thus also enabling to see it is not the primary, most fundamental real. The naturalistic-materialistic way of looking is blind and naïve in this regard and if it poses itself as the most fundamental real, it becomes dogmatic.

Let us upon this exposition move into something Husserl is saying in an appendix (no 13) to the *Ideas II*, which he wrote in 1917 (working on the internal progression and “consistency” of the book, preparing it for publication). This might provide an interesting clue for understanding how even the *Crisis* and the *Ideas II* might fit in with each other. Husserl is actually using the concept of ‘life-world’ in 1917, as he is discussing what constitutes method primarily regarding the (scientific study and understanding of the) “subject of life,” but, by implication, also his own phenomenology and the scientific understanding of nature. He says:

The basic relationship in this life-world, which predelineates the point of view of the method, is not causality but motivation. The subject can be motivated only through becoming what he “lives,” what he is conscious of in his life, what is given to him subjectively as actual, certain, supposed, valuable, beautiful, good. These characters arise as motivated, just as, on the other hand, they are motivating. The subject of motivation posits himself as such in original self-experience and posits others in empathy-experience. Empathy is not a mediate experience in the sense that the other would be experienced as a psychophysical annex to his Corporal body but is instead an immediate experience of others.⁷

Husserl, thus (in 1917) using the concept ‘life-world,’ might appear surprising since we do not commonly expect to find it before the time of the *Crisis* (in the 1930’s), at least not entailing the significance which it seems to be given in this statement. Its essence might be presented this way:

First, regarding method (of phenomenological inquiry) – what predelineates its point of view is not causality but motivation; this – since causality being the basic relationship of physical nature, is a very explicit manner of *stating priority*, method not predelineated by, not “mirroring” the physical nature as its basic foundational relation. *Secondly*, as it is motivation actually having and holding that predelineating function, you might expect, since motivation is the basic relationship of spirit, that it is *spirit* holding it. But this is *not motivation within* a spirit being (something) *opposed* to nature (or enclosed in itself); rather, it is motivation as the *basic relationship in this life-world*, which – as the “middle-in-between” – obviously includes *both* spirit and nature as two of its main aspects. And *thirdly*, then, the *subject within* the life-world (its third main aspect) *with* both “body and soul” (functioning naturally in “union”), both (his) natural and spiritual aspects, who *can be motivated only through becoming what he “lives,”* what he is *conscious of in his life*.

thing is something intersubjectively identical yet is as such that it has no sensuous-intuitive content [...] it is only an empty identical something as a correlate of the identification possible according to experimental-logical rules and grounded through them [...] by the subjects that stand in the intersubjective nexus along with their corresponding acts appropriate to appearance and to experimental-logical thinking. (*Ideas II*, pp. 92–93).

⁷*Ideas II* pp. 384–385.

This statement is, in its simple manner of putting it, of great importance regarding how what is said in the context of *Ideas*, is related to the *life-world* and *historicity* of the *Crisis*. This is so, since ‘[the subject] *can be motivated only through becoming what he “lives”* [and] *is conscious of in his life*’ expresses core-elements of historicity. Besides, since this is *what is given to him subjectively as actual, certain, supposed, valuable, beautiful, good*, and these characters *arise as motivated*, just as, on the other hand, they are *motivating*, we are, of course, (naturally, “life-worldly”) within our life-world. Thus, you have, *fourthly*, a very “intimate” *dialectic between the motivated and the motivating correlating the actual, certain [...] beautiful, good*, and since this will be *constituting subjectivity* (within what s/he lives), then this subject of motivation, might posit her/himself as such in *original self-experience*. Thus the *life-world with its historicity*⁸ *functioning within the lived dialectics of motivation*, lays open the soil for the *original self-experience*. But not only for (experiencing) her/himself; s/he might also posit others in empathy-experience. And this will, given that open soil for original self-experience, *finally* then, open the gate for the “original” *experiencing the other*, since empathy is *not* a mediate experience [...] the other experienced as a psychophysical annex to his corporal body but is an *immediate* experience of others.

And then, the question is raised about how all this, life, subjects, and their possessions etc., might become scientific themes. The answer is that they will be to the extent that *we take them precisely as they are and ask what belongs to them as subjects, as affected by their environment, as passive and active, and ask, further, what they accomplish and create in their surrounding world and how their surrounding world arises, grows and develops through their individual accomplishments and in reciprocal motivation as a common accomplishment*. Science is a function of a theoretical interest, which itself belongs in the subjective sphere,⁹ then, again leading us onto the dimension of motivation and the Life-world. This exposes major lines in how Husserl provides “origin” for understanding first the subject of life as it becomes foundational both for his method and also for the constitution of material nature. Now, then, we will be following up this by turning to Merleau-Ponty’s analysis of the concept of nature – particularly its spatiality.

Mainly M-P’s analysis is on the *Ideas II* and it entails both critical elements and some dynamic drive which is reflecting Husserl if we view him in a wider all-covering perspective pointing toward the *Crisis*. M-P seems clearly to have a strategy for what he in another context would say was to think the unthought-of in the thinking of Husserl – as he will be basing it upon another text by Husserl called “Foundational Investigations on the Phenomenological Origin of the Spatiality of Nature: The

⁸This might easily be compared to what Husserl says in *The Crisis* – in the appendix “The Origin of Geometry” characterizing history (and historicity) in this manner: “[...] history is from the start nothing other than the vital movement of the coexistence and the interweaving of original formations and sedimentations of meaning.” (p. 371) Also my article K. Rokstad: “On the Historicity on Understanding” in A-T. Tymieniecka (ed.) *Analecta Husserliana LIX*, pp. 401–422, 1999 Kluwer Academic Publishers.

⁹*Ideas II*, p. 385.

Originary Ark, the Earth, Does Not Move” (1933).¹⁰ This, then, now taking in the problem of origin, will, of course, right away introduce the perspective of historicity. M-P is here both creative and within the life-world as he is pointing to another kind of space than the one held by natural science insisting, then on how the universe of the natural scientists is secondary, saying: “This universe, considered in itself, refers to a primordial universe. The universe of theory subtends an already present universe. Behind this world, there is a more originary world, anterior to all activity, “world before a thesis”: the perceived World.”¹¹

This is, of course, in full accordance with Husserl – both in the *Ideas II*, as it says “objects are already constituted pre-theoretically” and in the *Crisis* where he says that scientists mistake what actually is a method for the true universe (ref.). M-P for his part speaks of a “constructed world” which contrasts the perceived world being “given itself in flesh and blood, Leibhaft [sic].” The Leibhaft which, of course, alludes to Husserl, is further said to have “an insurmountable character, underneath which is nothing” – whereas the universe of pure things “is an undermined universe, behind which there is the solidity of the perceived: the reference of one to the other is inscribed in the very meaning of the *blosse Sachen*.” Thus, it is the Life-world which is carrying it all. And after that comes what goes right into the heart of the whole issue – exposing the historicity of it all: “When we examine the meaning of the thing, we find the history of this meaning sedimented in it: Cartesian extension has its history in it; the *blosse Sachen* appear as idealizations, which are ulterior ensembles constructed on the solidity of the perceived.”¹² Even the Cartesian extension has its history in it, the “*blosse Sachen*” as idealizations etc. – this certainly turns the traditional naturalistic picture upside down and it calls for the historicity examined in the *Crisis*. And it is “to make the return trip to a preliminary level that will play the role of a source” thus following a “retrospective movement of intentionality” (cf. “intentional history”) that enables us to “find as the references to which the pure things necessarily alludes.” It is upon these reflections into the historicity of our situation that M-P continues into his examination of the *Ideas II* text itself (particularly the Second Section about the animal nature).

We shall not go into details of this – now only summarize the major lines drawn through the field. The Body becomes, then, the first key to it all as its essential role in the position of Things is examined and exposed. There are four aspects specifically taken into consideration: As “[t]he thing appears to me as a function of the movements of my body,” the first is, then, to examine the body “[a]s an Organ of the Ich Kann, the Je Peux, the I Can,” as M-P now expresses it. The second is to examine “[t]he Body as “Excitable,” as “Capacity to Sense,” as “Subject-Object,” the third is to examine the Body as Standard Thing, “Zero of Orientation” and finally, the fourth, “[t]he Role of the Other” is taken into consideration. All these aspects are functioning in “cooperation” and M-P does eloquently expose this all – even though

¹⁰Published in M. Merleau-Ponty: *Husserl at the Limits of Phenomenology*, pp. 117–132, Northwestern University Press 2002.

¹¹M. Merleau-Ponty: *Nature Course Notes*, Northwestern University Press, 2003, p. 73.

¹²*Nature* p. 73.

his analyses are much less rich in details than Husserl's upon which they are based; we shall now only look into some aspects of the last before proceeding to the problem of what is called "Originary Objects: The Experience of the Earth."

M-P continues by saying: "If by touch I manage to reflect on the action of my body, this reflection is still incomplete. [...] A subject that would have only eyes, Husserl says, would not have knowledge of itself. There must be a mirror for it. There must be others."¹³ So the need for the other is introduced and this motivates the analysis examining the constitution of the other which is a perception being "a pure and simple reply of the consciousness I have of my body." [...] "This perception of the other, which means that I grasp the body as lived, does not," M-P further now says, "consist in transferring onto the body of the other what I otherwise know of my soul. *Einfühlung* is a corporeal operation."¹⁴ And to M-P this means that "I apperceive the body [of the other] before apperceiving it as thinking. The look that gropes the objects is what I see at first: I see a body that articulates itself in the same objects as I do." Upon this and secondarily, says M-P, I perceive a soul and a mind – the fact that an "I think" emerges in this human being is a *Naturfaktum*. But in which sense is it a fact of nature? As this is now directly referred to Husserl's *Ideas II* (cf. pp. 190–191), it should also have been said that this is not such within the naturalistic experience and attitude but within the natural and the phenomenological attitude.

The outcome is, however, quite proper – as M-P says this carnal relation with the other is indispensable for thinking the *blosse Sachen* which again brings a "radical reversal" entailing my transformation from prehuman to become a human I. And as such, how is my situation? "I am no longer," says M-P, "the universal being of space, but a human enclosed in a sack." This, then, results in four or five more specific aspects of my situation: (a) My perceptions are going to become localized events in space and time; (b) I am going to become *Raumding*, spatial thing; (c) My body works to constitute itself; (d) The universe of *Sachen* closes in on me, whereas previously I was a rip, a gap torn open in the world; and finally, (e) the idea of a thing-for-X is introduced, for every subject that communicate with us. This whole set of aspects does then imply that "[t]he true thing must not be defined [...] from the point of view of God, except if we make a human of him and if he enters in our field." M-P refers this to Husserl and there is no doubt he agrees – reformulating it this way: "There is inter-corporeity such that even God can become an instance only on the condition of being taken up in the tissue of carnal things."

From here on M-P continues to interrogate what he calls "Originary Objects" and "The Experience of the Earth" thus carrying us toward what he speaks of as "the second definition of Nature given in the *Ideas II*." This second is the definition of Nature upon the Historicity of our Existence which becomes most fully developed in the *Crisis* and it is very interesting to notify M-P ascribing it already to the *Ideas*

¹³ *Nature* p. 75.

¹⁴ Op.cit. p. 76. This is, of course, pretty similar to what Husserl said about empathy – saying it is not a mediate but an immediate experience, not as if "the other would be experienced as a psychophysical annex to his corporal body but instead an immediate experience of others,".

II – even if, as he says, it leaves Husserl “visibly embarrassed.” Let’s look into how M-P develops the whole issue now, then, upon that smaller text called “Foundational Investigations of the Phenomenological Origin of the Spatiality of Nature.”¹⁵

The strategy M-P upon this text by Husserl follows is the one by contrasting in this way: the Earth is an object which is prior to the world of “pure things” and unlike how it is for Descartes the Earth is not one body among others – “for originary perception, the Earth is undefinable in terms of the body: it rather is the “soil of our experience.”” And we cannot tell if it is finite or infinite – it is “the living stock from which the objects are engendered,” neither “must we apply to the Earth the intra-worldly relations that we apply within the Earth” nor is it mobile or at rest – the Earth does not fall within these oppositions, it rather serves as a “cradle” (birth-place) or *an origin for all the ulterior possibilities* which our worldly knowledge is about as it erases “the Earth as *Offenheit*, as opening, with horizons that are only horizons,” as it is said.¹⁶

This is, of course, the critique of objectivism we recognize from the *Crisis* – now, then, pertaining to what it does in regard to (the phenomenon of) the Earth. It is about the forgetting the notion of *Boden* (“ground”), because, as M-P now says, “we have generalized it, situating the Earth among the planets.” According to this phenomenological perspective the Earth is prior to planets and the cosmos. And he further explains what this entails by taking in a thought-experiment that Husserl uses: it is about imagining a bird flying to another planet – it would not, then, as is said, have a double ground. And this is due to “the sole fact that it is the same bird, it unites the two planets into one single ground. Wherever I go, I make a ground there and attach the new ground to the old where I lived.” This is, of course, life-worldly rather intuitive and obvious, but it also has transcendental significance as it involves both my identity and some history. “For man,” M-P now further says, “there can be only men. Animals, Husserl says, are only variants of humanity.” And this is because “[w]e think that which is the most universal in us starting from the most singular. Our soil or ground [sol] expands, but it is not doubled, and we cannot think without reference to one soil of experience of this type. The Earth is the root of our history.”¹⁷ In this way the Earth and history in the sense of historicity are truly wedded upon the life-world.

M-P’s exposition continues by discussing objections Husserl raises against his own view. It is about how it can at all make sense to refer or “reduce” the universe to what is human; as humans are bodily individuals they die and have both a finite and relative existence and perspective upon the World whereas the universe (“in itself”) is infinite and “universal.” And the question falls very easy to ask: “If the reference to living being can disappear, if it is submitted to contingency, are we not obliged to say that only “pure things” remain?” But, M-P now says, “[t]he apparent

¹⁵Op.cit. p. 77.

¹⁶Op.cit.

¹⁷Op.cit.

paradox (of a physical reality resting on the carnal) exists only in a certain conception of subjectivity and the transcendental. It is true for Kant, but not for Husserl.”¹⁸

Husserl in his text also discusses catastrophic scenarios but leaves them aside ending up with the fact that I (am going to) die – this being a fact valid for all humans, it becomes the most substantial objection to his view. But upon this he develops an argument which actually is an argument of historicity. As it essentially links each one of us as individuals up with something being greater than each single one of us, i.e. the “spirit” which more precisely is understood as history and the generative in the sense of historicity.¹⁹

As it is such it is the historicity planted into our situation with everything contained, bodily individuality, memory, reiterability of history and sociality, sciences, time and space, earth etc. which both create and solve the paradoxical problem but to be able to see this you need look into history (this historicity) in another point of view than the one you get upon the constituted objective world-time which should encompass everything happening in the material “real” world – and likewise for the psychological concealed in it; we need the transcendental historicity which can be obtained only by executing transcendental reduction. The core of the argument is, of course, the constituting life and subjectivity which, in its living correlation with surroundings is the originating source for sense – eliminating it would also eliminate all possible sense and, then, all talk of the collapsing mass in space etc. would become equally senseless.

¹⁸This is explained with the following: “We cannot deduce from pure things our relation with our body, with the perceived beings, and other perceiving beings. We have to admit then that the world is not as appearance in relation to the appearance of pure things, on the contrary that it is founding in relation to these pure things.”

¹⁹The following is actually Husserl’s argument in its full extent: In the present, I as something present am progressively dying, others die for me when I do not find a present connection with them. But unity by recollection permeates my life – I still live, although in being other, and continue to live the life that lies behind me and where its sense of being behind me lies in reiteration and the ability to reiterate. That the We live in the reiterability and itself continually lives in the form of the reiterability of history while the individual “dies”. That is, the individual can no longer be “remembered” emphatically by others, but “lives” only in historical memory whereby the memory-subject can be substituted for the individual who “dies”. *What belongs to constitution is, and is alone, absolute and final necessity. Only on that basis is everything conceivable concerning the constituted world to be determined. What sense could the collapsing mass have in space, in one space constructed a priori as absolute homogenous if the constituting life were eliminated? Indeed, does that elimination itself not have sense, if any at all, as elimination of and in the constituting subjectivity? The ego lives and precedes all actual and possible beings and anything existent whether in a real or unreal sense.* Constituted world-time, more particularly, conceals in itself psychological time, and the psychological refers back to the transcendental. But it does not do so in such a way that it can simply convert the objectively psychical into the transcendental and above all such that one converts each manner in which, under the abstractly and relatively justified point of view, one harmoniously presupposes the homogeneous world and more precisely, Nature and the psychical psychophysical attached to it. In practice one can operate very well with that presupposition [e.g. by fashioning and utilizing science for human praxis]. But not even that allows for conversion into the transcendental or for making valid over against phenomenology the paradoxes which arise. (p. 296, Notes to pp. 78–84, my italics).

And returning to M-P's again – what does he for his part do? He talks about the difference between the things we perceive around us and our universal concepts – not now taking any position in regard to the validity they may have. And, then, still upon the Earth, he says something which is not quite clear: “Between the antipodes and us there is only a linkage of motivation; I know that the others have been there, that in principle I can go there, but that I would take time to go there and that when I will be there I will not be at the antipodes.”²⁰ This is about some horizontality or standing gape that cannot possibly be closed up – the “hiatus” spoken of in other contexts now embodying both some history and the horizontality provided by our living upon the Earth which can remain only horizontality. It yields both the most radicalizing challenges of our existence and it yields the only means we as humans have got to handle them meaningfully (as philosophers, too).

This, then, being my manner for making sense of the text above which should also be sustained by what M-P further says speaking of a “ubiquity of thought” making me believe that the antipodes exist by resting on a transmutation of the here to there which is, as is said, “a little like the replication of my irreplaceable “here” in the *Einführung* of the other.” Thus, by taking in the corporal human living upon the Earth, M-P can as well say that “the world of idealizations encloses a certain relativity. It is only true as limited and reincorporated into a more concrete given.” This could also now be taken directly back to the analyses of Husserl most instructively, perhaps, in his “Origin of Geometry” in which the idealizations of geometry are constituted upon both tradition and language thus providing that “more concrete given.” And there is, of course, no doubt about M-P returning directly to Husserl, saying: “Husserl rehabilitated the idea of Nature by his idea of jointure to a common truth that subjects would continue but of which they are not the initiators.” This, too, refers in a most obvious way to the same strategy – now referring even more directly to the tradition subjects continue as they are not the initiators of the common truth (but are) building it upon that tradition already established within the historicity of our existence. In that tradition people working upon it not realizing it as a tradition (but rather they are naturalizing – maybe even psychologizing it), it is the full impact of this M-P now attempts to discover and make us aware of as he further says: “All that happens is not explained by interiority, or by exteriority, but by chance that is the concordance between these two givens and is assured by Nature.”

In this way M-P comes to “the second definition of Nature” which he finds given in the *Ideas II*. This is, then, not the material Nature nor any Cosmos but exactly what Husserl speaks about as animal Nature (the “subject of life”) as the Body with its reversibility embodies the “access” to its own nature. “Nature is,” M-P now says, “that which I have a relation of an original and primordial character, it is the sphere of all the “objects which can be primally present not just to one subject, but, if they are present to one, can be given identically as primally present to all other subjects as soon (as these are constituted).” This also opens for speaking of the “totality of objects that can be given primally present” and what is “spatial-temporal-material

²⁰Op.cit. p. 78.

nature: the one space etc.” this is now actually constituted upon the analyses provided by both Husserl and M-P in the “collaboration” exposed here. It starts with “a primary universality of sensation” realizing that “the universal is not the concept but this perception in flesh and blood, foundation of my relation with others.” Sensation does not, however, envelop everything – “not the life of living beings.” On the other hand “[n]ature envelops everything, my perception and that of others, insofar as these can be for me only a divergence of my world.”²¹ Now as Nature has become Animal Nature in its full sense, it also embodies all the other parts in the form of the sc. Regions, both the material, the animal-psychic and the spiritual; the *primacy of the animal is grounded in its reversibility* which provides the *most originating access to its own nature* – and thereby to all there is, including the Cosmos.

²¹Op.cit. p. 78.

Evolution of Matter and Spirit, Rediscovering Slowacki's Mysticism and Teilhard de Chardin's Theology

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Abstract Both – Juliusz Słowacki and Teilhard de Chardin – despite difference of almost a century, had their original and controversial idea – to combine catholic theological thought and theory of evolution into an integral philosophical project.

Slowacki, the nineteenth century Polish poet and mystic, one of the leading personas in the Polish messianic movement created “genesian philosophy”, in which the processes of life-world and living spirits are described in the terms of theory of evolution. Prior to the publication of Darwin's *On The Origin of Species*, and with no-doubt partly inspired by Lamarckism it was innovative and original approach, in which all the Life, human-beings are undergoing the process of evolution which aim is the divinization of living beings, and the emergence of Solar Jerusalem.

This philosophical, mystical idea corresponds very well with the Catholic theologian and paleontologist Pierre Teilhard de Chardin, who tried to build the bridge between Catholic theology and modern scientific discoveries. Both of them, assumed the certain destination of evolutionary process (which stands against contemporary accounts), the final realization of Life itself – Solar Jerusalem or Christ OMEGA. They both have tried to abolish the dual concept of body and soul – toward the integral and processual concept of (human) being, constituted by the evolutionary (and spiritual) process.

In this paper I will try to reread Juliusz Słowacki's “Genesis from the Spirit” through thoughts and works of Pierre Teilhard de Chardin, mainly “The Divine Milieu”. There haven't been yet deeper studies of Słowacki's concepts on the field of philosophy, religion or even theology. His works were mostly studied in the context of Polish literature and Romanticism. His concepts were soon adapted on the beginning of 20th century by antroposophists, esoteric and occult circles. Słowacki was phenomenal writer, poet and visionary. His works were never actually treated

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with respect in the field of philosophy. He died young, in 1849, having only 40 years of life behind him. He died in the shadow of different Polish famous writer of nineteenth century, Adam Mickiewicz. They were both, next to Zygmunt Krasiński, considered as Bards of Polish literature. Słowacki was also one of the main representative of Polish messianic movement. Reading “Genesis from the Spirit” we can see much deeper thought than this, in the esoteric, historiosophic writings of Andrzej Towiański – the leader of Circle of God’s Cause in which Słowacki and Mickiewicz participated. It was a very strong messianic movement which had most of its followers among Polish émigrés in Paris – the followers were mostly Christian but also Jewish.

“Genesis from the Spirit” is a very complex work of Słowacki. In one way it is a prayer, a commentary to the first passages of the Biblical Book of Genesis. But most of all it is a meditation on the history of the Universe, the natural, material world, which is filled with the Spirit of God, with his breath (biblical *ruah*).

Juliusz Słowacki was a man of his era. He didn’t have modern scientific knowledge, or studies, but he was a very curious man. We could say that he had a very good intuition when it came to the history of the World. There is no proof of that, but he had to know at least basics of Lamarck’s concept of transmutationism. He did not live long enough to read “On The Origin of Species” by Charles Darwin. He was fascinated by the beginning of life, the process of life, its transformation and development. As a Roman Catholic living in the first half of nineteenth century he absolutely wasn’t essentialist. The World for him, from the very beginning, was transforming from inorganic simple material forms toward complex forms of life, more conscious and spiritual. He was aware that the history of the Universe keeps many secrets. Disregard his controversial theory, he regarded himself as a truly Catholic person.

In the context of catholic thought there seem to be only just one another person with such a similar concept of the World, and the development of Life. The Catholic priest, and geologist Piere Teilhard de Chardin. The reflection on the Juliusz Słowacki’s thought in the “Genesis” calls for the corresponding examination of Teilhard’s work. The experience of reading these works together enriches them, and gives reader a clearer insight. There are many concepts in their thought which are very similar to each other. Of course there was no direct influence of one thinker on another. But the basics of their thought, their intention seem incredibly similar. I could say that they are in the same spirit. By contemplating the world, they both tried to be orthodoxly Christian – cutting off from the ideas of monism or pantheism. The very process of Life fascinated them. They could oversee through the contemporary dualistic ideas of matter and spirit, which dominated Catholic theological thought.

The Spirit

For Słowacki, all spirits, all beings, have one source – that is the Spirit of God. At the beginning of his meditation he writes:

For before the world was created, my Spirit dwelt in the WORD, and the WORD was in Thee, and I was in the WORD.

And we, the Word Spirits, asked Thee to give us Forms and immediately Thou gavest us these forms, O Lord, permitting us to create from ourselves, from our Will and our Love, the first visible shapes, and appear before Thee in manifestation.¹

“Genesis from the Spirit” is Slowacki’s journey to the origin of the World. To the beginning itself. The evolution, transformation of the World concerns also the Spirit – Spirit of all beings. This approach may seem to be much more gnostic, than Teilhards. Of course for Teilhard, the divine Logos is in the beginning of the World. But it does not make the World divine itself. The world is in the process of sanctification. The Logos Incarnated, the Epiphany of Christ is for Teilhard main reason of the sanctification of matter. Teilhards tells us that we can recognize how in the whole process of life and creation “everything forms a single whole”.² For him the matter is sanctified mostly because of Incarnation.³ But it seems this sanctity is subjective, depends on the one who can “distinguish that portion of chosen being which is subject to Christ’s drawing power in the process of consummation”.⁴ One can perceive the physical and natural connections which bind his labor with the building of the Kingdom of Heaven. In Slowacki’s thought the sanctity of matter is purely objective fact. The Spirit takes many material forms. The Incarnation does not seem to be as important as the beginning of the act of creation.

In Slowacki’s though it is not merely that human actions take part in the process of creation and sanctification of the Universe, but the work of Spirit through all the possible forms in the real World. The development of the World, its transformation is spiritual in its origin.

Teilhards saw the soul as the product, the result of continuous development, the emergence of human consciousness. In “Genesis from the Spirit” the Spirit is from the very beginning filling all the reality there is. The matter is not secular, it is filled with the breath of God, it has its telos. This is the main difference between those two meditations.

But also these two meditations start from the same position – the contemplation of nature, surrounding reality, milieu of men.

Meditation

It is important to note that both works are exercises of spiritual matter. The full title of “Genesis from the Spirit” in Polish is “Genezis z Ducha. Modlitwa” (Genesis from the Spirit. A Prayer). Also Teilhards work is not only a meditation, and journey into his own consciousness but also an outburst of joy, and *fascinans*, on the wonder

¹ Juliusz Slowacki, “Genesis from the Spirit”, in *Occult Cosmogony. A Modern Commentary To The Stanzas of Dzyan Part 3, Descent of The Monads*, Kazimierz Chodkiewicz, Helene Petrovna Blavatsky, (Whitefish: Kessinger Publishing, 2003), p. 255.

² Pierre Teilhard de Chardin, *The Divine Milieu*, (New York: HarperCollins Publishers, 2001), p. 25.

³ *Ibid.*, p.30.

⁴ *Ibid.*

on nature in which God participates. For both of them – Słowacki and Teilhard – the laws of nature are epiphany of the sacred, das Heilige, which is hidden even in the most raw and crude organisms.

Teilhard writes:

Where are the roots of our being? In the first place they plunge back and down into the unfathomable past. How great is the mystery of the first cells which were one day animated by the breath of our souls! How impossible to decipher the welding of successive influences in which we are forever incorporated! In each one of us, through matter, the whole history of the world is in part reflected.⁵

Słowacki tries to answer to the very same question:

Let me, O Lord, whilst I rest here on this seashore, on these rocks and cliffs and bathed in the golden rays of the sun – narrate the Story of Creation, the tale hid in the memory of my past lives.⁶

For Teilhard and Słowacki, the history as well as the reason of the universe is hidden in this world. It is given to us in nature.

For in presenting the Christian doctrine of salvation, it must not be forgotten that the world, taken as a whole, that is to say in so far as it consists in a hierarchy of souls – which appear only successively, develop only collectively and will be completed only in union – the world, too, undergoes a sort of vast “ontogenesis” (a vast becoming what it is) in which the development of each soul, assisted by the perceptible realities on which it depends, is but a diminished harmonic.⁷

Słowacki remembers the past life of Spirit because of the external forms, which are scattered all over the world from the beginning of Creation. First – the light which can be observed is the witness of the first moments of the universe. In these first moments the laws of physics are established, and the Spirit “densified new thoughts into new forms”.⁸ First forms were created according to mathematical knowledge and numbers.⁹

For Słowacki these mathematical relations and numbers seem important. Even numbers constitute the non-organic matter, rocks. The six is its number. Organic life is designed on the basis of odd numbers.

Słowacki and Teilhard see that the man, in his being contains in itself elements of all possible life itself. In “Genesis” Słowacki writes “In the rocks, O Lord, lies the hidden Spirit like unto an excellent monument of beauty, still in sleep, but preparing for the human form of the future”.¹⁰

⁵Ibid., p. 22.

⁶Juliusz Słowacki, op. cit., p. 256.

⁷Piere Teilhard de Chardin, *The Divine...*, p. 24.

⁸Juliusz Słowacki, op. cit., p. 256.

⁹Numbers and geometry are present in whole “Genesis from the Spirit”, but they are especially noticeable, when he writes about the transformative progress of organic and biological life. See: Juliusz Słowacki, “Genezis z Ducha. Modlitwa” in *Dzieła wybrane. Wiersze i poematy*, vol1, (Warsaw: Państwowy Instytut Wydawniczy, 1987), pp. 571–574.

¹⁰Ibid.

We hardly know in what proportions and under what guise our natural faculties will pass over into the final act of the vision of God.¹¹

God, who made man that he might seek him – God whom we try to apprehend by the groping of our lives – that self-same God is a pervasive and perceptible as the atmosphere in which we are bathed. He encompasses us on all sides, like the world itself. What prevents you, then, from enfolding him in your arms? Only one thing: your inability *to see him*.¹²

Gods being is totally rational. It is enrooted in the whole creation (which cannot be here perceived statically but progressively, as a process of life itself). Human being, as a most complex living (therefore spiritual) being are predisposed to see God's being in surrounding milieu. According to Teilhard "to see him in all that is most hidden, most solid, and most ultimate in the world".¹³ It is not said though, that seeing His presence in the cosmos is somewhat a next evolutionary step in the existence of human beings. It is surely enriching, and desirable, but the relationships between human are considered as the main reason of human evolution.

Perceiving Reality and Action

Teilhard addressed "The Divine Milieu" to the people who were not concerned Christians or who were on the verge of Christianity. It teaches how one should perceive reality, finding in it Gods presence.

For Teilhard the Earth, cosmos is the diaphany of Christ. For Słowacki, as it was shown, reality is much more. Matter is divine and spiritual. Universe is the multitude of forms of the Spirit.

The labour and action of the human being in Teilhard's meditation works similar to the action of the Spirit in Słowacki's "Genesis". The action is the key to the sanctification of the material world, toward spiritual future (Pleroma), and communion of all things.

Human being through their action – all their possible and imaginable work – participate in the constant process of Creation. In one of his unpublished works from 1920 he calls it "creative transformation". According to him God is constantly breathing new being into us.¹⁴ In the Bible the God's breath is *ruah*, his Spirit. The same Spirit which in Słowacki's "Genesis" forms our World. Let me elaborate about the phenomenon of men's work according to Teilhard and the work of Spirit according to Słowacki. Teilhard writes that:

[...] we serve to complete it [creation] even by the humblest work of our hands. That is, ultimately, the meaning and value of our acts. Owing to the interrelation between matter, soul and Christ, we bring part of the being which he desires back to God *in whatever we do*.

¹¹ Pierre Teilhard de Chardin, *The Divine...*, p. 23.

¹² *Ibid.*, p. 9.

¹³ *Ibid.*

¹⁴ Pierre Teilhard de Chardin, "On the Notion of Creative Transformation", in *Idem, Christianity and Evolution*, trans. René Hague (New York: Harcourt Brace Jovanovich, 1974), p. 23.

With each of our *works*, we labour – in individual separation, but no less really – to build the Pleroma; that is to say, we bring to Christ a little fulfillment.¹⁵

The actions which Teilhard accounts to human beings, are in “Genesis from the Spirit” actions of the Spirit. He is the one who transforms the reality bringing it toward perfection, closer to the God. The whole creation, all the beings are fully participating in this endeavor. At first this thought may seem occasionalist. But it is illusory, because the multitude of spirits, although deriving from the one Spirit, have their own will. In the history they are sometimes responding collectively, but they basically have their own existence and experience of life (as seen in the “Spirit-King”, a work which was never finished, and which last parts he dictated on his death-bed). We can still find similar passages in the “Divine Milieu”, but they are not such a strong statement like in Słowacki’s “Genesis”.

The labor of seaweed as it concentrates in its tissues the substances scattered, in infinitesimal quantities, throughout the vast layers of the ocean; the industry of bees as they make honey from the juices broadcast in so many flowers – these are but pale images of the ceaseless working-over that all the forces of the universe undergo in us in order to reach the level of spirit.¹⁶

The human action is incomparably more significant than this of simple organisms. It is a mere shadow of our action. This hierarchy exists also in the “Genesis from the Spirit”. The labor of the Spirit acting through higher, more complex form of lives is superior.

According to Teilhard, work “implies effort and a victory over inertia. And then, however interesting and intellectual it may be (and the more intellectual it is, the truer this becomes), work is always accompanied by the painful pangs of birth.”¹⁷

Aforementioned words by Teilhard perfectly describe the work of Spirit in Słowacki’s “Genesis”. Only work of the Spirit, trans-formation of matter leads toward the eschatological future. There is no place for stagnation. The problem with the Spirit in the history is – as Słowacki names it – sloth. The Spirit, or rather spirits (because of its many forms) due time gets lazy and stagnant.

Teilhard speaks about the passivities of diminishment which slow down the growth toward the unity of the universe in God.¹⁸ In “Genesis from the Spirit” the laziness is main passivity of this kind. This diminishment lies within the Spirit, it is absolutely internal.

In the beginning of his meditation Słowacki writes about the inorganic mineral world of rocks, formed by the Spirit. After the earth was formed, the Spirit got lazy. The mineral forms which were built were motionless, “loving peace and quietude”. The spirit needs an impulse for further process of creation. This impulse is usually a global disaster.

¹⁵ Pierre Teilhard de Chardin, *The Divine...*, p. 26.

¹⁶ *Ibid.*, p. 24.

¹⁷ *Ibid.*, p. 36.

¹⁸ *Ibid.*, pp. 46–60.

Then, Thou, O Lord, made Thy flashes of lightning, Thy thunder, which pulverised and broke the rocks into pieces. This was the first death on the globe, the first sacrifice of form, for on these broken stones the first primitive organisms were built, and life began to appear.

Back then death was unknown in the world. Death is transition from one form to another. It cannot be treated as a real evil. For Słowacki death is never for vain. From death comes life. With the destruction of first rocks, the very first sacrifice the first organisms come to being. For Słowacki this very first “death”, a sacrifice, anticipates the sacrifice of Christ.

From Ambiguity to Homogeneity

All these events in Słowacki's meditation: The work of the Spirit; laziness of the Spirit and stagnation of forms; global disaster, a cataclysm; and the beginning of new life – these all four events are recurring elements of the cycle. History of the Universe has a spiral form – it consists of multitude of such cycles. In every cycle the Spirit creates a new forms of life. It is not an easy task to describe all of these cycles. At the very beginning was the world with simple water organisms; then plant life; giant fishes; giant serpents and lizards; birds and mammals.

Słowacki had no idea about mechanisms of evolution (there is no sign that he had any idea about adaptation and inheritance), so the transformation of species occurs rather in its own peculiar way. We can agree that his ideas were mostly similar to transmutationism of early nineteenth century. It may be characterized by going from the form which is closest to the ground, in the water, toward the flying organisms. This applies toward the animals and plants as well.

The world is in constant growth. Słowacki as well as Teilhard are sure of that. The life is in the process of complexification – of structure of beings and their relationships. It is the transformative and evolutionary process which lifts entities, transgresses their own boundaries. Through the meditation of the Cosmos, the rational and spiritual being – a man – can overcome the illusion of spiritual and material dualism in the World. Of course this evolutionary process, this creative transformation in Teilhard's and Słowacki's thought cannot be misguided with those in contemporary evolutionary sciences. For them evolution cannot be accidental and has its specified telos: for Słowacki it was a Solar Jerusalem, for Teilhard it was Christ-OMEGA. But the this very transformative process inspires them, in their rationality and faith. It binds their divided nature.

For the summary let me quote one passage from Teilhard's “La Coeur de la Matière”:

[...] as I took my first hesitant steps in an Evolutive world, I established that the dualism in which I had been brought up was vanishing like a mist before the rising sun. Matter and Spirit: not two things at all, but two *states*, two faces of the same cosmic stuff.¹⁹

¹⁹Pierre Teilhard de Chardin, “La Coeur de la Matière”, after Vernon Sproxtton, *Teilhard de Chardin*, SCM Book Club No.202 (Naperville: SCM Press, 1971), p. 33.

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Part V

Novel as a Path: Mamardashvili's Lectures on Proust

Mara Stafecka

Abstract In this paper it is discussed how Mamardashvili analyzed Proust's novel *Remembrance of Things Past* not as a literary text, but as a documentation of one's self-constitution. A person's life can be viewed as a path towards truth. Proust's novel brought evidence and vivid descriptions of moments of truth and understanding that Mamardashvili used to lay out his topology of path, which a human being must stay on to maintain existential identity with itself and preserve wholeness of being. Proust's novel was written with a presence of intense passion in every act of thinking, which attracted Mamardashvili as a material, to show how phenomenological procedures have to be applied to understand consciousness as a state of being. For Mamardashvili, Proust's novel was a formation novel, a coming-of-age in thinking and self-awareness novel, and he used it as an instrument to access the truth.

Mamardashvili turned to French writer Marcel Proust to show what paradigmatic changes happened in the beginning of twentieth century and what it meant for sustaining one's cultural and spiritual identity. By this time Mamardashvili had already lectured on Descartes and Kant and had discovered how differently the functioning of consciousness was viewed in the classical theories of rationality. His goal was to make thinking and understanding self-sufficient, to give thought means to uncover and identify its own falsehood, and to fight against automatic associations that exist in the culture and society which are activated every time humans use language. For Mamardashvili, Proust's novel was a launching pad to understanding art as a necessary precondition for a human being to become truly human and, thus, accomplish its destiny on Earth.

In his lectures Mamardashvili discussed philosophy and human beings who need philosophy to explore and understand their own existence. He revealed the significance of

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art in forming vital elements of thinking and understanding. For him philosophy was not a depository of concepts and ideas that could be organized, compared and contrasted with each other, but a special place where live ideas could be tried on and incorporated into one's own thinking process. Ideas, preserved in written texts, could reveal their meaning only when they become a part of someone's actual thinking. Mamardashvili was concerned about how to create some guidelines for thinking so it would not stray from the path of awareness of itself. In classical rationality, thinking was considered transparent to itself, able to penetrate itself with rational reasoning.

According to Mamardashvili, this is not the case in the modern world anymore. The mind has become a trap for itself because it is using knowledge that was not obtained from its own being. We are surrounded by bits of knowledge that somebody else has pulled up to light through his being. When the thinking leaves, bits of knowledge become dead empty shells. Only when we enter the same field of enlightening tension and plug-in our own beings, it is justified to ask about truth. The paradigm of classical rationality automatically activates associations of which we are accustomed. In this case, a person living in the paradigm of classical rationality is unable to notice the gap between one's existential experiences and their rational interpretation. Therefore, at this moment in history, the major responsibility of philosophy, believed Mamardashvili, was to overcome a human being's inability to detect the absence of identity with itself, and, thus, incapability to understand itself as a whole being. The task of philosophy, as he saw it, was to authenticate thinking and to locate its place in the life-world of a human being. "We should not think that the complete subject stands in front of the world ready to cognize it, and that at the end of this process he will come up with some kind of truth." (Mamardashvili, p. 397)

We can consider Mamardashvili's *Lectures on Proust* as an introduction into a very specific contemporary task of philosophy. Mamardashvili wrote, "I am calling Proust's philosophy a certain spiritual task, a life-long task that he is undertaking as a human being at his own risk; it is not reasoning, and it is not forming an aesthetic or philosophical conception; it is a task that ancients have called 'salvation'." (Mamardashvili, p. 11) For Mamardashvili it was a sin to shift one's responsibility to social surroundings or to other people just because one had missed the opportunity to look into oneself and to change oneself. (Mamardashvili, p. 35) Mamardashvili linked this theme of individual responsibility to an obligation to work tirelessly on one's own self here and now. It was the individual's existential duty to avoid postponing changes to any later time in the future. "Here and now" is the point in space and time when one's destiny is defined. According to Mamardashvili, this innate existentiality of philosophy is by definition an unalienable requirement that has to be at the very center of every philosophical undertaking.¹ This acknowledgement neither turns Mamardashvili into an existentialist, nor associates him artificially with Heidegger

¹I want to point out a very interesting juncture between Mamardashvili and Heidegger and also French symbolism. Mamardashvili said the following in an interview in 1990 about Heidegger, "He had a talent to feel the real life of philosophical notions and it was more poetic than philosophical. He was returning philosophical thinking that went too far into abstractness to its primordial vital sense and to its place in the life constituting process. In this sense he did what was done by symbolism, first and foremost French symbolism, at the beginning of the twentieth century." (Kruglikov, p.61).

or any other name from the history of philosophy. As Mamardashvili stated himself, true thinkers cross their paths often because they follow the lead of ideas while laboring on solutions of similar problems. He pointed repeatedly to these hidden citations in works of his predecessors that clearly showed that at some point in history others had been on the same path of thought. (Mamardashvili, p. 28)

For Mamardashvili, understanding what philosophy is and how it affects self-awareness of a human being was a central theme of his lectures. Early on, he came to the realization that classical rationality with its concept of transparency of consciousness of itself needed revision because it did not correlate to the real-life processes of thinking. Mamardashvili demonstrated and taught his audiences how it feels and what it meant to think. He argued that consciousness could not be understood as an object attached to the subject as classical reflexive procedure intends to perceive it. He believed that to understand thinking one has to step outside the limits of consciousness. Everything begins from a simple mandate – we have to understand what happens when we think and what are the tools we use to capture it.

Here is the point where all difficulties begin. Is it possible to be inside and outside of consciousness at the same time? He frequently repeated that thinking is an existential act – something has to happen – and that understanding is a result of an existential state of being extending beyond rationally and logically compounding the contents of our experiences. It is no wonder why he often referenced quantum theory and used uncertainty principle to explain why certain parts of our conscious experience could not be defined simultaneously. We can explain Mamardashvili's task as identifying the world where thinking and consciousness appear attached to objects in it. Intersecting lines of perception, apprehension, and sensation form a tense field. Thinking moves through it sorting daily experiences – sensations, impressions, perceptions, judgments, and opinions. It is difficult to agree with Valery Podoroga's interpretation that Mamardashvili was a transitional figure in Soviet philosophy where he served as a bridge to western thought, but did not reach the other side leaving the last span of the bridge unfinished. We think that this image misrepresents Mamardashvili's role and place in the Soviet philosophical thought. Mamardashvili was a truly unique philosopher. He challenged traditionally assigned roles of thought. He freely moved through historical layers of thought explaining what the texts are telling us and how we could use them to understand our own thinking. For him, thinking was a way one could understand oneself and, thus, find one's human identity and one's place in history. As he saw it, thinking carved a passionate path towards oneself. Mamardashvili used philosophical writings and cultural references in his own unique way to ignite thinking. He often reminded his listeners that he was not giving a summary from different sources but trying various approaches for a specific reason – to help his audience tune into true thinking. Mamardashvili understood his task as teaching to understand one's own life experiences, to demonstrate the gap that exists between our sensations, impressions, observations and perceptions and their rational interpretation using tools from the arsenal of classical rationality. If a human being is living with this gap and is not realizing that it exists, true-life experiences are misinterpreted and, as a result, misunderstood.

Mamardashvili often used associations from modern physics to explain why we cannot rely on reflexive procedure to capture meaning of our experiences. Human beings function in a world that resembles viscid, tense field of visible and invisible lines of “gravity” where at one point we can see clearly what is happening and at the other everything becomes obscured and we vaguely can distinguish only an outline of something. As thinking beings, humans function in life-world as carriers of knowledge and as states of being. This duality greatly complicates self-understanding of thinking beings.

Mamardashvili focused on the symbolic aspect of human existence, on the fact that every happening in the life of a human being has two sides: one that is visible to everyone around, and the other that is hidden and grows deeply in the consciousness defining individual mentality. The world where we function, explained Mamardashvili, has internal power or intensity lines that remind us of a magnetic field in which at different moments, objects can have different significance. It is similar to what happens in a chess game where a pawn can become more powerful than initially more influential figures.

To understand this hidden, deeply embedded meaning, we need a mechanism that could point to the gap existing between what one is feeling and what is the true meaning of this feeling. Mamardashvili introduced the notion of cogitative consciousness that is capable of bridging the gap. (Mamardashvili, p. 191) This is consciousness as a mental state, as a state of being. Such special capability is nurtured in art, which is the true function of art – to explicate what and why one is feeling and to develop cogitative consciousness.

At the beginning of the twentieth century the novel changed its recognizable appearance. Instead of broad and monumental social landscapes recreated in the novels of Dickens, Zola or Hugo, this new kind of novel delved into the depths of an individual human being by looking into its psychological and sensual uniqueness reaching more and more inwardly and acquiring distinctive understanding in what it means to be human. In this type of novel, commonly called the *stream of consciousness* novel, the author was following the flow of thoughts and feelings, woven into emerging and disappearing images and associations from the distant and not so distant past. Why did the nature of novel writing change so dramatically? What happened in society that caused authors like Marcel Proust to change the way in which they communicate with reality by plunging into themselves and trying to pull the understanding of the world from their own life experiences? Why did Proust’s novel become an element of change in our aesthetic perception of the world? (Mamardashvili, p. 12)

It was about that time when Freud was exploring the unconscious and extended our perception of personality and human self. A few decades earlier Nietzsche was writing passionately about becoming “true self,” about cultivating “genuine humanity” and “genuine wisdom” as opposed to “superficial rationality”. Impressionists were devoting themselves to mapping out perceptive, sensual clues about apprehension of the world. The end of the nineteenth and the beginning of the twentieth centuries brought in so much evidence of “alternative thoughtfulness”, which a human being was required to comprehend and meaningfully function in this new socio-cultural

environment. At this point in history, Proust's novel, *Remembrance of Things Past*, according to Mamardashvili, was a grandiose attempt to sort out what has changed in perception of our own humanity and how we can approach images and feelings that enter our minds and at the same time avoid prejudices that originate from our traditionally rational worldview. Proust collected an immense amount of perceptual experiences in his novel. Mamardashvili analyzed it as a type of instrument that can create awareness of how we understand or do not understand things and events around us. Mamardashvili noted that Proust himself was aware that the novel, the unique instrument he created, would be used by anyone to recreate the same effects in themselves. (Mamardashvili, p. 12) Everyone has to 'struggle'; to work immensely hard to come to an understanding of oneself and the world by diving into oneself. This is the main idea of Mamardashvili's Lectures – true understanding cannot be inherited as knowledge. If anything can be understood at all, it has to be done through the effort of an individual human being, through passionate immersion in the world. "There are no problems that concern humankind; there are only problems that concern every human being separately." (Mamardashvili, p. 17)

Following Proust, Mamardashvili raised the question about what is the true knowing and what are the possible ways of expressing it. New experiences, which had accumulated in society since the beginning of the twentieth century, led to a revision of rational images of truth. Mamardashvili noted that Proust demonstrated that true knowing is related to the state of change when something happens to us. It is a state of being and as such, cannot be comprehended adequately as a statement where only words carry meaning.

Mamardashvili repeatedly returned to the episode in the novel where two friends – Marcel and Saint-Loup – approach Rachel and they both perceive her differently. He used this scene to show that perception is predetermined by something that has happened previously. Saint-Loup, who had seen Rachel performing on the stage, in the limelight of fame, idolized her. For him, Rachel was an adorable, noble, gorgeous, lovable, charming young woman who deserved to be respected and admired. Conversely, Marcel, who had seen Rachel in a brothel, had a completely different image of her. For him, Rachel was a prostitute who could be had for a few cents. There was nothing majestic about her, only pity and compassion. How was it possible that Marcel and Saint-Loup had such different images of Rachel, asked Mamardashvili. This example shows that objects do not have constant meaning attached to them but gain meaning in the life-world of experiences. There are no pure objects. They are attached to different awareness structures that connect Marcel and Rachel and Saint-Loup and Rachel that were deeply rooted in previous experiences that did not intersect.

To explain this phenomenon, Mamardashvili introduces notions of metaphysical *a posteriori* and metaphysical *a priori*. Let's look back at Marcel and Saint-Loup. Something happened before and this "before" is defining Marcel and Saint-Loup's perceptions. Seeing Rachel on the stage surrounded by fame was the event that forever characterized Rachel in the eyes of Saint-Loup. Vice versa, seeing Rachel as a prostitute forever degraded her in the eyes of Marcel. This perception came from experience and, therefore, is *a posteriori*. Mamardashvili named it *metaphysical a*

posteriori. Nevertheless, at the same time it will a priori influence every occurrence in one's life. This *metaphysical a posteriori* will a priori determine the structure of one's world and draw a horizon of one's understanding. This is an a priori structure but because it was formed in the empirical experience, it is also a posteriori. (Mamardashvili, p. 401) This a priori sent Marcel and Saint-Loup's understanding of Rachel in two different directions that would never overlap. Rachel, as a physical object, was not what true Rachel is. Rachel was between Marcel and Saint-Loup, and each of them contributed to "packing" metaphysical a posteriori in her. Mamardashvili used this term to indicate what had happened to a subject, to thinking or consciousness but was not a result of a conscious act. We did not pack; packing was done beside us, without our self-consciousness. (Mamardashvili, p. 405)

Understanding is an act of being that requires inner sensational agility and readiness to be engulfed and overwhelmed with a new reality. This leads to a conclusion that understanding is a state of mind that cannot be acquired simply by receiving an explicit message. For that reason, Proust's novel does not describe a character's life, Mamardashvili argued. It is a constituting part of a character as a human being itself.

Marcel Proust shaped a completely new form of novel that let him recreate his own life from the chaos of daily incoming sensations, associations, perceptions, and accidental thoughts. This form served a very particular goal – to help understand oneself. The work of art in general, believed Mamardashvili, is an adequate way to gain understanding of oneself. Mamardashvili was reminded that Dante used Virgil as a special symbol of something that helps us move, initiate understanding, and begin to see. Virgil is a symbol of art as a unique, necessary way of gaining access to one's self and, thus, understanding not only one's subjectivity but also the world. The work of art is a mechanism that interacts with one's life, a courageous, constitutive mechanism that changes how we perceive ourselves. (Mamardashvili, p. 23) Mamardashvili viewed Proust's novel as a mechanism (he uses Russian word 'mashina') that can induce a 'second birth' that comes after the biological birth. He spoke about the two worlds in which human beings function. To earn the privilege to peek into the 'other world', we have to learn to suspend our daily language for awhile with its automatically identifiable meanings and associations and listen directly to incoming experiences. (Mamardashvili, p. 16) Language has established connections that automatically organize and sort our incoming experiences, and to overcome this automatic action one has to force oneself to look beyond empirical reality.

Mamardashvili read Proust's novel neither as a literary critic nor as a literary historian, but as a philosopher who saw in Proust's work an example of how to approach complex processes of thinking and understanding without turning them into lifeless and formal sequences of reasoning with wordings camouflaging the meaning which made it harder to identify with experiences given in the text. A human being is surrounded by a myriad of daily happenings and by countless descriptions of them. For Mamardashvili, this is a circle where a lie that appears like truth is overwhelmingly present. Mamardashvili strongly believed that the truth could not be given as a statement just embedded in words. The difference between the

truth and the lie cannot be found at the level of statements. It can only be proved in an act of individual experience or inner act of endurance as truth.

Mamardashvili's task was to ignite a spark of true thinking, to keep it alive and flickering in spite of dull, superficial perceptions that overwhelmingly dominate daily undertakings. He explained why he chose to use Proust's novel and did not use terminology developed in Husserl's phenomenology. For him, abstract terminology was cold and uninviting, missing what he called "the French passion". Personally, Mamardashvili was not fond of the German tradition in philosophy. As he had confessed to his audience, he grew up with French writers and philosophers, and it shaped his preference for French culture and mentality. He explained that French culture and mentality were saturated with passion; therefore, its contents worked better as a basis for psychological and philosophical meditations. For him, Proust's novel was a better tool to explain psychological complexities of our thinking than Husserl's phenomenological terminology. ("Let's continue supplementing artistic images and metaphors that are better than definitions and notions to help us understand philosophy." Mamardashvili, p. 26) Here Mamardashvili echoes his admiration for Descartes, who once said that important ideas most likely will shine brighter when they are gathered from art or poetry and not from philosophy.

For Mamardashvili, Proust's writing was an attempt to explore how our understanding works and how we can be sure that we really understand. Mamardashvili tried to interpret Proust's unique ability to capture thinking in its most live and authentic state, which we can call metaphysical seeing that penetrates our existential perceptions. Metaphysical seeing is present in every simple detail as is metaphysical a priori, so it explains why a cookie named "Madeleine" can trigger unexpected revelations. Earlier, while working on *Symbol and Consciousness*, Mamardashvili pointed out that introduction of quasi-objects is the only way to solve this kind of paradoxes, because certain phenomena elude the reflexive procedures of description. (Mamardashvili, Piatigorsky, p. 258)

According to Mamardashvili, only in the process of writing his novel Proust became who he was – the author. Proust abandoned the assumption that our consciousness and will control how we find appropriate accurate verbal forms for content of our perceptions and experiences. (Mamardashvili, p. 339) Here Mamardashvili saw Proust's connection with Descartes. Proust, wrote Mamardashvili, reinstated in the history of philosophy the unfortunately forgotten existential side of *cogito*, which Descartes introduced as a symbol pointing to the gap that exists when I think about the world and that has to be filled with my being, my existence. (Mamardashvili, p. 335) It was Descartes who first linked the truth with the state in which it was perceived.

This leads to one of Mamardashvili's fundamental ideas that we feel in one world and we think and name things in the other world. As a result of this situation, there is a gap in our daily presence in the world. The act of consciousness is hidden until we acknowledge the existence of this gap. Authenticity of our existence depends on our ability to fill this gap. When we record our observations, we touch the visible, the external side of objects. The inner individual core that comes from our presence in the world is missing. When we leave our individual inner core,

we dwell in the realm of abstractions and general notions. In that realm we can play with words infinitely without approaching the truth and true meaning. (Mamardashvili, pp. 319–320)

To overcome this problem twentieth century turned to art. Traditionally, the process of cognition was understood as a sequence of experiencing an impression and then attempting to extract knowledge from it. Proust, according to Mamardashvili, believed in the opposite – that it was impossible to have an impression without understanding it. “The experience that is described in Proust’s novel is impossible to understand...if we will not suppose that it contains the rejection of assumption that a human being deals with a world of meanings, concerns and rules established without his participation... We are dealing with meanings that do not exist if they are not extracted...they are inseparable from the act of extraction...they originate... in the act of extraction.” (Mamardashvili, pp. 323–324) Mamardashvili used an example from Shakespeare’s tragedy *Hamlet* where Hamlet stages a play to extract meaning and to understand what is happening. Hamlet wants to become a source of his own actions. His play is his rising himself in truth. He enacts his own tragedy to find the meaning of his own life. (Mamardashvili, p. 314)

For Mamardashvili, works of art are mechanisms that create us as human beings. (Mamardashvili, p. 311) “A work of art as a guest from another world brings forth in me those thoughts and states of being which would not exist and which I as a natural empirical being would not have, and therefore, there would not be truth or my knowing about something.” (Mamardashvili, p. 314) As empirical beings we are on that unsteady winding trail of perceptions where an impression can strike like lightning. We cannot ask for it because it is an unintentional act. The work of art is a place where unintentional acts of truth are preserved. Let’s listen to Mamardashvili, “On the thread of burgeoning mystical sense something is breaking out of his soul seeking to become a work of art.” (Mamardashvili, p. 305) A traditional critique of art overlooked or misunderstood the fact that a novel, text or a work of art are mechanisms of changing oneself. Art enables us to see, to be aware, to sense where to look for truth. According to Mamardashvili, art is this privileged instrument to access the truth.²

The notion of an interval or gap is central to Mamardashvili’s understanding how we – human beings – use our consciousness and how it affects our

²I cannot agree with Elisa Pontini’s conclusion that “Even if art is not, to repeat, a privileged instrument to access the truth; still the work of art is the sensible expression of that original, ever personal act of genius that sets in motion the conditions for meaning to appear.” (Pontini, p. 177) Art for Proust, as for Mamardashvili, was a source of becoming an origin of one’s own act, of oneself. Mamardashvili underlined the necessity of a creative act as a mechanism, through which we can access our hidden individual core. Art is a place where quest for identity turns inward and we can descend into the deep well of our soul to find the truth. A work of art becomes a scene where our conscious self can find out the beginning of the path to itself. Mamardashvili pointed to Hamlet who was enacting a play to find out what was happening around him. He also mentioned Greek tragedy where characters work through circumstances, through existential states to become masters of their own destiny.

functioning in the world. When we enter the world to understand it, we have to move apart mental states that have been molded or imprinted into objects, and into this “between” we have to apply our effort to squeeze in. Objects are not things-in-themselves because they belong to our world. All of them carry a hidden component, a mental imprint that originates from coming into the horizon of our perception. It is a forceful pushing-in. Mamardashvili employs a metaphor of “using your own shoulders” to widen the gap. (Mamardashvili, p. 347) When we become aware that the gap exists, we can start to analyze preconceptions about who we really are.

Many years ago, a similar idea was discussed in receptive aesthetic, in works of Robert Jauss and Wolfgang Iser. The essence of their idea was that we could not understand the work of art as a discrete point in time and space because we cannot locate its meaning “there”. To understand the work of art, we have to “stretch it” between two or more points in the field of perception.

Everyone has experiences but not everyone can see through them and bring forth understanding. Two people can look at the same set of events and obtain completely different ideas. Mamardashvili shares Proust's example of Saint-Loup and Marcel who are living with the opposite images of the same Rachel because Saint-Loup saw her first on the stage in the light of high artistic values, and Marcel had seen her in the brothel where her services were cheap. To understand what is happening here we have to apply phenomenological reduction. In reality, we are surrounded with similar joined formations that can be easily misread. Terminology does not help to recognize and identify strange formations that he called ‘simulacra’ or ‘quasi-objects’ because only by diving into one's own inner depths and peeling off layer-by-layer of perceptions and sensations one can overcome illusions that appear as absolutely legitimate and rooted in reality. To deal with ‘simulacra’ one has to acquire a special technique, which is the core topic of Mamardashvili's lectures. Mamardashvili plays with Proust's example of eating a pastry, ‘Madeleine,’ that awakens memories and like lightning carves a path where happenings in the past align to shape understanding. This is something that our will does not control. This special memory cannot be initiated by an act of will. The same is true about understanding. This is not an act of reasoning, which can be consciously planned or accomplished. Something other has to happen. Something has to happen in us if we want to understand and decode phenomena like ‘simulacrum’. It is possible to understand them only through existential acts, which we cannot summon when we think we need them. Our will has nothing to do with their presence or absence. We do not know which tiny detail (pastry, flower, poem) from our past experiences might suddenly become a catalyst and trigger an enlightening glimpse into ourselves. Mamardashvili reinforced Proust's belief that thought could not be transferred in a rationally controlled manner from one person to another or from a text to a reader. Something else has to happen. Indeed, you cannot have Pascal's thought, stated Mamardashvili, because it was not born in your head. In fact, most likely you would just have an empty shell that thinking had left behind.

Artist's Personal Cosmogony: Andre Gide and Jarosław Iwaszkiewicz's Concept of Cosmos, Experience of Artist and Origin of Art

Daria Iwona Gosek

Abstract Human: situated between cosmos and earth, between individuality and humanity, is a creative subject. He is trying to intermeditate between cosmic forces and his reality, create a vision which translate the world for him. Andre Gide once wrote: "Man cannot discover new oceans unless he has the courage to lose sight of the shore." Those "new oceans" Gide has mentioned, could be understood as efforts undertaken to describe the world, attempt to explain the origins of the world (which is, as Leszek Kołakowski said, creating a myth, a cosmogony). Andre Gide and Jarosław Iwaszkiewicz, those two writers, French and Polish, tried to present complicated vision of cosmos and human being (as transcending project) and life from their perspective: perspective of artist. In their works (both: fictional and non-fiction) they were struggling with those problems. Their visions of world, cosmos, human being are strongly unique, original and yet – there are similar. Both of them are often portrayed as representatives of existentialism *sensu largo*.

One of the researchers¹ of Jarosław Iwaszkiewicz's² works notices that they include elements of most of the world's cultures that constitute European culture of the

¹Piotr Drobniak, *Jedność w różnorodności: Europa w twórczości Jarosława Iwaszkiewicza*, (Wrocław: Wydaw. Uniwersytetu Wrocławskiego, 2002).

²Jarosław Iwaszkiewicz, 1894–1980, one of Polish outstanding twentieth century writers. Best remembered for his literary achievements in poetry before World War II as well as for his short-stories. Co-founder and leader of the Skamander group of experimental poets with Antoni Slonimski and Julian Tuwim in 1919. After war he was a major figure in Polish literature, though he was also criticized as a long-term political opportunist in the communist Poland. He is well known for his translation of the Soren Kierkegaard writings into Polish.

In 2011 Iwaszkiewicz's private diaries were published. The manuscript (which was never intended for publication) was personal, detailing, among other things, the author's sexuality, his artistic frustration, moral doubts and trivial concerns.

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twentieth century. Childhood in Ukraine that for the rest of his life stayed a “paradise lost” to him; deep youthful fascination of Russian and French literature; stay in Denmark in a diplomatic post in the interwar period; entering the culture of Germany and Italy, packed with deep emotional experiences – all of that forms up the world of Iwaszkiewicz’s creative imagination (Alicja 1983). He understood and lived each of these cultures multidimensional, treating with equal importance the history, monuments, literature – and daily, current life he could witness first hand. At the same time, he was not – he could not nor want to be – a full participant of any of these cultures, staying in closest relations with the dead worlds of his own childhood and youth, as well as with Poland in all of its complex history of the twentieth century. His position about Europe is partly a position of “a barbarian in a garden” who experiences profound instinctual bond with the whole of European cultural tradition, but cannot shed embarrassment and shyness in contact with it. The role of an external observer allowed him to recognize cultural reality more closely, with greater perceptiveness than the other European do (Matuszewski 1968). Iwaszkiewicz can be called an “amateur anthropologist”, very responsive to hidden themes of the perceived reality, and able to capture them with rare intuition and describe them in an exceptionally plastic way.

“Thought has its own geography”. – once wrote Sartre. In those geography Iwaszkiewicz and Gide were citizen of the same realm. Iwaszkiewicz and Gide are children of the same spiritual formation, heirs of the nineteenth century modernism and connections between them are not only in the realm of ideas: literature, music, art. Concealed homosexuality, marriage with a woman, family distress, war – they both share these experiences.³

Just as a Frenchman, wherever he goes, cannot take a step without *also* drawing nearer or farther from France, so also every movement of the mind either carries us nearer or farther from Gide. His clarity, his lucidity, his rationalism, his rejection of pathos, allowed others to hazard thinking in more obscure and uncertain areas. They knew, while on their voyage of discovery, that a luminous intelligence upheld the rights of analysis, of purity, of a certain tradition; should they be shipwrecked, the mind would not founder with them. All of French thought in these past thirty years, willing or not, whatever its coordinates may have been elsewhere – Marx, Hegel, Kierkegaard – must also be defined in relation to Gide.⁴

Not only the French thought. Gide influenced the literary world of Jarosław Iwaszkiewicz as well. Polish writer continuously returns both to subjects explored by the French writer, and his biography and philosophy.

³Paradoxically, they do not bring the writers closer together. The journals of Iwaszkiewicz are filled with malicious remarks about the author of the “The Fruits of the Earth”. He looks for any signs of insincerity, hypocrisy, superficiality, banality on the pages of Gide’s “Journal”. Iwaszkiewicz in his personal diary wrote: “The worst thing about by life – especially now that I am old – is that I have nobody to compare myself to. Undoubtedly, I am relatively the greatest persona. But I grew like a huge mushroom covered with a small jar, hence all the deformations.” There is resentment to be felt in these words – especially that earlier he notes that had he had such an opportunity – he would have become a writer as iconic as Gide.

⁴Jean Paul Sartre, *The Living Gide*, in *Gide: A Collection of Critical Essays*, ed. David David Littlejohn, Englewood Cliffs, (New York: Prentice-Hall, 1970).

Cosmos of a Poet

Jarosław Iwaszkiewicz asks in one of his poem: “Whoever will accept me – Nothingness, Matter or God?” Although the answer is God, Iwaszkiewicz understood God differently. God is what the world was created from, it is the name of matter. In “Sérénité” he define “universe:” “The universe, that is matter, that is God, that is us”.⁵ These poetic pantheism is characteristic feature of Iwaszkiewicz’s thought. These kind of feeling (feeling of oneness, holiness) can be experience only through art. In Chopin’s “Barcarolle” Iwaszkiewicz saw an impressionistic landscape with a pantheistic sound.⁶ His poetry has a pantheistic faith in the unity of life, but without denying the worth of the individual. Poets’s words are distant echo (filtered through experience of twentieth century) of Spinosian phrase about absolutely infinite substance which is indivisible.

These connection between cosmos, God, matter and consciousness is obvious but inexpressible, poet merely apprehends to these truth. The eternity of cosmos and its mystery still belong to the world, they are realized “in the real world”. Within it, the cosmos is a symbol of mysterious destinies. Despite the anxiety and the sense of unsolvable mystery a man feels under the star-lit sky, it is, as in the famed formula of Kant, a guarantee of order ungraspable by human mind, yet encompassing all beings. Therefore, in the (material) world there is a spiritual element, the mystery so characteristic for existential thought. Next to mystery, another key word for Iwaszkiewicz is “nothingness” – nonexistence, non-being, etc. Experiencing it is a boundary experience.

However, immersion in life is not so simple. Gide, in “The Fruits of the Earth” touches the problem to getting to know and experiencing the world, being in it. Gide recognizes the specific situation of human being – their immersion in reality and in themselves, distancing themselves from the world and their own selves at the same time. Getting to know oneself is an impossible process – because men continually change. Men teeter on edge, feel unending anxiety. “May your vision be new at any moment” – adds the writer. Uncertainty of the author is evident from, for example, his descriptions of a morning state, when a waking man regains consciousness, draws first conscious breath. Movement begins: external and that within, each being an additional ingredient, building up taste. Philosophy is born of astonishment. The thought of Gide and Iwaszkiewicz has its roots in anxiety. Anxiety of Iwaszkiewicz is eschatological, related to death, and for Gide the anxiety is related to vitality, men’s desire to understand and live the world fully. A man of Iwaszkiewicz teeters on the edge of materialism and spiritualism cosmos and culture. Iwaszkiewicz finishes one of his poems with a reflection on the existence of two bloodstreams in

⁵Jarosław Iwaszkiewicz, *Serenite*, in *Opowiadania*, (Warsaw: Czytelnik, 1980).

⁶In his “Notes on Chopin” Gide also admire these piece of music: “Sfogato, has any other musician ever used this word, would he have ever had the desire, the need, to indicate the airing, the breath of breeze, which, interrupting the rhythm, contrary to all hope, comes freshening and perfuming the middle of his barcarolle?”. André Gide, *Notes on Chopin*, tr. Bernard Frechtman (New York: Philosophical Library, 1949), pp. 30–31.

men – natural and spiritual, red and black, that which brings a man together with nature and that which separates them from other beings, other people.

Intensity of Experience

Jarosław Iwaszkiewicz spoke of the “favorite toy from the times of Stavyshe”,⁷ referring to the activity of drawing a mental line between himself, observing a starlit sky, and a star twinkling up there. He wrote that this experience brought forth feelings of “going back to something he already knew”. “The entire world, mighty and huge, reaching consciousness through me, breathed with my chest”.⁸ Consciousness with the entire body, became a part of the whole, “mighty, huge”, governed by its own rules. The feeling on fullness,⁹ harmony of the world and man, experiencing it by the artist (feeling and expression through art) are motives bringing together the works of Andre Gide and Jarosław Iwaszkiewicz.

Expressed by Iwaszkiewicz “intensity of existence” should not be understood as a simply “vitalism” or superficially “dionysian experience”. His existential sensitivity cannot be captured by literary and aesthetic ideas (aestheticism, amorality of beauty, instinct of death pervading erotic instinct), nor through particular refinement of sensory perceptions of its the various narrators (“sensuality” of his prose and poems). Iwaszkiewicz, as a poet, as an artist is someone bestowed with a peculiar sense of “intensity of existence”, experiencing more, with greater intensity. These experience can be pain as well as happiness, but it cannot be morally judged as the nature of this experience is not moral. It is vibrant and strong experience of time and space, and thus infinity of the world and loneliness “in the face of being”, experience of its existence.

“Listen this invitation to mediation, to death” wrote Gide in his diary’s entry. Image of declining season, tree losing its leaves, remind him “modest actor in a vast ensemble”. Unlike spectators “of a vast ensemble”, Gide is not bored observer. He’s becoming a part of these scene, he is “melting into this harmony”.¹⁰ These experience of melting can be melancholic or... almost orgiastic (like in famous Gide’s novel, “Immoralist”): “And suddenly I was seized with a desire, a craving, something more furious and more imperious than I had ever felt before – to live!”¹¹

Those experiences (“intensity of existence” and “melting into harmony”) recall “Dionysian experience” as it was described by Friedrich Nietzsche and interpreted

⁷Stawiszczce – town in Kiev Oblast of central Ukraine, on the Hnylyi Tikych river, where Iwaszkiewicz spend his childhood.

⁸Jarosław Iwaszkiewicz, *Książka moich wspomnień* (Warsaw: Czytelnik, 1994).

⁹Helena Zaworska, “Fullness: The Writings of Jaroslaw Iwaszkiewicz,” *Polish Perspectives*, 20, no. 9 (1977), pp. 33–41.

¹⁰Andre Gide, *The journals of Andre Gide*, tr. Justin O’Brien, vol. III, (London: Secker & Warburg, 1949), p. 563.

¹¹Andre Gide, *The Immoralist*, tr. Dorothy Bussy, (New York: Alfred A. Knopf, 1949), p. 32.

by Walter Kaufman in his dissertation “Nietzsche: Philosopher, Psychologist, Antichrist”, in which he merges the doctrine of the eternal recurrence to the idea of the Dionysian faith and the *Übermensch*, indicate that the letter would “realize how inextricably his own being was involved in the totality of the cosmos: and in affirming his own being, he would also affirm all that is, has been, or will be”.¹²

Experience of Art and Life

An expert on the subject of Dionisus, Karl Kerényi, author of a study of Dionysian cult noticed there were two Greek terms for existence – *bios* and *zoë*. The former (*bios*) refers to being as individual, temporary and unique. The latter – *zoë* – is not restricted by time. The author or *Dionysus* describes an experience of being that transcends passing (*zoë*) and is available to the unit as a feeling of life without properties. “When our life is threatened, the irreconcilable opposition between life and death is experienced in our fears and anguish. – he writes – (...) *Zoë* does not admin of the experience of its own destruction: it is experienced without end, as infinite life. Herein it differs from all other experiences that come to is in *bios*, in finite life. This difference between life as *zoë* and life as *bios* can find a religious or a philosophical expression.”¹³ Poetic cycle “Pleiades”¹⁴ introduced transition from a *bios* to *zoë*, a transition the patron of which is Dionysus himself, in which unit sheds the individual human form. What is destroyed is the *bios*-created division into culture and individualism of human beings and mystic nature – both the giver and the enemy of life.

Gide says in his journal about the specific ability of poet and artist: “Two really extraordinary faculties of the poet: the permission to yield to things, when he wants, without losing himself; and the capability of being consciously naïve. These two faculties can moreover be reduces to the single gift of dissociation.” Gide suggest, that existence in the world means experience it – in all the complexity and impossibility of separating “natural” elements and the culture-determined ones from human experience. Thinker rejects the culture oppressiveness – forms, conventions, rules, social roles, but the only way to experience world is thought art. “Got up a bit before daylight, after a rather good night; a very strong wind driving the low clouds, a bluish – gray sky; not a ray, not a smile from sky to earth (...). Wonderful unanimity of all elements of the landscape, I was about to say: of the symphony. In its way, I can imagine nothing more beautiful”.¹⁵ “World as a symphony” is something more than only metaphor. Art provides the tools, terms in which the world can be

¹² Walter Kaufman, *Nietzsche: Philosopher, Psychologist, Antichrist*, (Princeton: Princeton University Press, 1968) p. 320.

¹³ Karl Kerényi, *Dionysos: Archetypal Image of Indestructible Life*, trans. Ralph Manheim (Princeton: Princeton University Press 1996), pp. 23–25.

¹⁴ Jarosław Iwaszkiewicz, *Wiersze*, t.2, (Warsaw: Czytelnik, 1977), pp. 37–43.

¹⁵ Andre Gide, op.cit., p. 254.

described, understood, experienced. Eduardo in “The Counterfeiters” says about his own journal: “This is a mirror that I carry with me. Nothing that I meet becomes real to me until I see it reflected in this mirror.” Reality is misleading and the act of recognizing the reality is occurred by the act of writing (act of creating). But even then life utterance cannot be trusted. It is both hide and reveal the truth.

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Phenomenological Elucidation of Any Self Demonstrative Form of Expression

Erkut Sezgin

Abstract Our self demonstrative forms of expressions express our certainties and truth beliefs which appear as self demonstrative of their own differences and identities in space extended as space(time). That is the kind of appearance which *conceal* manifest reality as reality is experienced and expressed as if it's self demonstrative of its own difference of sense, as the one thing which is this pen in my hand differs from my hand writing with it. But is my hand something self representative of its difference and identity: or, the pencil which I am writing with; or the letters and words which I am writing, pronouncing?! What about this tree, and that mountain which I see through my window: are they self representative of their differences and identities? Does anything have a self essential reality to be self representative of its own sense and difference?! Isn't seeing, meaning, pointing at anything as if it's own self representative of its difference and identity, like the gesture of meaning with a finger as if the pointing finger is self representative of its difference and identity?! What is that then the awakening sense of the touch of which is missing from the intentional historical structure of this self-consciousness the truth beliefs and certainties of which are experienced and asserted as self demonstrative (proof) of their own truth and certainty which conceal and interweave with manifold misconceptions? ("The individuation of knowledge requires a new conception of the subject, or a new transcendental perspective for subjectivity, on consciousness, that is expressive of this immanent double genesis of being and thought. Consequently, Deleuze does not conserve the form of consciousness within the transcendental, so much as try to replace the a priori unity of synthesis and identity of an individuated consciousness-Ego with an impersonal, pre-individual, problematic transcendental field – which in his last published work is "defined by pure immediate consciousness with neither object nor self, as a movement which neither begins nor ends" and

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is constituted by singularities or potentials in a process of auto-unification.” I quote this note from the review of the book on Deleuze: “Immanence: A Life” Sean Bowden, (*The Priority of Events: Deleuze’s Logic of Sense*, Edinburgh University Press, 2011.) reviewed by David Scott, just to point out how the question of attaining a new transcendent perspective for subjectivity is responded and penetrated by Wittgenstein’s reminders assembled to elucidate the internal signifying connections operational in learning, meaning with the rules of pictures defined in external connections by ostensive definitions of naming and describing.)

If I say: ‘That is a chair’, ‘That is the place where it stood’, ‘That is the colour it had’, the word ‘that’ is used in many different ways. I cannot in the same sense point at a place, a colour, etc.¹

“We cannot claim to have read and understood a text until we begin to understand how it has *read us*, that is, opened us up to a critical self-questioning that alters us in some fundamental way.” Stanley Cavell

The question I am concerned with is the possibility of giving an articulation to the sense which requires a *movement* different from the habitual movement of intentional memory action, which is operational and operationally structured by being trained and educated with the rules and pictures of the historical language-games. The latter also determine the ways in which we interpret, read, act, speak, and express our *self experience* of reality by self-demonstrative forms of expressions expressed by gestures of meaning-showing by the use of pronouns as if it’s self-representative of its own sense and reference, as if the perception of truth and certainty experienced and expressed as self demonstrative proof of its own sense and reality. The famous example of which is expressed by Moore’s self demonstrative gesture of his hand, which is offered as the premise of his argument for the exclusion of doubt as against the sceptical arguments about the existence of the external world.

The truth beliefs and certainties expressed by self-demonstrative forms of expressions have significations of implying the intended sense meant at the moment of the expression of the demonstrative use which operates by learning and acting with the consequences shared by others’ acting and operating in the “*same way*”. The ways of acting and operating with the unfolding significations as such serve as rules, to indicate, follow, trace and retrace the auto-affective sequences and consequences with the use of demonstrative pronouns naming and describing, hence mapping a *world horizon*, in which one operates and acts by the demonstrative intentional uses of pictures which are defined to be used in external connection with the intentional memory actions as means and ends of memory anticipations intended and experienced as self-consciousness or subjectivity. The auto-affective awareness activated to be awakened by reminders of the signifying connections of the form of the expression which manifest as segmented in internal connections with its manifest surroundings can then freely move to trace the signifying internal connections that are operational in the structuring of intentional memory action and habit structures experienced as empirical self-consciousness of intended anticipations and associations as senses

¹Wittgenstein, *Phil Remarks*, 1975, p. 92, p. 118.

and references experienced and recognized as if self demonstrative of their different senses and references as “empirical objects”. They are meant as particular means and ends the sense differences and references of which are actually pictured and ruled in internal signifying connections where the uses of the different senses and references which are ruled to be followed as space-time of intentional memory action. Hence the “space-time” is spaced by the *Use of pictures in internal signifying connections*, and the memory space of shared intentional action is structured by learning and by being trained with the established norms and rules of the historical language-game(s) by learning to follow, mean, name, describe and operate with the rules and pictures of any historical language-game.

The grammatical rules of meaning, saying, with the demonstrative uses of signs, presuppose the learning and operating with the rules expressed and structured with the signifying manifest Use of the demonstrative form of the expression which is expressive of the self experience of the sense of reality. That is the experience pictured by the western philosophical tradition in metaphysical sense as “subjectivity”, “consciousness”, “spirit”, “soul substance”, “res cogitans” as opposed to “matter” pictured as “extension”, “res extensa”, “primary qualities” as opposed to “secondary qualities”. These concepts, although they owe their differences and identities to the internal signifying connections presupposed as manifest rather than to the sense of reality meant by the self demonstrative forms of expressions expressed by gestures of meaning, as if they are self demonstrative proof of their truth and certainty, they still exercise and dominate their grip on our thinking and reasoning habits which suppress the capacity of auto-affective awareness of sensing and tracing the manifest sense of significations, *lifeworld* as the presupposed background of speaking, meaning with the intentional self demonstrative forms of expressions expressed with the different uses of pronouns and names. Our intentional thinking and reasoning habits and the tools and rules of pictures of the historical languages in which we are educated are so intertwined and interwoven that, although we may sense the manifest world as it is, and attempt to contribute to its elucidation, we are barred from doing that by the very tools and rules of language we have to carry on with, as the rules and pictures are so ruled and defined for demonstrative purposes to mean as means and ends in external connections, as intended ends of memory action. Whereas the real question of elucidation here, involves the clarifying of the structuring of the operational habits of intentional action by learning and operating with the use of pictures defined and ruled as means and ends in external connection, for demonstrative purposes.

Even Husserl, when he attempts to elucidate the intentional structure by introducing the terms *noesis* and *noema* as two poles of intentional consciousness falls into the trap of attempting to elucidate it by introducing new terms and pictures into the manifest scene while the very question of the intentionality requires elucidation of expressive phenomena of self demonstrative forms of expressions of truth and certainty, the two poles of which are not given self essential proof of neither self experience of subjectivity nor objectivity. The two poles need to be elucidated by reminding the manifest signifying aspects of phenomena, although that is essentially presupposed for a self demonstrative form of expression to mean, demonstrate, say

anything in language, it is obliterated from the horizon intentional operational habits of meaning, reading, listening, responding to the horizon with the self demonstrative habits of meaning in deep oblivion of its manifest presupposed internal connections with its surroundings. That is an oblivion the missing awareness of which leaves human self-consciousness in separation from others' as ego-centred intentional self-consciousness which may be shared by the historical actors of a historical language-game, the sharing of which however results in judging the differences of other historical cultures "alien", "pre-logical", "unscientific", "barbaric", "irrational" etc.

It is like one, having learnt the use of signs in internal signifying connections (which is manifested by reading, writing, pronouncing, hearing, listening, responding...) believing that one's self experience is the right measure in demonstrating that one "sees", "perceives", "means", "names", experiences, senses the self identity and difference of anything! Hence one creates a myth of "self reality" experienced as self subject meaning objects, which entirely misses the manifest phenomena expressive of self demonstrative forms of expressions of truth beliefs and certainties. While the self-demonstrative form of expression of self certainty of truth beliefs doesn't mean, name, describe anything in isolation of the manifest internal signifying surroundings always presupposed as essential wants and remains to be gathered and appropriated properly so as to be articulated and imparted as the most significant universal philosophical insight to be responded and carried as the possibility of unchaining the "chains of the inmates" to their truth beliefs believed to be as self evident or self demonstrative proof of their own certainties and truth, to speak in reminiscence of Plato's famous cave metaphor.

Interpreting the manifest surroundings internally connected in the structuring of the intentional self demonstrative forms of expressions of truth beliefs and certainty as simply historical rules and pictures defined and ruled for historical-cultural reasons of a Reason or Nous in history as was supposed or implied by Kantian a priori categories in meaning, naming, describing sense experience, again introduces and project a general picture, instead of elucidating the structure of intentional historical demonstrative forms of expressions of truth beliefs and certainties. What needs therefore is to try to *elucidate the nexus of internal signifying connections which manifest* with the forms of expressions as expressive of speaking, meaning, saying, showing, naming and describing the difference and identity of anything by the self demonstrative Uses of pictures; where the intentional form of the expression of the truth belief and certainty is clarified either operational in internal signifying connections with its manifest surroundings, or is exposed like an idle wheel turning nothing with itself, signifying nothing! Except the confused self identity expressed by such self-demonstrative gestures and instigations of meaning the images that resemble the images of pictures in isolation and oblivion of their internal signifying connections of the use of pictures where the images of pictures and the use of pictures manifest in internal signifying connections and anticipations.

The *Nous* is rather expressed in so far as the articulating movements of rewriting the characters of language which we learn to operate to use in reading, meaning, mapping, picturing, allows at the moment of unfolding our awareness to trace how

characters of language unfold with differing significations of meaning the differing consequences pronounced, spelled out, read, recited, heard, responded, listened to, starting so to speak from a murmur of a monologue to a dialogue with the demonstrative uses of pictures with the intentional self sense of using them with rules, with double significations of intentional self sense and references of truth beliefs and certainties of historical language-games.

The theorizing and constructing epistemological theories with essentialist ontological qualifications and arguments in competition with one another, which differ from one another as to the premises adopted on the grounds of truth beliefs and certainties which are held as self-demonstrative proof of their certainty and truth as the self certainty experienced and shared as reality, all suffer from responding to a question which requires elucidation of thinking and reasoning with pictures of language, by picture projections and thinking and reasoning habits structured by learning and operating with rules and pictures, rather than elucidating the nexus of the internal signifying connections of the manifest phenomena expressive of intentional self demonstrative historical forms of expressions of truth beliefs and certainties structured and acquired by actors' learning, operating, training and sharing the rules and pictures of a historical language-game held fast, as paradigms of historical language-games.

That is the reality which may be meant as self-certainty and truth of matter or material sense of reality experienced or perceived as the basis of our shared truth beliefs in the existence of extended matter, against which arguments may be raised by pointing out this experience is subject dependent, hence the theories and arguments classified as "subjective idealism" as against "objective idealism" and so on. Hence the words used "experience of reality", "subjectivity", "objectivity" "matter", "consciousness", "thinking" "subject", "*res cogitans*" "*res extensa*", "impressions", "ideas" are all "metaphysical" in the sense they introduce pictures which operate in the arguments implicitly or explicitly as self demonstrative proof of their own certainty and truth associated with experience of reality, perception of truth and certainty shared as the basis of knowledge, the criterion of truth and so on. What these theories and their pictures fail to *think* and express is precisely grasping and understanding the Selfless reality of thinking, reasoning and theorizing presupposed in projecting pictures of language.

Therefore the real philosophical task that would be enlightening is, instead of attempting with arguments and theories the implicit or explicit premises of which are based on pictures maintained as self demonstrative proof of their truth and certainty, about understanding insightfully what is involved in those self demonstrative forms of expressions of truth beliefs and certainties which operate and carry one with one's self demonstrative uses and truth beliefs and certainties normally as manifested in one's daily activities.

The demonstrative form of the expression has the double signifying consequences as it always manifests with the self implications of the manifest consequences which are operationally acquired and learnt as ways of acting to traverse the anticipated ends, spaced as the space-time of intentional memory action shared and followed by others. The self-implications do not necessarily imply, the modern "subject-object"

polarity of the sense of reality of the intentional consciousness of the historical actor, as implied by the customary associated modern meaning of these words and descriptions. On the contrary, the self demonstrative form of the expression with the Use of demonstrative pronouns *needs to be recognized and gathered* in the light of internal connections; namely, as the sense of the demonstrative use which cannot be shown, meant demonstratively, but exhibited learnt in internal signifying connections which manifest as preceding and sequencing with consequences of differing senses signified in Use, which are the Uses learnt operationally, by operating and learning the unfolding differing consequences signified. That background operational in learning to operate with the demonstrative uses of signs needs to be recognized always as the presupposed background and the possibility of defining and describing a rule and a symbol to be used demonstratively, as a name, as the possibility of meaning, defining, showing intentionally anything with its difference and identity with the use of demonstrative pronoun meaning or signifying anything with sense. It is expressed as the sense that finds its form of expression in the shared practices ruled and followed and interwoven with the forms expressions shared and practiced. This is the Use which needs to be recognized in the phenomenological sense, giving sense and reference to the demonstrative intentional uses of names and descriptions, as opposed to the ordinary sense of “use” which systematically misleads one to define “words”, “uses of words” and the “facts” pictured by the uses of words”; as if they can be thought by such “naming” and “describing” in separation of the manifest Use which manifest in internal signifying connections which signify the different senses named to be used and referred in external connection with the intentional habits of learning to operate with the rules and pictures named and described as such.

The intentional self structure is then expressed by the self-demonstrative forms of expressions expressed by gestures and gesticulations of meaning the truth and certainty of facts as if they are self demonstrative proof of their certainty and truth, which we may also be tempted to express our self-certainty and truth, in meaning our self-experience of the matter of objects in space and as space filled to be extended as matter as opposed to empty space. The same demonstrative forms of expressions operate in meaning the supposed subjectivity, privacy of images, or sensations supposed to be experienced and meant as such.

The self-demonstrative forms of expressions expressed by gestures and gesticulations of meaning the truth and self certainty imply implicitly or explicitly that the self essence of truth and certainty of reality is “perceived” or “experienced”, displayed as such. Oddly enough, Wittgenstein always provokes and play with this self-certainty and the truth beliefs expressed by such gestures and gesticulations of meaning, showing, naming expressed in the form of self demonstrative forms of our expressions, always reminding the actual signifying manifest surroundings operational in learning with the use of demonstrative pronouns and rules which interconnect with the signifying uses of other signs. The purpose of this provoking and play goes hand in hand with the reminders of the of the internal connections of the self-demonstrative form of the expression, exposing that the self-demonstrative form of the expression expressed by gestures and gesticulations of meaning signify nothing, neither to the self-reality of supposed subjectivity, nor to the self reality of supposed objectivity,

but remains like an idle wheel, turning nothing with itself, in deep oblivion of the manifest signifying internal connections with which the demonstrative form of the expression manifest originally. “Originally” in the sense of manifest nexus of phenomena expressive of the space-time of intentionality with the uses of pictures defined and described in external connection with anticipations and intentional expectations interwoven with the operational habits and techniques acquired by learning to operate with rules and pictures of historical language-games. Thus the self-demonstrative form of the expression expressed by self demonstrative truth beliefs and self certainties, while they are exposed as internally connected with the rules and pictures of historical language-games, they are also elucidated simultaneously with the manifest signifying phenomena expressive of learning and operating with the self-demonstrative forms of expressions of meaning, showing, using demonstrative pronouns which unfold with rules and pictures defined and projected in external connections, which make up the projected historical world-horizon of space-time of historical self experience of intentional consciousness.

Our habitual intentional stance is easily misled to identify the sense or meaning of the name with the object pointed at as if the object pointed at is the self-representative of its own sense and reality, of the differing senses represented by objects and events. It represents our common sense which is expressed by our self demonstrative forms of expressions of truth beliefs and certainties, when they are challenged, i.e., when it is pointed out that they are not self representative of their reality, but maintained by the shared rules and Uses in language. The failure of understanding the background phenomena presupposed in our learning to operate with signs in defining names and descriptions in external connections as tools of intentional memory action is also what misleads the logician to misconstrue the logic of words by defining sense and reference in external connection, as if a demonstrative pronoun, or a name, or description can be used to mean itself! As if what the sign means can be read from the sign itself, whereas the reading, listening, speaking, writing of signs needs to be recovered while manifesting *in internal signifying connections with the forms of expressions speaking-writing-listening-reading before they are learnt to be seen and interpreted as from the standpoint of intentional habitual standpoint of meaning “reading”, “writing”, “speaking”, “listening”*. For these words automatically associate the different images associated by “writing”, “reading”, “speaking”, “listening”, “reciting” rather than the manifest phenomena in the signifying internal connections of which one learns to express one’s self, the truth beliefs, certainties, sense of reality experienced and expressed as self-reality by self demonstrative forms expressions of truth beliefs and certainties. Hence our self demonstrative forms of expressions of truth beliefs and certainties betray a failure of self-understanding which double signify as to the self reality of the speaker-actor, as well as the self reality ascribed to the reality pictured by the use of words as names and descriptions of objects and events. Hence we have a sense of objective reality which we believe that it is objectively exhibited, perceived, or experienced as self demonstrative proof of their differences and identities as expressed by our self demonstrative truth beliefs and certainties. Thus, our self demonstrative truth beliefs and certainties double signify the two poles of the intentional structure

of memory space-time of acting and operating with the uses of pictures defined, ruled and held fast for intentional purposes, anticipations in the life of language. And the intentional horizon appears as represented by pictures which seem to be meant by names and descriptions in space-time, as if they have self-essential features and qualities self-representative of their own.

What is missing from the awareness of intentional operational habits of meaning-speaking with the demonstrative uses of signs are thus exposed by provoking the implicit suppositions and presuppositions that are grounded with the habits of reasoning by the uses of pictures defined and ruled in external connection with the intentional demonstrative purposes in anticipation of intended ends, to be followed, acted, produced operationally as means and ends as the space-time of memory action. Such self-demonstrative habits of meaning-showing-naming-pointing gestures and gesticulations of intentional memory action are then exposed like an idle wheel, in oblivion of the internal manifest signifying connections presupposed in meaning, learning to operate with the uses of pictures and with the uses of demonstrative pronouns in defining external connections between a sign and its reference, which presuppose learning and operating with the pictures in internal connections. The elucidation of internal manifest signifying connections of the manifest form of expression with its manifest signifying surroundings elucidate also how the space-time of intentional consciousness is expressed and structured by projecting pictures defined and ruled in external connections anticipated, intended as tools of intentional action to be used as means and ends with memory habits of intentional action.

The whole insight here in question is expressed straightforwardly and in plain language of insight by the Zen master Hui-neng:

The body is no-body without its Use, and the body is the Use. To be itself is to know itself. By using itself, its being is demonstrated, and this using is, in Hui-neng's terminology, 'seeing into one's own Nature'. Hands are no hands, have no existence, until they pick up flowers and offer them to the Buddha; so with legs, they are no legs, non entities, unless their Use is set to work, and they walk over the bridge, ford the stream, and climb the mountain...²

Here the Use pointed out, as what manifests as the form of expression and its signifying surroundings in simultaneity, before all the conceptual differentiations picturing and re-presenting the surroundings as from the standpoint of the habit structures of intentional consciousness: as "precedents" and consequences", "before" "now", "after", "causes" and "effects" and so on. The Use which is pursued to be elucidated traces the manifest presence of differing significations which are always deferred as Jacques Derrida's pursuing the tracing and describing the trace of significations of the manifest presence in the event expressive of speech, pronouncing, saying, reciting and hearing, listening, following the consequences of the demonstrative, indicative forms of expressions. The Use in question responds and calls to respond to the question how meaning, sense and reference of words manifest, before the surroundings are pictured by external definitions as names and descriptions to be used as demonstrative pronouns with the sense of words differing from the sense

²D.T. Suzuki, *the Zen Doctrine of No Mind*, Ed. By Christmas Humphrey, Weiser Books, 1993, p. 42.

of their references. That requires to trace the internal signifying connections of the manifest form of the expression with its surroundings; to pay attention to the differing consequences of following, using, meaning, pointing with the demonstrative forms of expressions that unfold with the different senses and references in internal signifying connections, which are then separated by naming and describing them in external connections for intentional demonstrative purposes of language use. From the intentional perspective the differences of senses and references appears to the intentional habit structures not as represented by the signifying Uses of pictures in internal connections, but as represented to the memory and imagination habits of intentional consciousness which is structured by learning to operate with the rules which define and project pictures as tools of intentional-historical memory habits. The result which manifests as the consequence of historical intentionality, finds its self-demonstrative forms of expressions in confusing the differences and identities, which are actually represented by the Use of pictures in internal connections with the manifest phenomena expressive of the demonstrative form of the expression, with the associated images of pictures which resemble and associate the images of pictures. The confusion is rooted but remains operational all through reasoning with the demonstrative uses of pictures with the demonstrative habits of meaning, saying, speaking, naming, describing as if things, events, facts are meant, shown, named, described in space-time! Whereas, precisely the space-time differences represented by pictures defined in external connections are expressed, ruled, maintained, kept fast by the manifest phenomena expressive of the demonstrative form of the expression which unfold with its signifying consequences to be ruled and modified with the rules of pictures of language defined in external connections as tools of intentional action with memory habits in the historical space-time of intentional memory action.

Therefore the possibility of the demonstrative form of the expression and the demonstrative uses of pronouns), do not imply in essentialist sense neither a subject of the demonstrative form of the expression nor the object of the demonstrative pronoun, but the kind of empirical-historical intentional consciousness of memory action the modalities of which are determined by the signifying differences acquired by learning and operating with the rules and pictures of the language-game in which one is trained and educated.

Thus such demonstrative forms of the expressions which we are used to express by projections to describe certain cultures of past and present as “mythological”, “pre-logical”, “primitive”, “unscientific” or “scientific” and so on, betray only *our* prejudices and failure of Self-understanding human historical drama and fate which is our own very drama and fate, rather than of past or present history. We are misled to describe different human forms of life as we fail to trace the manifestation and unfolding of self-demonstrative forms of expressions interwoven with shared practices and rules. Hence, we are led to describe and picture them as “myths”, “rites”, “narratives”, “truth beliefs”, “belief-systems” in implicit or explicit comparison with our own rules and pictures held fast. Thus we have philosophical pictures which narrate history and historical development of spirit and values, which are pictures we are trained and educated to interpret human condition and history,

without however questioning that they are pictures of language and culture constructed by means of narratives based on truth beliefs and certainties which operate with the rules of the game held fast. That is to say, they are maintained in internal connection with the root phenomena expressive of the demonstrative forms of expressions which manifest in internal signifying connections, as the ultimate presupposed background and possibility that mediate the intentional truth beliefs and certainties expressed by self-demonstrative forms of expressions of sensing and experiencing the *lifeworld*.

Therefore, unless the life in manifest, as implied by the term *lifeworld* is gathered to be expressed by articulating movements of *circumscribing* that encompass the unfolding of manifest significations (which requires a certain release and awakening of insight from the bond of historical rules and pictures held fast) in its manifestation, one remains to be gripped and determined by the paradigms and rules of the language-game held fast in which one is trained and educated, rather than the freedom of the space of awareness of what is operational at the background of the self certainty expressed by the self-demonstrative forms of expressions expressed by gestures and gesticulations of meaning, showing. Namely as if the finger, or the demonstrative pronoun used in meaning the thing meant at is it's self representative of its sense of identity and difference. Whereas the presupposed background when elucidated and gathered with the required awareness at all, discloses that there is no such thing or entity with a self-essential reality, to be self essential representative of its own reality, that neither the use of the demonstrative pronoun of "I" implied by the use of the finger, nor the thing meant by the pointing finger or by the use of the name of the thing meant exist in such manner but they all owe their supposed self existence or subsistence in space-time to the signifying uses of signs the internal connections of which are presupposed in following, and defining uses for the intended, anticipated ends.

The question is, how can this awareness be imparted, better to say awakened to round up otherwise the fragmented intentional reactive consciousness expressing its self sense of experience of reality by self-demonstrative gestures and gesticulations of meaning, as if they are self demonstrative proof their certainty and truth?

The term "language-game" serves rather to elucidate the signifying internal connections of the self-demonstrative form of the expression, the phenomenological recognition and elucidation of the manifest internal signifying connections of which allows also to recognize the "reactive and active aspects of the behaviour" of the self-demonstrative form of the expression under the impact of the historical rules and pictures of "historical language-games". That elucidation has the merit of elucidating and allowing for us to trace back and forth the structuring and mediation of the intentional operational habits of reasoning, arguing, explaining, acting, saying by the use of pictures of language, constructed and projected for intentional demonstrative purposes. Thus it allows the tracing and unravelling the threads and knots knotted by operational intentional habits of reasoning and reading the world horizon always by pictures ruled as means to the ends in external connections. Without the clarity and insight into the phenomena expressive and mediator of the intentional demonstrative forms of expressions one is always led by the rules and pictures and

the system of the truth beliefs of the historical language-game(s) in which one is trained and educated.

Missing that awareness about how intentional demonstrative forms of expressions and the rules and paradigms are interwoven in internal signifying connections, which are held fast, human beings tend to interpret the historical horizon as from the standpoint of paradigms held fast, the rules and pictures of the historical culture of the language-game in which the actors are trained and educated. With the result that their self-demonstrative forms of expressions of truth beliefs and certainties express and betray a sense of reality as if it's self-demonstrative proof of its own truth and certainty, as if the self-demonstrative form of the expression is its own picture, displaying its sense of truth and certainty. Like our belief in the extension of material objects qualified and clothed by pictures extended in space-time, as well as the self reality implied by such self-demonstrative truth beliefs expressed in reaction to these pictures and their associated images.

Descartes' proof of the "unextended thinking substance" (*res cogitans*) is offered exactly as self-demonstrative proof of its certainty and truth, as the methodical doubt the truth and certainty of which is held immediate self-demonstrative proof of its own, by contrast to the mediated truth beliefs and certainty in the extended world of body in its relation to objects and events in extended space and time. Another example of the self-demonstrative proof of the truth and certainty is expressed in reaction to Cartesian scepticism, by G.E. Moore's famous gesture of showing his hand, meaning that doubt in the existence of external world, is nonsensical, rather than proving or implying anything about the essentialist distinctions between *res cogitans* as opposed to *res extensa*, and so on. And Wittgenstein, although credits Moore's argument as against essentialist ways of theorizing by means of arguments based on premises the truth and certainty of which are maintained implicitly or explicitly as if self-demonstrative proof of its own, criticises Moore, as losing sight of expressive phenomena of speech, which involves bodily gestures, use(s) of hands and fingers, use(s) of voices, mouth and larynx, brain and physiological body processes, uses of pencil, letters, words as materials of speech, while elucidating none of these can be meant in any privileged essentialist sense in isolation of the manifest internal signifying connections presupposed in speech, in the usage of demonstrative pronouns.

Thus the whole criticism connects up with the criticism and exposition of the confusions which result from thinking by learning to operate with rules and pictures of language, without a real understanding of the phenomena of speech the signifying internal connections of which are presupposed in learning to operate with the demonstrative uses of signs, the different senses of which always manifest in internal signifying connections presupposed as manifest.

Therefore, always the internal signifying connections presupposed in learning to operate with names and descriptions defined and ruled as pictures to be used with the demonstrative indicative purposes of language are elucidated and contrasted by means of theorizing and arguing based on the truth beliefs and certainties maintained as if self-demonstrative proof of its certainty and truth. They may be maintained in rationalist terms of Descartes or by empiricist arguments denying the rationalist

premises on the grounds of empiricist premises maintained as if self demonstrative proof of its sense and truth, which is implied by the empiricist terms “impressions” or “ideas” and which, instead of elucidating phenomena expressive of the demonstrative forms of expressions which express the differences pictured by means of such general names and descriptions as “impressions” and “ideas”, loses the sense of awareness of signifying phenomena of life, presupposed in meaning, speaking, saying anything with the demonstrative uses of pronouns. The whole elucidation of the manifest internal connections operate therefore around the *self demonstrative form of the expression* of truth and certainty, which is not to deny or challenge the certainty and truth beliefs expressed there, but only to elucidate the phenomena involved in expressing and mediating the demonstrative forms of expressions of the truth beliefs and certainty shared as the shared intentional consciousness determined and structured by learning and operating with the rules and pictures of a language-game, held fast. They operate by standards of judging and interpreting the historical becoming, rather than the insight of understanding that encompass the whole historical interplay in one drop of insight which is presented by reminders assembled always in a minimalist manner, which cuts, so to speak, a cross-strip elucidating by reminding the manifest internal signifying connections presupposed of the demonstrative forms of expressions which mediate the modalities of intentional consciousness which are ruled, structured, interweaved with rules and pictures defined in external connections, anticipated, intended as means and ends, in space-time and as space-time of the intentional memory actions with rules and pictures.

Philosophy is only philosophy when it serves to the ultimate ends of philosophizing, when it is moved by the ray of light in the way of discovering the wisdom of light, rather than by being moved in reaction to picture projections by picture projections in the form of theories. The latter is intellectualism, an entanglement by being determined by the rules and pictures one is trained and educated, which then moves one to reason with the arguments and analyses which are based on pictures and rules, ultimate premises of which are expressed by the self-demonstrative forms of expressions of the truth beliefs and certainties expressed by gestures and gesticulations as the historical modalities of intentional consciousness. That is a historical intentional modality structured and conditioned by the rules and pictures of a historical language-game where certain pictures and rules are held fast and make up the system of truth beliefs and certainties which serve to judge, evaluate, assess the sense of other assertions and expressions of truth beliefs and certainties. Therefore, the truth beliefs and certainties held fast, while they express the self-certainty of the truth beliefs with the self-demonstrative forms of expressions and the uses of demonstrative pronouns ruled with the uses of pictures, do not express awareness as to the speech phenomena. That is to say, the phenomena expressive, mediator and operative of the demonstrative forms of expressions of speech, writing, speaking with the uses of demonstrative pronouns, names and descriptions which mediate and structure the demonstrative intentional historical-empirical modalities of truth beliefs and certainties. They are entertained as the presupposed unquestioned truth beliefs and certainties shared in practice, while they are held fast as the rules and pictures of the language-game; they are only expressed explicitly when they are

challenged by the rightly or wrongly conceived questioning of the rules and pictures held fast, the uses of which feeds on and are sustained with the signifying connections with one another. Therefore, gestures and gesticulations as demonstrative forms of expressions of truth beliefs and certainties, express the self-certainty of the truth beliefs which are sustained and structured by being trained and educated by the system of the rules and pictures shared and practiced as the paradigms of sense and reality experienced and expressed.

The real philosophical task is therefore lies in the way of articulating the sense, the structuring the space-time of intentional memory action in which the demonstrative uses of pronouns are used to express the self demonstrative truth beliefs and certainties of the actors. This is the texture of intentional modalities which needs to be explored and recovered by raising our awareness of what is presupposed as the internal signifying connections of the self demonstrative form of our expressions to mean, say, signify, to operate as a demonstrative pronoun in signifying internal connections with the uses of other signs.

This is also Wittgenstein's response to the question called by Jacques Derrida as Heideggerian hope. Derrida cites Heidegger:

The relation to the present, unfolding its order in the very essence of presence, is unique (*ist eine einzige*). It is pre-eminently incomparable to any other relation; it belongs to the uniqueness of Being itself (*Sie gehört zur Einzigkeit des Seins selbst*). Thus, in order to name what is deployed in Being, (*das Wesende des Seins*), language will have to find a single word, the unique word (*ein einziges, das einzige Wort*). There we see how hazardous is every word of thought (every thoughtful word: *denkende Wort*) that addresses itself to Being (*das dem Sein zugesprochen wird*). What is hazarded here, however, is not something impossible, because speaks through every language; every where and always. (Martin Heidegger, *Holzwege*, Frankfurt: V. Klostermann, 1957, pp. 335–336.)

“Such is the question: the marriage between speech and Being in the unique word, in the finally proper name.” says Derrida: “Such is the question that enters into the affirmation put into play by *differance*. The question bears (upon) each of the words in this sentence: Being/speaks/through every language/everywhere and always/” (Jacques Derrida, *Speech and Phenomena*, Northwestern Univ. Press, 1973, p. 160.)

The question is then about making the voice or call of Being heard, responded in simultaneity of its hearing, in the calling and hearing of which subject object poles of intentional space-time of hearing, sounding, speaking with the demonstrative, indicative uses of words are spaced as letters, words, names, descriptions, which can be used as demonstrative pronouns as if demonstrative of their different senses and identities.

This is a question, the possibility of which seems as if it's a key to human ethics and historical destiny, the deep crises of which are connected with the determined and conditioned intentional habit structures which are expressed with self demonstrative truth beliefs and certainties woven and interwoven with the rules and pictures of language-games held fast, without however the necessary deeper insight into how the rules, following, acting and operating with the rules and pictures are intertwined with the significations which unfold in internal connections with different senses. The unfolding of different significations the sequences and consequences which are spaced temporally is what is deferred, leaving the trace of differences in differing

significances which Derrida introduces as differance, as the trace of internal signifying connections presupposed for self demonstrative pronouns to operate with indicative intended uses and consequences. This is a term, like the language-game(s) of Wittgenstein, is not introduced for demonstrative purposes, to mean and delineate, objectify anything, but is a term functioning to elucidate the signifying internal connections of operating with signs in the form speech and writing as the presupposed possibility of the demonstrative, intentional, indicative use of pronouns. Contrary to the traditional presuppositions of western metaphysical thinking starting with the self demonstrative gestures and gesticulations of logo-centric truth beliefs and certainties expressed as if self demonstrative proof of their certainty and truth, the possibility of such demonstrative uses are elucidated as depended and mediated by learning and operating in internal signifying connections. Where the form of the demonstrative form of the expressions manifest in internal signifying connections with its manifest surroundings, the shared consequences of which are ruled with the narratives of speech which manifest the form of expressions of *soul and body* in internal connections.

Hence, the differing historical rules and pictures, with different intentional consciousnesses of the actors, shared as different historical consciousnesses of the actors of different language-games past and contemporaneous. So much so different that enmity, rivalry, violence, power politics are the determining dynamics of the intentionality of the actors.

It seems only by hearing and responding to the call echoed in our speech, when we use such demonstrative pronouns with self demonstrative forms of expressions of truth beliefs and self-certainties, we may come to hear the Self sense which simultaneously belongs, to what is present as the certainty and truth of the moment, as the space-time, which is pictured as means and ends, both as space-time in external connections relative to the anticipated series of intentional memory action, while at the same time in simultaneity with that as the internal signifying connections of the uses of pictures, in the unfolding manifest series of which human forms of expressions with their signifying consequences are shared, ruled to operate with the demonstrative uses of pronouns.

Part VI

Comment on Max Scheler's Thought and Philosophical Counseling

Lucrezia Piraino

Middle-Class *Ressentiment* Against the Sympathetic Heart

The Mind lives on the Heart
Like any Parasite.
If that is full of Meat
The Mind is fat.
But if the Heart omit
Emaciate the Wit
The Aliment of it
So Absolute
(E. Dickinson)

“The world becomes immediately a stale textbook exercise, an object of calculation, when we disconnect the spiritual organ of reverence. It alone gives us the awareness of the *depth* and the *fullness* of the world and of ourselves, and it makes clear to us that the world and our nature bear within themselves an inexhaustible wealth of value, that each step we take *can* reveal to us what is eternally new and young, amazing and unseen”.¹

This quotation, which is taken from *Zur Rehabilitierung der Tugend (On the Rehabilitation of Virtue)*, would appear to encompass the secret of a wide, stratified reflection such as that made by Max Scheler.

The “moving steadiness” of this thought, which is impressively rich in content and sparkling in its course with an exceptional openness to the complexity of life, stands out for its fervent and, at the same time, insightful intuitive flair for reality.

¹M. Scheler, *Zur Rehabilitierung der Tugend*, in Id., *Gessammelte Werke*, Bd. III: *Vom Umsturz der Werte. Abhandlungen un Aufsätze*, Franke Verlag, Bern- München 1995, pp. 13–31, tr. it. *Riabilitare la virtù*, in Id., *Il valore della vita emotiva*, Guerini, Milano 1999, p. 173.

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This flair, which led the “volcanic-nature”² of the restless German philosopher to also distance himself from the transcendental orientation born from the evolution of Husserlian phenomenology, brought him to seamlessly, interestingly reconsider the most important aspects inherent in the relationship between philosophy and *Erleben*, the lived experience; a reconsideration deriving above all from his need to find an innovative approach to reality. A new attitude, therefore, with which to enter the relationship between knowledge and the real world without leveling learning by reducing it to the typical causal dynamics of explanation (*Erklären*), but, on the contrary, by favoring its gradual understanding from inside through *Verstehen* (*understanding*).

According to this viewpoint, *Verstehen* is a broad, detailed, but not logical or mechanistic, understanding of reality that, by moving incessantly on a variety of planes – on diverse “spheres of existence” – spans over different themes involving the fields of gnoseology and metaphysics, anthropology and sociology, ethics and religion, also passing through psychological analysis to arrive at the spiritual level.

This new attitude, which arises from life itself and whose goal is to avoid any leveling or scattering of the depth of meaning, has, on the one hand revealed the multiform, intricate and inseparable link that there is in this speculation between ethical and cognitive issues, between the theory of knowledge and the theory of values, while, on the other, has attempted to give origin to “a possible revitalization of Western civilization”.³

In Scheler’s mind, this revitalization, intended as a revolutionary renaissance directed to changing the underlying philosophical attitude characteristic of the cultural vision of the modern era, should take place above all by radically challenging the scientific conception of the world, typical of that middle-class Protestant tradition based on a mechanistic vision of reality, whose related philosophical outlook is a rationalism that “considers mechanical principles as pure laws of reason”.⁴

His deep criticism of the poor spiritual condition of his time was rendered absolutely vain by a close succession of diverse, reductive interpretations of vital phenomena – which were mostly construed in excessively positivistic terms, either according to pseudo-sociological explanations or following theoretical and abstract visions.⁵ A criticism that, however, places Scheler perfectly in line with the reversal of values denounced by Nietzsche, with particular regard to the theme of predominance of the middle-class ideal of profit compared to vital values.

This ideal did indeed create an outright break with the “predominantly contemplative cognitive attitude of ancient and medieval thought, oriented towards the

²H.G. Gadamer, *Maestri e compagni nel cammino del pensiero*, tr. it. G. Moretto, Queriniana, Brescia 1980, pp. 58–63.

³Cfr. G. De Simone, *L'amore fa vedere. Rivelazione e conoscenza nella filosofia della religione di Max Scheler*, San Paolo, Milano 2005, pp. 26–27.

⁴M. Scheler, *Ressentiment und moralisches Werturteil*, in *Zeitschrift für pathologische Psychologie*, tr. it. *Il risentimento nella edificazione delle morali*, Vita e Pensiero, Milano 1975, p. 172.

⁵Cfr. L. Boella, *Il paesaggio interiore e le sue profondità*, in M. Scheler, *Il valore della vita emotiva*, p. 18.

quality of things".⁶ As a result of its wholehearted glorification of the spirit of work and its consequent hectic quest for making money, the middle-class vision based on the existential attitude of "*ressentiment*" did in fact transform that ancient contemplative attitude into a well-defined "quantifying, calculating" position of the aware person.

This transcendental, abstract subject, in his capacity of legislator of the world, set his primary, specific goal as the realization of a new "*will of power over nature*";⁷ in this way, bringing about an irreversible, fatal detachment between subject and object, spirit and nature, thought and life.

In this context, in *Versuche einer Philosophie des Lebens (Tentativi per una filosofia della vita)*, an essay in which Scheler undertakes a fascinating and close hand-to-hand fight against the philosophies of life developed by Nietzsche, Dilthey and Bergson, he strongly asserts that

... life begins to decline [...] not when it reverses to its opposite state, i.e. death, but when it feebly sinks into a conscious reflection and presents itself as something objective, i.e. as a *positive element* that can be observed, analyzed and measured by the intellect acting as a transcendental subject. Such splitting between subject and object marks the onset of a process of progressive *devitalization* of nature. According to Scheler as well as Nietzsche, said process is undoubtedly triggered by the fears of *plebeian* man who, having no vital values and being *resentful* towards those men who are better than him, concentrates his psycho-physical energies on putting into practice his impulse of domination, to achieve which, he devises all possible mental schemes, laws and principles. As a result, reality as a whole is considered in a mechanistic way and deliberately interpreted through the theoretical-conceptual frameworks of that *Weltanschauung* which more than others attains the expected result. Only to the extent that it is considered in a mechanistic way, can nature be dominated and manipulated.⁸

At this point, it seems almost useless to underline that the gnoseological conception examined above, with its unavoidable sociological repercussions, is the basis of a certain type of ethics, grounded, in turn, on the moderate and middle-class values of self-interest, prudence and economy. Yet, given this problematic scenario, it is all the more appropriate to emphasize the close, perhaps almost obvious, relationship between this gnoseological conception and a certain vision of human psyche, with its concomitant effect on historical events.

It may be true that the modern world has seen the rise of doctrines based on Cartesian *res cogitans*, which overlapped those of nature by removing "the whole living", but this same conceptual elaboration has also been applied to organizing and controlling the structures of the thinking soul, as well as to defining the structures of socio-historical reality. Both have been broken down and parceled out in a countless series of sensations and representations under the pretext of reproducing, as much as possible, their perfect analogy with Newton's celestial mechanics and the scientific assumptions of molecular physics. Thus, it is not at all a coincidence that according to Scheler

⁶M. Scheler, *Der Bourgeois*, in "Die Weißen Blätter" I/6, 1914, 581–602, tr. it. *Il borghese*, in Id., *Borghesia socialismo e intuizione del mondo*, La Scuola, Brescia 1982, pp. 44–45.

⁷*Idem*, p. 35. The words in italics are from the author.

⁸W. Caligiuri, *Max Scheler e i Tentativi per una filosofia della vita*, in "Rivista di filosofia moderna", p. 5.

this analogy has also led to the representations of man and his psyche provided us by Spinoza and Hobbes and to their attempt to deduce movements and moral ideas from the basic instinct of self-preservation and egoism, as well as to the new representations of the State outlined by Machiavelli and Hobbes, according to which the State was an organization of power based on a “contract” in order to dominate egoisms. Furthermore, this analogy has given origin to the political doctrine of that time (whose name is a clear reference to a mechanic representation), i.e. the idea of an European “equilibrium” that should be automatically restored without any universal spiritual or political authority, such as the Papacy and the Empire [...]. Finally, it has also affected the classical national economics with its doctrine of “Harmony of Interests”, which viewed the State only as a necessary evil and wished to attain the maximum prosperity following the principle of “*laissez faire*”.⁹

It was Dilthey who was to highlight that this approach to psyche and historical events loses, “given the desired *construction*, life and laws peculiar to all *superior spiritual functions*”,¹⁰ as it is essentially based on a “synthetic and illustrative”¹¹ observation of events, which, in turn, adopts the theoretical model of abstract demonstration. Thus, continues Scheler, it is no coincidence that this problematic setting tries “to synthetically build the *Erlebnis* by elaborating the minimum possible number of elements (sensations, impulses, feelings), regardless if and how these elementary units combine in the *Erleben* itself and if the global personality, experiencing them through actions and sufferings, creations and enjoyments, transcends them by discerning their unique *meaning*”.¹²

Therefore, it is Dilthey, represented as a pure man, a “delicate spirit [...] burnt with the desire to penetrate history not according to the cold norms of an illustrative description, but through direct experience and *understanding*”,¹³ who was to be the one to actually initiate a “science of spirit and [...] a new form of understanding of the historical world starting from life as a whole”.¹⁴

This “German professor, whose deepest tendencies were almost unknown even to his colleagues – amongst whom he lived, as if by chance”,¹⁵ by refusing to found the science of spirit with a psychology of historical events developed according to the principles of the science of nature – when not exclusively reduced to their simplistic correlation with biological events – managed to draw the attention of philosophical reflection to the idea of the spiritual quality of these historical events, above all thanks to his innate and special ability to penetrate deeply into the connections of meaning concealed in them. He also emphasized his intense, resolute “need to plunge his heart – which he considered, as did Goethe, an integral part of the heart of the world – into the variety of things that men had believed in, craved for, desired, loved, without, however, dispersing his heart in them, but filling it with them”.¹⁶

⁹M. Scheler, *Versuche einer Philosophie des Lebens. Nietzsche – Dilthey – Bergson*, in *Die Weißen Blätter* I/3, 1913, 203–223, tr. it. *Tentativi per una filosofia della vita*, Armando, Roma 1997, pp. 92–93.

¹⁰*Idem*, p. 94.

¹¹Cf., *Idem*, p. 90.

¹²*Idem*, p. 91.

¹³*Ibidem*.

¹⁴*Idem*, p. 89.

¹⁵*Idem*, p. 88.

¹⁶*Ibidem*.

Events are, in fact, characterized by “significant living connections”¹⁷ that absolutely cannot be reduced to “the geometrical phenomenon of the simple local change of a *quid* in time” and to “the assumption of a series of uniform laws of motion”.¹⁸ In this problematic scenario, therefore, the psychological and spiritual worlds represent the “inscrutable”. Using this term, Scheler clearly expresses the necessity of underlining that those spheres of human life, which are in themselves enigmatic and mysterious due to their substantial ambiguity and their absolute unpredictability, cannot but be obscure and impenetrable, i.e. they cannot easily nor clearly be grasped by human conscience.

The understanding of the sphere of the spiritual world may be exclusively explained “through a *Mitherausleben*, i.e. a participation in life, actions, deeds that, starting from men themselves and their entire life, will neither gaze at the life already lived, nor draw logical conclusions from events, circumstances, works, historical men and from what they had done and wanted”.¹⁹

Reverence of Thought and Sense of Participating

No sense will take the place of the sense of sharing, participating, having in common.

Even a life tuned to an all embracing- vision.

It will be of no use without that sense of sharing, participating, having in common.

(Wisława Szymborska)

This new spiritual attitude, in Scheler's view, is expressed through the ethical and existential dimension of reverence, given that, he maintains,

...our “self” and that of our fellow creatures appear in their *deep dimension* only in reverence. A man, who claims to penetrate and fully understand himself, *does not* show to know more than the man who has reverence, for whom even from himself “buried gold shines like from streams”. He only shows that he does not want to go through the pathway that makes his own depth visible. This pathway is actually the reverence in front of his own “self”. Only the latter gives us the secret consciousness of richness and fullness, while our limited thoughts leave us a sense of emptiness and misery. It makes us aware of the treasures of our existence and of our strengths that have not yet been used and that *are not exhaustible* within the space of mundane life. Reverence softly announces to us a range of action of our true strengths which is wider and longer than our temporal existence. It protects us from definitive – either positive or negative -value judgments on ourselves, only capable of leaving us still and motionless, it lays out and places carpets and road signs in front of us, on the wake of which we may rather get lost in ourselves, but in the end will be able to find our way.²⁰

The phenomenological attitude cannot in any way be confined to “a philosophical doctrine or a method whose essence should be firstly fixed”; on the contrary, it is a

¹⁷ *Idem*, p. 91.

¹⁸ *Ibidem*.

¹⁹ *Idem*, p. 89.

²⁰ M. Scheler, *Riabilitare la virtù*, cit., pp. 173–174.

“working on things”²¹ and devoting oneself to the *Sache* (the “*Thing*”) for life. Fully coherent with this, therefore, Scheler urges to re-evaluate reverence in the cognitive field, while also underlining those aspects that permit us to make a heated, complex criticism focused on social psychology looking both at genetics and associationism.

Contrary to what middle-class scientific rationalism of the modern school supported, which refused to consider reverence as a quality sprung from the “Free Gift of Grace”,²² above all when, after spiritualization and its final transformation into decency²³ it undoubtedly slowed down scientific progress, Scheler makes of this virtue one of the key points from which human beings can access values. Thanks mainly to its capacity of bringing man closer, and joining him to the mystery of things, reverence actually allows the “threads penetrating the invisible”²⁴ to make the spirit and depth of the person visible.

A reverent attitude towards the world, therefore, seems to fully express the particular position adopted by the German philosopher within the phenomenological movement of his time. He embraced a cognitive, existential and philosophical disposition closely linked to the idea that phenomenological reduction would require, almost demand, the suspension of an excessive conceptual activity of the intellect, in such a way as to be able to capture the essence of things in an absolutely intuitive manner. Accordingly, his revolutionary and fascinating vision of philosophy develops, based on the inspiration of Bergson,

... as the act to offer oneself to the intuitive content of things, the same way as the motion of a deep trust in the indisputability of all that is simply and manifestly “given”, as a fearless abandonment to the world that let itself be captured by an act of intuition and a motion of love. Towards the world this philosophy is comparable to the gestures of an open hand and to a freely wide-open eye. It is not the wink and critical look that Descartes, starting from radical doubt, throws at things. It is not even the look that Kant lets fall on things, penetrating them with the cold ray of an indifferent and ultramundane spirit. The philosopher in question feels neither the fear generated by the current need for self-interest, nor the proud sovereignty of the “thinking reed”, which is the primitive source, the emotional prerequisite of any theory, for Descartes and Kant. Instead, he is totally pervaded by the flow of being that, as such, is always beneficial (whichever its content is). The thought is inspired not by the will of domination, organization, univocal determination and crystallization, but by a motion of sympathy, fruition of existence, tribute to the full growth of the being, whose contents, in the light of a generous vision, gradually break free from the grip of human intellect and overcome the conceptual limits. The real world is much more varied and rich of our natural *Weltanschauung*.²⁵

Thus, by becoming the pathway towards a regained relationship with the entirety of things and, consequently, with the way in which they are actually made, a reverent attitude may therefore represent the code and turning point that opens just slightly

²¹L. Boella, *Il paesaggio interiore e le sue profondità*, cit., p. 22.

²²M. Scheler, *Riabilitare la virtù*, cit., p. 159.

²³Cf. *Idem*, p. 174.

²⁴*Idem*, p. 172.

²⁵M. Scheler, *Tentativi per una filosofia della vita*, cit., p. 96.

and, at the same time, permits the manifestation of that inescapable, and all too often, suffocating tension of men toward a radically personal opening. This opening is essentially turned towards the transcendence of one's own self. This happens, above all, if one considers, as Boella does, that "the intuition of the essence of things allows one to have access to the concrete quality of things without reducing it to empirical-sensible data, and reality presents itself as a correlation of the Relative and the Absolute, the Finite and the Infinite, the Temporary and the Eternal. Values, which constitute its ideal structure, open the breach allowing passage from the sensible to the supersensible world, leading in this way to a *widening of experience*. Each element of reality actually assumes the form of experience, i.e. of a relationship with the world".²⁶

Hence, transcendence happens, occurs and shows itself through the emotional perception of values and, being directed to all that is placed outside the restricted walls of the internal perception of the self, is turned towards God, nature and objective culture: i.e. "absolute realities" as they exist in themselves and are not produced or ordered by the person.²⁷

Thinking ironically on the fact that too often the human being has naively and erroneously persuaded himself that it is much easier to know himself than what is outside of self, Scheler substantially questions the intense activity of the most important psychological orientations of his time, by sustaining in practice that most limit themselves to building what the philosopher himself defines, by paraphrasing the title of one of his most important works dedicated to these themes (*Die Idole der Selbsterkenntnis*) as "idols of self-knowledge". These are nothing but theoretical and fictitious constructions through which human beings get sucked into impersonal processes and functions that conceal their unique, irreducible individualism, particularly considering the fact that "acts are performed (by persons), functions take place, and progress (as they are psychic)".²⁸

Scheler's search for "a *phenomenology* of psychic process, whose formation and essential connections"²⁹ are represented through the intuition of the essence of things and of the psychic connections themselves and not through the *observation* of the stranger nor, least of all, through *self-observation*, gives access to a person's depth, in this way. Although it has not the "transparent *pathos* of Husserlian philosophy",³⁰ this phenomenology restores a deep, totally complex anthropological and ethical connotation.

As is stated in *Der Formalismus in der Ethik und die materiale Wertethik (Formalism in Ethics and Non-Formal Ethics of Values)*, a person can be considered

²⁶L. Boella, *Introduzione – Rileggere il Sympathiebuch*, in M. Scheler, *Wesen und Formen der Sympathie*, GW VII, pp. 7–258, tr. it. *Essenza e forme della simpatia*, Franco Angeli, Milano 2010, p. 13.

²⁷L. Boella, *Il paesaggio interiore e le sue profondità*, cit., p. 22.

²⁸M. Scheler, *Die Idole der Selbsterkenntnis*, in Id., *Gesammelte Werke*, Bd. III: *Vom Umsturz der Werte. Abhandlungen und Aufsätze*, Franke Verlag, Bern- München 1995, pp. 213–292, tr. it. *Gli idoli della conoscenza di sé*, in Id. *Il valore della vita emotiva*, cit., p. 76.

²⁹*Idem*, p. 146.

³⁰L. Boella, *Il paesaggio interiore e le sue profondità*, cit., p. 12.

neither a substance underlying acts or, least of all, a mere sum of abstract acts having a universal rational nature. On the contrary, a person is “*the concrete unity-of-being, which is itself the essence of acts of diverse nature*, so that the person becomes oneself [...] before each act essentially distinguishes itself [...]. *The being of a person ‘blends’ all essentially different acts*”.³¹

Being, therefore, “in relationship with his own living body, psyche, other ‘egos’ and persons, the world of essences and spiritual values, the sphere of the Absolute and/or the Divine”,³² a person cannot be confined within an individualistic horizon or, even less, in a solipsistic dimension, but rather expresses an extremely multifaceted, stratified structure of man. Man is, indeed, “endowed with sensorial feelings, typical bodily sensations and vital impulses, psychic feelings, spiritual and personal feelings. His physical body (*Körper*) is not dualistically detached from his spiritual soul, but rather is a materially intertwined union of physical body, one’s own living body (*Leib*), the psychic self, spiritual person”.³³

In this problematic context, then, as Scheler himself adds in *Die Sonderstellung des Menschen im Kosmos (Man’s Place in the Cosmos)*, we have a concise summary of his ideas on the most important themes regarding philosophical Anthropology,³⁴

...we want to designate as ‘person’ that centre of acts where the spirit appears in the finite spheres of being, by clearly distinguishing it from all *functional centers* of ‘life’, which, considered from an internal point of view, are also named ‘psychic centers’ [...].

The man is, therefore, that creature capable of behaving like an unlimited being “open to the world”. To become men means to rise, by virtue of the spirit, to the extent of being able to open themselves to the world.³⁵

Transcendental Reduction and the Laws of Feeling

Intellect has nothing to find: it has only to clear up the ground. It is only suitable for humble tasks.

(Simone Weil)

As already seen, Scheler’s reflection is characterized by an as fervent as multifaceted assertion of the reality of psychic life, decidedly disengaged from the procedure of psychotherapies, which too often erroneously focused exclusively on the pathological aspect, while instead the philosopher maintains that “there is an entire

³¹ M. Scheler, *Der Formalismus und die materiale Wertethik. Neuer Versuch der Grundlegung eines ethischen Personalismus*. 3, unveränderte Auflage, mit einem dritte Vorwort und einem Sachregister, Verlag Hans Niemeyer, Halle 1927, tr. it. *Il Formalismo nell’etica e l’etica, materiale dei valori. Nuovo tentativo di fondazione di un personalismo etico*, San Paolo, Milano 1996, p. 473.

³² G. Morra, G. Ferretti, *Max Scheler*, in *Enciclopedia Filosofica*, Bompiani, Milano 2006, p. 10130.

³³ *Ibidem*.

³⁴ Cfr. M. Scheler, *Die Stellung des Menschen im Kosmos*, Bern, Franke, Band IX 1975, tr. it. *La posizione dell’uomo nel cosmo*, Armando 2006, Roma, p. 115.

³⁵ *Idem*, p.143 e p. 146. The words in italics are from the author.

series of cases in which certain doctrines of *normal* psychology reveal their falsehood just because what they state only occurs in *particular pathological cases* and not in normal life".³⁶

In concomitance with this, it has also been pointed out that the profound, original valorization of emotional life as the core of interior life, irreducible to the clarity of currently lived experience of conscience and the parallel Schelerian criticism of introspection and conventional ego-logic or impersonal psychic schemes, besides restoring the concrete depth of a person, who has been, in turn, considered as a spiritual subject center of willful acts, also led to a profound reconsideration of man's place in the Cosmos.

From this, a new task unequivocally seems to emerge for phenomenology, which in Scheler's view is *the* philosophy par excellence, given that, by means of phenomenological reduction, philosophical reflection itself surely becomes an "act, determined by love, by which the innermost core of a finite human person participates in the essences of all possible things",³⁷ so as to be open to a renewed, full as possible relationship with the world. On the other hand, and in addition to what has been said above, practical implementation of this orientation of thought makes it possible to carry out that deep spiritual transformation of men and Western civilization so wished for by Scheler and which also seems to be the often failed goal of many psychological and psychotherapeutic approaches.

In this problematic scenario it is possible, in general terms, to support the idea that "philosophy is therefore the act of participating in the essences, and is so as it is an "act of moral nature" involving the human spirit as a whole and having its root in love, the love for a learned being as an absolute value"³⁸; in particular, it is the act of phenomenological reduction that, in the meaning given by the German philosopher, can become a "technique" of existential rebirth which is extremely useful for a person, also within pathways of Philosophical Counseling.

The, so to speak, practical, but certainly not pragmatic, real but not immediately effective dimension, of Schelerian phenomenological reduction comes out, above all, if it is taken into account that, as underlined by Cusinato, at the centre of this act there is a process of rebirth to new life having as its innermost core a continuous transformation of the person involved. For this reason, it is absolutely indispensable in this context to underline the circumstance that

... in Scheler, the reduction assumes a purely ethical meaning from the beginning: it is not an epistemological method, as it is in Husserl, but a "technique" of existential rebirth. The person stands out from other ontological entities since they come to life and constantly regenerate: the person has not a fixed, completed *form*, but is a being in *evolution* [...]. Through this transformation, the person is able to put the predominant attitude in brackets – i.e. the active-objectifying attitude of *homo faber* directed to changing the world by means of technique and science – to reach the receptive disposition that in the Christian act of

³⁶M. Scheler, *Gli idoli della conoscenza di sé*, cit., p. 111.

³⁷M. Scheler, *Essenza della filosofia e condizione morale della conoscenza filosofica*, in Id. *L'eterno nell'uomo*, Milano 1972, p. 180.

³⁸G.D.S. G. De Simone, *L'amore fa vedere. Rivelazione e conoscenza nella filosofia della religione di Max Scheler*, cit., p. 31.

humilitas recognizes its limits, its right extent and only in this way attains the correct “know yourself”. *Humilitas*, which is the basis of Schelerian reduction, tacitly implies the moment of *kenosis*: it is the emptying of the mind not only from learned notions, but also from the attitudes and mentalities that made them possible. It is the emptying from an impersonal way of living but only to plunge themselves deeper, within the meaning of *Weltoffenheit*, into the lively richness of the world. It means renouncing everything in order to obtain everything. It means the death of egocentrism in order to leave the cavern and come to life again as a person. Only once emptied from the objectifying attitude, a person reaches the disposition allowing participation, and only on tiptoe can the frontier of the sacred be crossed, attaining salvation.³⁹

It is as if to say that the practice of philosophical counseling inspired by Max Scheler’s reflection should set as a unique, but not simple, goal the possibility to widen spiritual understanding in persons by means of the radical and concrete exercise of philosophy. The latter, seen as “philosophizing”, i.e. as thinking always in movement, besides going beyond psychological categories, must not forget to also transcend those absolutely restricted categories of traditional rationalism, so as to be able to deepen and penetrate all those non-logical, intuitive dimensions which restore the vivacity and complex depth of the human experience. In fact, Scheler adds

... a philosophy, which a priori disregards and denies the claim to transcendence also advanced by all non-logical acts, and which grants this claim, in addition to all acts of thinking, only to those acts of intuitive knowledge that within the field of the theory of science provide us with the material for thinking activity, is condemned to not seeing an entire set of correlations of content, which, by their nature, are not accessible to the spiritual acts of intellectual nature. A philosophy of this kind is like a man who, despite having healthy eyes, chooses to keep them shut and expects to perceive colours through his ear or nose!⁴⁰

Phenomenological reduction, therefore, intended as a radical possibility for a person to transcend himself, empathize with life and draw on the most unexplored horizons of his depth, can become the code practiced by a philosophical life: a life that has as its centre the necessity, so much pursued by Scheler, of a concrete regeneration of the figure of the human heart.

That heart which, notwithstanding the fact that common opinion considers this organ the realm of confusion and emotional instability, actually “does not represent a mere reality of fact silently joined to the self, but rather is a complete set of well-oriented acts and functions, *possessing a rigorous, autonomous system of laws*, independent from the psychic organization of man. It is a system which works in a precise, exact, accurate manner; and it is in its very functions that a *sphere*, rigorously *objective of facts*, appears in front of our eyes, which is more objective and fundamental than any other”.⁴¹ A sphere that opens just slightly to values and consequently defines feeling as a meaningful act, so as to lead Scheler to declare that “*who has the ordo amoris of a man, has the man himself*”.⁴²

³⁹G. Cusinato, *Rettificazione e Bildung*, in M. Scheler, *Formare l'uomo. Scritti sulla natura del sapere, la formazione, l'antropologia filosofica*, FrancoAngeli, Milano 2009, p. 9.

⁴⁰M. Scheler, *Ordo Amoris*, Morcelliana, Brescia 2008, pp. 92–94.

⁴¹*Ibidem*.

⁴²*Idem*, p. 52.

The *ordo amoris* reflects the fundamental core, the system of values and the structure of acts of love and hate of the individual person: it is, in fact, his concrete and dynamic centre, the primary source of any ethical experience, since it leads everything in the direction of its specific value.⁴³ Thus, it constitutes in every man “the primary source from which his concrete existence and his individual story forms – or, in a figurative sense, “crystallizes”-; ultimately, the place of his possible growth and of his through-and-through personal development”.⁴⁴ For this reason, analysis of the particular meaning and of the laws of emotional life, shown through stories of the existence of a person attending a session of philosophical counseling, lets a personal vision of values and truth emerge, given that it is truth that “must have a different content for each person [...] because the content of the existence of the world itself is various and different for each person”.⁴⁵

In a time of strong contradictions, in which emotional life is seen as the expression of all that is obscure and ungovernable, if not trivialized, Scheler's pages, devoted to the figure of the human heart, still give hope in the possibility of narration and sincere understanding of the laws of feeling.

In this sense, then, philosophical counseling can only take on, in the face of different and unique personal life stories, an attitude which is deeply astonished in front of life, and totally attentive to new aspects, internal connections of meaning, with which, as we have seen, Wilhelm Dilthey, who was a tireless researcher of the spirit, examined historical events. Fully aware of the fact that “the understanding of the stranger lies precisely in the fact that I make the lived experiences which are presented to me recede, and it can happen during the telling, for instances, from the experience of a stranger, to *simply* listen to the other”⁴⁶ and be carried away by the irreducible but absorbing presence of his enigmatic mystery.

⁴³ *Idem*, p. 27.

⁴⁴ *Idem*, pp. 39–40.

⁴⁵ G. De Simone, *L'amore fa vedere. Rivelazione e conoscenza nella filosofia della religione di Max Scheler*, cit., p. 50.

⁴⁶ M. Scheler, *Gli idoli della conoscenza di sé*, cit., p. 103.

Hyper Klein Bottle Logophysics Ontopoiesis of the Cosmos and Life

Diego Lucio Rapoport

Abstract We present an onto-epistemology based on the self-contained KleinBottle and HyperKleinBottle surfaces and their logics; the latter incorporates interrelations and hypercontextualizations within an heterarchy of Otherness. We introduce the associated logo-physics, as a basis for the unification of science and phenomenology, by surmounting the Cartesian Cut. Dualism is found to be a projection of the former logic, not an independent primeval onto-epistemology. We present the phenomenology of these logics, with regards to the geometries and topologies of space and time; of thought and language; of semiosis and its geological, cosmological and astronomical signs linked to the Myth of Eternal Return; of perception and cognition; of the common ontopoiesis of life and the inanimate realms, and of biological shape departing from embryological development and its unfolding as body-plans and their anatomy-physiology, and discuss its bearing in evolutionary theory, all which we present as embodiments of this non-dual onto-epistemology. We contrast this paradigm with: (1) the dualism of the theory of autopoiesis and the purported interior/exterior divide, as a general principle, which these logics subvert by self and mutual reentrances of the heterarchies; (2) the dual membrane of cell biology; (3) evolutionary theory associated to the metabolic versus genomic dualism; (4) the mereological fallacies of the neurosciences and the hypercontextuality of metaphors and anthropomorphisms; (5) the dualisms of Newtonian physics, Einstein's relativity and quantum mechanics which are found to be epistemic theories, and the assumption of noncontextualization in physics, chemistry and geology which we show not to be the case; (6) the psychophysics of visual, aural and musical spaces, (7) the anatomy-physiology of the sensorium and the healing reconstitution of integrity; (8) in the division of epistemology and ontology, of language and process, and the top-down and bottom-up systemic, and finally (9) the

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issue of design related to turning-inside-out of a sphere (the ovum), yet transcending creationism. We present their surmountal through the onto-epistemologies of the Klein and Hyper-Klein Bottles surfaces, of hyper-contextuality and complexity. We discuss teleological causation and design of processes/structures, in particular in paleogeology, physics, chemistry and biology, in terms of the latter onto-epistemologies and of the Golden Mean, generated by time waves and their guidance by the Fibonacci Algorithm. We apply this onto-epistemology to the interpretation of religious texts and discuss the relations with the evolution of science. We discuss the two-dimensionality of biology and the lifeworld, novelty and the time operators.

Introduction

Philosophy has played a negligible role in the development of the sciences following the development of Mathematics by Descartes, Pascal, Leibniz and Newton in the spirit of metaphysical problems. Newton's lifetime activity was Alchemy, a lifeworld which attempted to reveal unity, a cosmical order, cyclic time its essence, which the so-called Age of Reason relinquished completely. This is where Philosophy and Science stand today, unity between them forsaken, unity internal to them, unattainable. The Cartesian Cut provided a formidable impetus – manifested, to some extent, as power to control Nature-for the sciences in terms of the positive world of objectivity. Aristotelian dualism, mathematically framed as the two-valued (true and false) logic by G. Boole, the Aristotelian-Boolean logic (ABL) turned to be the (largely unacknowledged) logic of discourse and structuration of the sciences, and their ontology (Rapoport 2011a, b, c, d, 2012, 2013). Dialectical logic was considered by Hegel to be unrelated to mathematical logic, establishing a disconnection of Philosophy and Science. The phenomenologies of Husserl and Heidegger, followed a dimmer fate.

Scientists ritualize and develop their investigations in the exclusive terms of dualism. Yet, a system of logic is a formalization of an ontology, which is further embodied (Rapoport 2011a, b, c, d; Günther 1967). Thus, the ABL is already a formalization of an ontology, its embodiment are the broken sciences (and broken selves and societies), disconnected to Philosophy. The ABL, as an ontology implicitly subscribed by the sciences, has the particularity of holding Being as its sole locus, whilst Non-Being, Nothingness is cast into Being since the negation operation is purely reflective, and thus this operation creates no ontological independent locus. This reflexive operation introduced by the ABL's negation erases signification and thus semiosis, and the mechanical world thus purported, ceases to be comprehensible and altogether to have a meaning at all (Hoffmayer 1996). With reductionism for scientist's key instrument together with two-valued logic, further reduced to one single value by positivism raised to reduce the world to the Ratio of Objectivity, existence was equated to what can be measured.

For the ancient cultures, mensuration was related to time reckoning, central to their cosmogonies and their socioeconomical organization, embodied in the Myth of the Eternal Return (de Santillana and Gretten von Dechend 1969; Purcell 2006).

Thus, instead of the contemporary occupation of (even virtual) space as our vital contemporary mode, ancient societies self-organized in terms of the signification lived through cyclical temporal dynamics, framed from the knowledge of the positions of the stars and the planets, the precession of the equinoxes its most essential physical manifestation. Its importance was no less than providing the basis for semiosis. The symbol for semiosis was the Ouroboros (and the Analemma 2010; Rapoport 2013, 2014), which we shall reencounter as the KleinBottle surface (KB), the embodiment of eternal return.

Marx made of the determination of the material realm by the ideative realm in his Capital Logic, the core of a second-order cybernetics, critically revised by (Johansen 1991; 1993); cyclical dynamics is encountered in economics, as well as in the history of culture (Sorokin 1962; Páles and Mikulecky 2006). An imaginary action for the interrelation between Physics and Will was proposed by the founder of electromagnetism James C Maxwell, currently identified with the action of a Time operator, a logophysical cyclical operator implicit to the Myth of Eternal Return, that is crucial to self-determination, in particular in biology, chemistry (Rapoport 2011b, c, d) and number theory (Johansen 2010). Thus, a cyclical non-circular KleinBottle logophysics was found to be crucial to cell biology, embryology, evolution and genomics, cybernetics and physics. This non-dual self-referential logophysics, which is the basis for the ontopoiesis of the inanimate and Life, surmounting the Cartesian Cut (CC), will be the subject of this article.

Also in the nineteenth century, psychophysics came to the fore with Fechner and von Helmholtz, yet it did not fit into the mechanical world. Following Planck's proposal of the quantum, appeared the Copenhagen Interpretation of Quantum Mechanics (CI), an epistemology in which an "observer" was brought into the theory, through the *res extensa* of his measurements. Information (yet not information, as morphogenesis) became the catchword of the sciences, extended later as a paradigm of Life through molecular biology. With the CI, a reduced form of subjectivity is claimed, with the subject as a reality determining-object by reducing the *potentia* of infinite states to the one single manifested world, by knowledge acquired (as bits, that the observer contains, presumably in the brain, and somewhat mysteriously projects onto the phenomena) through measurement, becoming thus a partner to the world by the expediency of the reduction of wholeness. Thus reality, with the real numbers for its measurable expression (although imaginary numbers, i.e. related to the square root of minus 1, provided the representation for the physical phenomena) was linked to epistemological action, yet conceived as having no ontological locus (but the implicit dualism), another form of Cartesianism. The physicists' models for this are multiple, yet subjectivity is ontologically absent in most theorizations: The observer is embodied by a measuring device, which may still divide the world into an infinity of worlds, all uncognizable but the one in which we actually measure, so that self-referentially the world amounts to what is measured because it is we who measure it. Thus, the worlds of Otherness are the loci for the unmanifested Potential to dwell as an unacknowledged tenant, whereas the world we actually live is the fusion of the observer with the Apeironic Potential (Rapoport 2011d; Rosen 2004a), producing a self-referential quantum space-time

structure (that we shall encounter in this work) driving the phenomenae to manifest singularly (Rapoport 2007). In the former rendering we are estranged to the source; in the latter we are unseparable to the source; this lifeworld is far from trivial.

It was Cybernetics, the newborn science created by the cooperation of scientists of a transdisciplinary persuasion, with its aim of developing a theory of systems, in particular biological, and ultimately in developing engineering systems with life-like properties, that had to face the problem of mimicking life and subjectivity, by investigating their origins and essential operations. Indeed, it appeared as the promise of an epitome of metaphysics and pragmatics, but not without a paradoxical vengeance, which we are today suffering as an increased alienation to the cycles of Nature, trading instead to virtuality and the notion of a “technological singularity”. Its credo is: “in technology we trust” (Kurzweil 2005). Yet, as in the Myth of Eternal Return (MER) in which the world is formed and brought to manifestation by cyclical time, the world through Will returns to itself in self-recognition and self-determination through and by wholeness. Indeed, the fracturization of Science into sciences, with a recurrent reduction to a never ending increase in specialization, and a sense of alienation that can not be concealed by the triumphalism by which scientists have come to forcefully offer their image of the world, is the current mode of the sciences, for which reality reduces to measurement and manipulation, and its paramount virtual operation is computation. It is signed by the ABL, and a linear-time-parameter progress that the world may intend to undo, by turning into integration, by and through self-reference, whose modes of manifestation stems from a topological phenomenology, in which a Time-operator, whose action and topology is non-linear, is embodied in the KleinBottle surface (KB); see Figs. 1, 2, 3, and 5 below. The KB is a two-dimensional surface, a topo-logic (locus as logic and logic as locus, or still, logic and locus, undissociably) of self-reference; its phenomenology and its associated multistate (and multivalued) logic is the Klein Bottle Logic (KBL); see Fig. 5 below. This topologic plays a crucial role in the MER (Rapoport 2011d), as well as its self-referential predecessor, the Moebius Band (MB); see Fig. 6 below. The KB is a surface not contained in space, but self-contained (see Figs. 1, 2, and 5), and thus cannot be framed in the Cartesian mode of Being, defined by the formula: object-in-space-before-subject. While the KB is in-formationally complete, this completeness is not open nor closed, and has no global Inside nor global Outside, which are only local and dynamically intertransformable. It is generated by a primeval distinction on the Plenum (Rapoport 2011a, e) that acts as a boundary that does not separate Inside from Outside, but integrates them by embodying paradox, through self-reentrance, i.e. a principle more general than the Principle of Non-Contradiction, the backbone of the ABL. As we shall elaborate below, Being is unseparable of the KBL as an ontological locus of an integrated ontological system in which subjectivity is fused with Being, thought as an image and thought as a process, together with Time, constituting the four ontological loci that are embodied by the KB, and thus identifiable with its logic. Through this phenomenology, the Cartesian Cut (CC) was surmounted, and mathematical-physics, cybernetics, biology, anatomy-physiology, logic, perception, cognition, semiosis and the MER, found an integrating principle (Rapoport 2011a, d). The relations between the KB and ancient cosmogonies are elaborated in (Purcell 2006; Rapoport 2014).

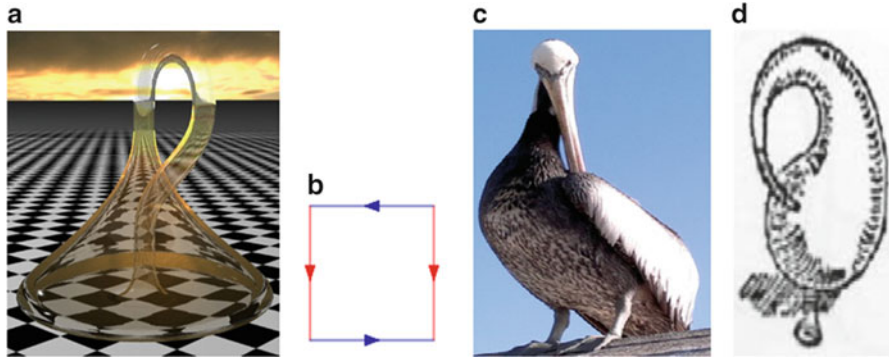


Fig. 1 The KB placed in a background environment (a) and the topological identifications that abstractly produce it (b); opposite sides are identified yet in accordance with the direction of the arrows; those equally directed establish the symmetry structures and the two sides with opposite direction, the asymmetry structures, both crucial to the form/function – integration that is crucial to the Cosmos and Life, as in the Pasteur-Curie Principle (Lima de Faria 1988). The KB and the iterated chessboard, generate a representation of the genetic code and the algebra of quantum mechanics (Rapoport 2011c). In (d) the alchemical flask, Pelican; heat entered in the bottom as in A heating the elements which flow through the neck unifying Inside with Outside (Purcell 2006). The pelican in C beaking its chest as in the Pelican Christ, a symbol of the Redeemer (Purcell 2006). The KB originally appeared as the cap of freedom of the Phrygians of ancient Anatolia (Purcell 2006), worn by Mithras, as a principle that unifies the opposites. According to Jung, a cap represents what is thought, and thus the Phrygian cap is a sign for Self-reference. This cap appears in Picasso’s 1930s works, related to the Tauroctony, the “slaying of the bull”: the turning away from the constellation of Taurus as the polar locus on the long cycle in the MER to initiate a cycle headed by Aries (<http://en.wikipedia.org/wiki/Tauroctony>). It was worn by the *Three Magi Kings* http://en.wikipedia.org/wiki/File:Early_Christian_Magi.JPG, by France’s Marianne as the emblem of the Republic and the French Revolution, by the Celtic Pixy which thus became a symbol for the shamanic cap, and worn by Troy’s Paris (Cirlot 2002) as a symbol of his servitude to Eros. Thus, it was further related to the Phallic Cults and to the origin of the practice of circumcision, also practiced by the Mithraics. The Phrygians, enslaved by Alexander, were related to the early Scythians, who migrated from Ireland; they adored a goddess of fertility, Cibele, taken by the Romans as their own, as Alma Mater, was considered by the Greeks, as the mother of all creatures, gods and earth. The relevance of the KB in regards to the Myth of Eternal Return and the precession of the equinoxes, as an invariant cross-cultural mythopoiesis is developed in (Rapoport 2014)

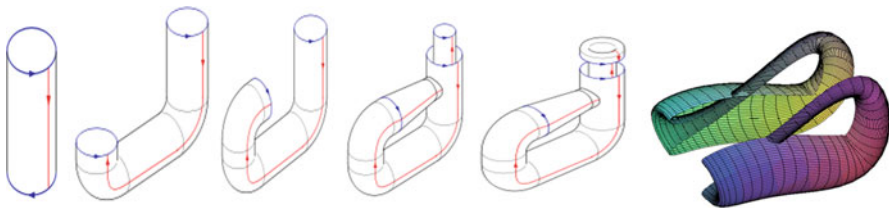


Fig. 2 The identifications as they unfold to produce the KB; courtesy of Inductiveload ☺. In the final picture – courtesy of Theon ☺, we see two oppositely twisted MBs produced by cutting the KB along the longitudinal section; conversely, zipping them we obtain the KB. Yet a single MB can be obtained from the KB, an operation that we shall not present in this article

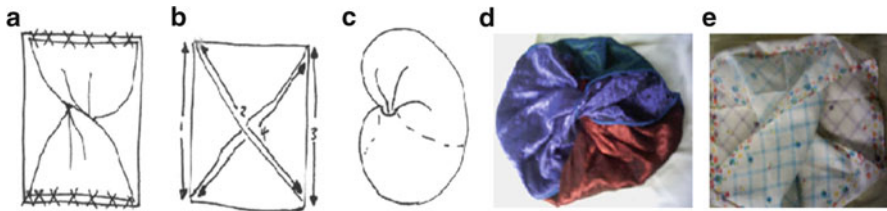


Fig. 3 The Moebius Kleinbottle, a posture of the KB, is easily constructed using three squares. This is the model described in Lewis Carol's *Mein Herr*. Two squares are joined together to make the twisted MB to finally stitch a third square as in (b): Moebius KleinBottle in (c and d). The model in (c) made with three different coloured squares shows the twist in the purple square. In (d), a model is of the same design and is offered for the reader to sew the third handkerchief onto the continuous edge of the Moebius strip. Being a fabric with a grid printed on it, the orientation of the diagonal and orthogonal weave is revealed. From (Purcell 2006), reproduced with the kind permit of the author



Fig. 4 The Sea-Urchin gastrulation. The Exterior/Interior duality is clearly not the case through the in-formation of the double bag invagination which will produce the bilateral symmetry. This in-formation proceeds by shearing motions, i.e. torsion. The geometry of the gastrulation is self-referential: as a process the developed embryo is not contained in space as in the Cartesian take, rather self-contained

A prevailing myth of our times, yet unrelated to the Cosmos for its foundation, is the current paradigm embodied in the fractured sciences; their mythical character being the claim of their finality and completeness of its ontology and epistemology. “Science does not rest upon solid bedrock. The bold structure of its theories rises, as it were, above a swamp” (Popper). Lacking a foundational onto-epistemological principle, the current sciences are, at best, based on bold intuitions that may reflect shreds of this missing principle. This claimed finality of the myth cannot be dissociated from the dualistic ABL (Günther 1967). *The fractured sciences speak about manifestations of things and processes contained in space (time as the container for change)*. These are the notions of Cartesian space and object resumed in the formula object-in-space-before-subject (Rosen 2004a, b, 2006, 2008). Thus, the self-contained KB does not fit into this myth. Furthermore, Gotthard Günther argued that neither subjectivity and Life belong to this myth, since the current paradigm of the fractured sciences has for essential ontological locus only Being, into which subjectivity is cast as an object, and thus denied a locus for itself, but the one provided by the physical inanimate reality (Günther 1967). He further related the objectification of subjectivity with the dual ABL which is the core of the myth

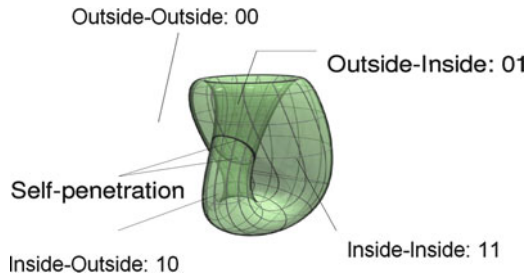


Fig. 5 A natural topo-logic of four states (the Klein Bottle Logic, KBL) which has two digits representation: Inside-Inside (represented as 11), Inside-Outside (represented by 10), Outside-Inside (represented by 01) and Outside-Outside (represented by 00). The mediation states arise from self-penetration, absent in the mechanical-dual-membrane and in the Cartesian conception of object-in-space-before-subject, are paradoxical states associated to time waves. From the KBL appears the genetic code with its 64 elementary codons, and furthermore the genome and its association to the mathematical structure of the Dirac algebra of Quantum Mechanics (Rapoport 2011c). An alternative representation for the KBL and still for the genetic code (where know the 64 codons will be identified with the 64 hexagrams (Schonberger 1992), is – following Leibniz to represent 0 and 1 by the Yin and Yang symbols, —, --, respectively, and thus produce, — — — — —, tai yang, shao yin, shao yang and tao yin, respectively of the I Ching, the Book of Mutations. The Tao Ji, ☯, embodies the interpenetration of Outside and Inside, yet with no perception of them nor conceptualization in terms of them, but their mutual interpenetration. The Tao Jin can be obtained by recurrent geometrical operations on the two dimensional plane image of the Analemma (private communication, Melanie Purcell 2006). The KB used in this figure is a modification of Trung’s ☺

underlying the fractured sciences. Thus, Life with its willful character of self-determination, can not pertain to this myth, since Life is not a thing (neither that thing, the genetic code, can be its structural source): Life neither is contained in Space nor in Time. Thus, Time, and Thought, continue to be outcasts of Being and its spatial manifestation, which is all that the current paradigm of the fractured sciences allow to exist. As it turns out to be the case, biological systems are self-created distinctions, which do not occupy space but actually are ontopoietic, i.e. they create themselves as spatial manifestations of the KBL and a Time operator, as a morphogenetic materializing logophysical operator (Rapoport 2011a, b, c, d, 2012). Since a logic is the formalization of an ontology, biological systems appear to be ontopoietic, as we shall elaborate below. Thus, biological systems do not conform to the myth of the sciences, if not in the dualistic stance in which is formulated by keeping Life and Consciousness as the Mysteries, glossed upon as epiphenomic emergentisms. Indeed, for the Cartesian formula object-in-space-before-subject, the subject being another such object, the observer, is reduced to the rods and clocks that made the core of Einstein’s argumentations for objectivity in terms of “relativism”. Further, the observer is contained in a mechanical universe, in contrast with a time-structured and self-determined world of the ancients (de Santillana and von Dechend 1969). For Einstein, time is more space, in which the contained observer through formulas of invariance, assess this presumed-to-be-objective character of

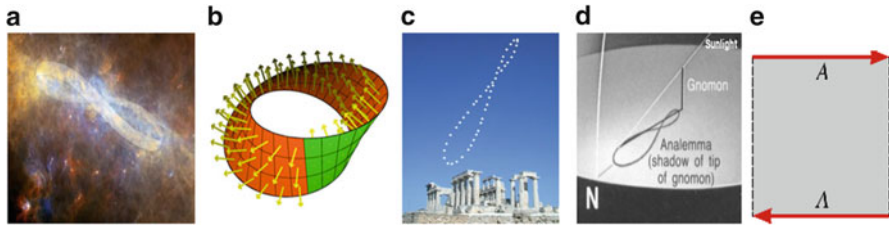


Fig. 6 In (e), the Moebius Band is constructed by joining the *top* and *bottom* sides of a square together so that the directions of the arrows match; this requires a 180° torsion/twist, as in aural space. In (a), the MB, in the centre of the Milky Way; photographed by the Herschel Telescope, July 2011; in <http://herschel.cf.ac.uk/results/twisted-ring-galactic-centre>; courtesy of NASA. In (b) we see the continuity between the positions of a normal vector at one point near to the transition between *red* and *green* areas, facing say outwards. We move in anti-clockwise direction to reach the same point, but now it will be pointing in the opposite direction than the original. In (c) we show the MB Analemma, taken through a whole year exposure of the sun to a fixed camera, placed on the site of a Greek temple; <http://solar-center.stanford.edu/art/analemma.html>. In (d) we show the Analemma as produced by the image projected by the Sun on the tip of a rod, the Greek gnomon or the Egyptian merkhat/obelisk (Purcell 2006), or a humble rod. Remarkably, the pedestal sustaining the rod as in sundials, i.e. the gnomon, was called the Analemma. “that what supports”, instead of the image. The reckoning of the Analemma is an operation that demands a whole year for registrations. Charles Ross’ *The Year of Solar Burns* reckoning of the Analemma, can be found in the Chateaux d’Oiron, Loire Valley, France, and as far as we know, is the first one to have been produced in several centuries, until more recent photographs serials

the observations of objects and processes contained in spacetime, and his own account of them, to establish their independence, relative to himself and to other observers which intercommune through the rule of invariance, yet all as detached beings, despite the “relativity” of their cognition. This is a theory of space-time based upon the notion of an unstructured observer relative to which spatial-temporal relations are established; yet both space and time are still containers of this passive observer, who does not participate in the making of the world although the status of his cognition of it are the issue of the theory: this observer uses the rule of invariance to establish objectivity by surmounting the “relativity” of his cognition. Yet, as remarked by Bateson, any experience is ultimately subjective (Bateson 1973,1988), to which we may add, that the fusion of objectivity and subjectivity is the case of *any* experience, in the degree that it is *embodied in the subject, and further mediated by light*, that has this self-referential character of fusion of objectivity and subjectivity. This rule of invariance, that allows for establishing the criteria for objectivity are in Special Relativity (SR), the Lorentz group transformations, and in the case of General Relativity (GR), the group of invertible coordinate transformations that charter the world as if real, as in Descartes’ analytical geometry. This chartering of the material world reduces to a four-dimensional Cartesian world, in which the origin is the unacknowledged singularity, the mensurating self. The rules of SR preserve globally (requiring thus no charts) the equation between space and time, the light-cone. The rules of GR preserve the light-cone, but only locally due to the presence of curvature as the signature of masses, so

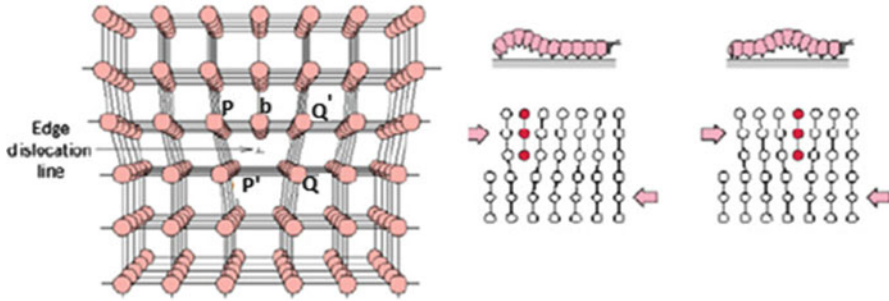


Fig. 7 Torsion introduced by shear in a lattice; in the rhs by a caterpillar moving in the surface of a perfect crystal. In the lhs we have a perfect lattice, as is the case of a discrete space-time rendering of the homogeneous spacetime of General Relativity, but in the central area in which a dislocation is the case. We see then the transition from parallelograms that close (null torsion as in General Relativity), to non-closing and the formation of a fifth side, the torsion field

that they do require chartering to emplace the single common theater, for objectivity to be realized.

Since the photon is self-referential, it is not seen, it is seeing, the perceptual process, and thus a manifestation of fused objectivity-subjectivity (Rosen 2004a, b, 2006, 2008; Rapoport 2011a, b, c, d; Young 1972), *Einstein's purport of vanishing subjectivity from physics, is maintained by denying self-reference as an essential ontological and geometrical locus*. Yet, this rule of invariance for establishing objectivity, can be construed as the rule that observers interrelated by their common identification of light's singularities, i.e. of the quantum action of the photon, as the most essential physical manifestation of a locus geometry (noted by dialectical materialist physicist V Fock), i.e. embodiments of subjectivity-fused-with-objectivity (Fock 1958). These are the loci for the singularities of light electromagnetic waves, surmounting the wave-particle dualism (Rapoport 2009, 2010, 2011d). This generation of a locus by light's singularity, the quantum non-pointlike photon, and thus the generation of a geometry, is the fundamental operation for the self-referential construction of space as discrete extended inhomogeneities (see Fig. 7 and Appendix). Inhomogeneities rupture the abstract continuity of sameness, the latter being convalidated by the mensuration of distances as in Einstein's theories, which were meant to omit singularities as a rejection of the aether that breaks the continuity, the untameable unbounded Apeiron, later somewhat mutated to the physical vacuum of quantum field theory, which is not empty but the Source for the physical world. In the topological phenomenology, Apeiron has the KB topology (Rosen 2004a). This inhomogeneity is the seeing subject, constituting a space through light's singularities, the photon, distinctions that create distinctions, as in (Bateson 1973, 1988). *This operation is not anthropomorphic, since cells come to be in the same guise*. Indeed, we have identified these geometries of physics, as those of biological structures (Rapoport 2011b, c, 2012), of thought (Rapoport 2011a, d), manifesting as vortical processes associated to torsion, i.e. shearing folding, crucial to biological and chemical shapes, and to a unification of physics (Rapoport 2005a, b,

2007, 2009, 2010, and references therein). Thus, the self-referential basis for the central operation of Einstein's theories of relativity for establishing an operational epistemology for claiming objectivity is unacknowledged. Because these theories deny an ontological locus for subjectivity, and hence for its fusion with objectivity, they establish an *epistemology* (and thus Einstein's claim of deliverance of a theory for the objectivity of the physical world is found wanting) for detached observers based on light – yet unwarily of its fusion of object with subject – to determine objectively the physical operations, in which observers and light singularities are identified. Yet, this is a rather trivializing identification that has avoided recognition, since it obliterates self-reference and thus fails to acknowledge the fusion of objectivity and subjectivity (Rapoport 2011a, d). Instead of light and its singularities being the basis for the *res extensa* for objectivity, Einstein in extending his theory of Special Relativity to General Relativity, due to the failure of establishing a theory of the physical world in terms of light (which is massless and then does not curve space-time), he proposed massive objects. Their geometrical signature is the curving of the space which contains them, instead of space-time being self-referentially generated by torsion folding which requires, in principle, no such curvature. Thus, this central unacknowledged operation of Fock's – further pursued by (Rapoport 2010, 2011a, b, c, d)-reinstatement of Einstein's theory, establishes an *epistemological invariance based on the fusion of objectivity and subjectivity of light's quantum nature. It thus departs from the discreteness of space and time rather than its continuity* assumed by Einstein through an observer which does not break space-time due to the disembodied generation of space-time being the premise of General Relativity. The latter assumption operates alike the CI of quantum mechanics, in calling in the observer to assess the world, an epistemic call. While the self-referential locus and the torsion geometry associated to it is based on quantum action, Einstein contested this epistemic character of the CI during his lifetime, with his dictum that God does not play dice. In other words, in Einstein's claim for objectivity, as embodied in a geometrical non-random world of his theories of relativity vis-à-vis the randomness of Quantum Mechanics and the CI, he failed to grasp (as well as the epistemologists and physicists, that have tried to make sense of his obscure discussions with Bohr) that *both the CI and his theory of relativity were epistemic Cartesian stances*. In (Rapoport 2005) it was established that this rejected randomness is none other than the motions of Apeiron constituting self-referentially along the light-cone a torsioned space-time, a clinamen, through Brownian motions. These are random motions that their discoverer, biologist Robert Brown, claimed to be the motions of Life for their apparent willfulness. Einstein, the physicist to first theorize on Brownian motions to later neglect their essential role in Quantum Mechanics, also neglected from the very outset of his conception the torsion geometry produced by light particles as primeval inhomogeneities, generating vortical structures and folding motions, rather than the objectifying curvature. Though, torsion was unbeknownst to him at that time, the 1910s–1920s, and until the 1930s, when he started to collaborate with Elie Cartan, the mathematician that introduced the torsion geometries (Goenner 2004). Yet, their approach failed since they could not identify the relation of torsion with physics altogether, nor with the *quantum action*, as the basis of the self-referential light torsion geometries

(Rapoport 2009, 2010, 2011e). Hence, it is that by the choice of distance for the basis for an ontology for space-time, that Einstein obliterated the self-referential character of light and the quantum as the basis for his space-time geometry, and was further unable to perceive its essential role in Quantum Mechanics. Hence, till this day, the unification of General Relativity and Quantum Mechanics has failed. His followers, and physicists of all persuasions, have *overlooked the common self-referential origin of these two theories*, which most physicists claim to be the core of Physics.

To resume, while post-eighteenth century philosophy played a negligible role in the development of Science, dualism in its manifold manifestations, and the *omission of self-reference* was and continue to be the crucial underwritten, and remarkably unacknowledged philosophical premises for the broken sciences. Thus subjectivity has been cast out of Science, and Life deferred to a Mystery, both as emergentisms.


Logic as a Formalization and Embodiment of Ontology: Language, Signification and Subjectivity, the Aristotelian and Klein Bottle Logics, and the Time Operator

In Aristotelian thought, from which stemmed the Western scientific tradition, we have as its core a dualist conception, the ABL and the Principle of Non-Contradiction. Dualism is expressed in the exhaustive division in the characterization of the universe with two values. One value is about designation, and thus, it encompasses all what the universe is and what can be said of it (Günther 1967). The other value is non-designative, and due to the completeness of the designative value, this non-designative value points to no ontological object or phenomenon. This eliminates subjectivity from the universe, since subjectivity is incorporated into the subject qua object and the discourse of it falls into the designative value, “there is”. Indeed, the subject qua subject is left outside of the realm of discourse exhausted by the affirmative value; the *res cogitans* could not be established in the *allthat-there-is*, the *res extensa*.

Therefore, the *division between living and non-living, in the framework of dualism is rather contradictory*, since whatever the ontological locus of this division may stand for, paradoxically this division exhausts the ontological discourse, while dualism excludes the subjective element that living beings allegedly possess to their ontological constitution and makes them a separate and complementary category of the non-living. In other words, *this division already produces the violation of the principle of non-contradiction*, and thus the ABL cannot be the ontology, in terms of which this dualism can be designated, if not by erasing non-duality. This subjective element which is associated to Will, is thus inherent to both animate and inanimate realms, or is in-existent to both, and the onto-epistemology for incorporating subjectivity and Life is a non-dual logic.

Greek thinkers interrogated on the nature of time as belonging to the objective designative value or to the non-designative subjective one. The response of the Eleatic school, whose most prominent figure was Parmenides, was that time does not exist, the universe is static and the subject is part of the universe. Heraclitus response was the non self-identity of beings in sequential time, or formalized in the laws



Fig. 8 Two possible paradigms of interrelation systems. In the lhs we find the Matrushkas,: Recursive containment without self-contention nor reentrance of the Whole on the Parts; this is the current paradigm, recursive dualism. In the rhs we have a completely different conception. Three examples of the HyperKlein Bottle-HKB (courtesy of the Science Museum, London; Creative Commons ). The systems reenter on themselves and may also reenter in others, as is the case of the far r.h.s.; this latter reduced case is casually suggested in the antiverbiage – and verbose-manifesto in (Serres 2008). The Matrushkas paradigm is a reduction of the HKBL by erasing all reentrances. Static Mandalas (Sanskrit for *circle*) are usually perceptually structured alike Matrushkas

of thought, A is not A at different *sequential* times. Thus, although the Principle of Non Contradiction is violated, it occurs in a certain ordering of time, which is linear and exterior to Being. This time of Heraclitus, recovered by Newton's absolute time, is not the non-linear time order of the *language* which designates this flow. Indeed, while the appearance of descriptions is linear, the concatenation of language, due to its self-referential action, is non-linear. Hence, the perceived sequential time described by the ABL of designation, alike to our observation concerning the ABL's inconsistency concerning its designation of Life, is belied by the self-referential action of both the thought and language that describe it. This shows the *failure of the Principle of Non-Contradiction to describe its own generation and its association with becoming*. Thus, the process of signification through language, the information conveyed and produced by it, the subjective time unfolding this signification and the thought process that generates it, all of them have an interwoven lifeworld. The lifeworld has no interior nor exterior, but the one informed by their recurrent non-linear self-directed and mutual action, in which the Principle of Non-Contradiction is but a projection of this semio-ontological system of synergetic self-penetrations, and also penetrations on the others. *Hence, the twentieth century (meta) mathematical rendering of analytical philosophy in terms of set theory (culminating with Russell and Whitehead, further rendered obsolete by Spencer-Brown in his Laws of Form), in which the relation of being an element of a set is the cornerstone of analytical philosophy' claim to be rooted on science (surely dualistic, as the relation of belonging is), cannot embody these phenomenology. Thus, much of contemporary mathematics is estranged of the lifeworld.* We can represent the onto-epistemology of this system of articulated non-linear superposed self-operations, as the embodiment of the Hyper Klein Bottle surface (HKB); see Fig. 8 above. Thus, time, thought,

in-formation, signification are all embodiments of layers over layers of both continuous and discontinuous self-referential torsion folding and unfolding, mutual and self-penetrations of a semiological field, through which the material world is in-formed, as is the case of organisms and of space (Rapoport 2011b, c, d, 2013), and of geological landscapes, as we shall discuss below. In particular, the time which sustains designation is structured. The present onto-epistemology differs from the notion that the objectivism of science is born from the externalism of language, in that it displays the world and signifies it (Matsuno and Salther 2002); as already shown, signification is not the case of the ABL, but of the KBL. The critique of externalism by these authors, implicitly considers *language to be an epistemic instrument, instead of a morpho-logical semiological field*. This critique thus disregards the fact that language and thought unfold simultaneously and unseparably, revealing the topology of time and of the fusion of language and thought, and of the fused extension and intention of the self, for manifesting as if external *res extensa*. Thus, the construction of an “internalist” perspective, in which the observer/speaker is placed inside the system, and cannot see it as if from outside (Matsuno and Salther 2002), as is also the case of the theory of autopoiesis (Varela 1979), is based on the tenses of language which accompanies the linear sequentiation of Heraclitus and Newton’s time. Yet, this tensional division of language, does not suffice, per se, to evidence the self-penetration of language and time, as a KB (in which outside and inside are fused by time, as in Fig. 5), nor to evidence this logic of signification. The non-linear self-re-entrance of language has for ultimate expression, the non-linear gestalt of music and its perception.

It can not be more abysmal the contrast of the lifeworld just presented, with the dualistic paradigm in which being occurs in space and becoming occurs in time, so that time and space are passive containers, as in the Cartesian mode. The latter operates as if the topology and its being, of language and thought, would be exterior to the world they designate. Thus, signification is reduced to the usage of language to either claim or deny objectivity as expressed in the designative value of the ABL; further, time and space are homogeneous and devoided of self-referentiality. Newton and Einstein maintained this exterior character of Time, universal for the former, related to space and in fact another dimension of it, for the latter, by erasing self-reference, as we already argued. They did so while keeping the Principle of Non-Contradiction of Being (while Newton’s alchemical conceptions belied this principle), and the Cartesian formula of object-in-space-before-subject, where the subject is itself a static object, with respect to whom beings manifest themselves.

It is in Hegel’s system that a new approach is found in which Time is related to the laws of thought (Hegel et al. 1969). This laws are of internal necessity, a logophysical coherence, so while they correspond to the designative value, now they point to the internal world of the subject. In Hegel’s dialectics we have a fusion of the designative value of objects and the non-designative value of subjectivity. Günther’s analysis of the Hegelian stance is that *the elimination of Time is related to the isomorphic character of the two-valued logic based on the Principle of Non-Contradiction*, or Tertium-non-datur (no third value); *the excluded third value is: Something can be and not be, or still, true, and false are the only two admitted logical/ cognitive values.*

This isomorphic character divides all objects which are the realm of the designative value into two classes: (1) Ortho-objects which can be conceived separately from any other object (ideally speaking; this separation is established in terms of the hidden assumption of the validity of the Principle of Non-Contradiction) and (2) pseudo-objects which can be only be conceived with reference to other objects, their duals – yet not conceived as polars-(e.g., right-left, night-day, etc., which is also dependent for its definition in the assumption of two-valued logic where no merger of dualities can be the case, in opposition to Hegelian dialectics). We return to remark that the usual take of living systems as a distinctive category defined by dualism, identifies them as pseudo-objects. Thus, the Zeno Paradox appears as a consequence of the impossible effort of reconciling the phenomena of change and motion with the static phenomenology of Being. In the Aristotelian tradition, Being is the class of all ortho-objects and thus designated by the single (designative) value, while Time alike Life in the dualistic conception, is a pseudo-object designated by three states (past, present and future), and thus the claimed isomorphism is non-existent (an isomorphism requires a one-to-one assignation). *Thus in the Aristotelian tradition it is hard to find an ontological place for Time, if there is any at all, and as discussed already, this is also the case for Life. This might be at the root of the trivialization of Time that has been incorporated into the sciences and human affairs at large with non-trivial and tragic consequences (Raju 2003; Rapoport 2014).*

Instead, we choose to abandon the association of the notion of value in logic as fundamental, to replace it by the notion of ontological locus with the elimination of Tertium-nondatur; we introduce the following ontological loci: (1) Being; (2) Its reflection on thought as an image (which requires the existence of light to form the image in terms of distinctions of light intensity, or more primitively, the existence of a boundary to establish images in terms of topology, which also requires light, for establishing the boundary as a frontier between the inside of the object reflected, and the outside); (3) Time. Thus (1), (2) and (3) form the Ego complex. We can extend this to include (4) Thought as a process, which in the Aristotelian tradition is confused with thought as an image, and thus with the introduction of this fourth ontological locus we have internalized time as the difference that makes a difference in the sense of (Bateson 1973, 1988); and finally (5) the ontological locus which operates as the detachment from the locus (4), implying also locus (2) and (1). Operationally speaking, locus (5) is an iteration or repetition of (1) to (4), so no infinite regression is possible. So a 4-loci logic is sufficient to describe Time, Being, and the Subject as the bearer of reflection of Being in thought, through Time, and the bearer of thought as a process.

There are two ways for representing this 4-loci logic, either directly through the KB as depicted in Fig. 5, or through a matrix representation, as in Stern's Matrix Logic (Stern 1992, 2000), which follows easily from the former (Rapoport 2011a). In the latter, logical operators are two by two matrices, operating in the two-dimensional plane identifiable with the complex plane. Those operators that verify that their twofold self-multiplication is the identically zero matrix, can be realized in terms of light rays in spacetime, unifying thus the physical and logical realms. Thus, *light, as described by the null-light-cone equation, is seeing and thinking, and the converse is also true* (Rapoport 2009, 2011d). The unification is produced by

extending the denotational world of discourse manifested as the system of real numbers, the ideal bearers of *res extensa*, to include the imaginary numbers as a second locus (which as a unified complex plane, has the topology of the KB), the action of Time transforming the real into imaginary axis, thus unfolding to a logic of thought as a process. Two essential features of this system of loci are further evidenced. On the one hand, the non-duality of True and False operators of Matrix Logic in which the negation operator does not intertransform them; in contrast, in the ABL, in which True and False are not operators but a two-valued system, 0 and 1, which are intertransformable through negation. Now, in Matrix Logic, True and False are no longer in specular reflexive relation; there is a folding in the cognitive plane, which is embodied in the twist of the Moebius Band and the KleinBottle (Rapoport 2011a, d). This torsion defines a cognitive operator, M , given by the difference of True and False, i.e. $M = \text{True} - \text{False}$, which is not equal to the null operator. Yet, its two-fold self-multiplication is null and thus it can be decomposed as light rays.

Therefore, the torsion produced by the lack of specular (under negation) symmetry between True and False, defines a non-null cognitive operator, M , in Matrix Logic, which further allows to transform cognitive statements to physical quantum mechanical statements, thus unifying cognition in the logical and physical realms. Furthermore, logical connectives are both operators and operands, such as thoughts are, and thus self-referential action (as is the case of light) is essential to Matrix Logic. This logic is unseparable from a topo-logic, namely the KBL (Rapoport 2011a, b, c), as in Fig. 5. A most important fact is that in Matrix Logic, the ABL is the projection under the action of the KB represented as a matrix, on the two superposed topological states *true and false, nor true nor false*, as in Nagarjuna's logic (Nagarjuna 1986), to the two Boolean states true & false, from which the latter can be recovered by further action of the KB.

Therefore, *dualism is incorporated in this non-dual logic, yet produced by the KB as an operator which actually generates it and further regenerates itself by acting on it: It is not an independent ontology nor primal with regards to the KBL onto-epistemology, as we just seen (Rapoport 2011a)*. For the KBL shown in Fig. 5 above, this reduction to dualism, appears as the reduction of the four loci to the Outside-Outside and Inside-Inside states, thus eliminating the intermediary Outside-Inside and Inside-Outside states that realize the integrity of the KB. By further identifying the Outside-Outside and Inside-Inside states (violating thus ABL, for which are absolutely separate), the double-helix model of the genome is generated (Rapoport 2011c) also the generation of space is related to this model and bistable perception.

Now, $M = \text{Time} + \text{Spin}$, the Time and Spin logophysical operators, respectively (Rapoport 2011a, d); the former computes the difference between logical states, and thus a (logical) distinction that generates distinctions, in the sense of (Bateson 1973, 1988), and geometrically operates rotating the real numbers axis to the imaginary numbers axis. Hence, *Time connects the representation for res extensa with that of res cogitans*. Spin produces a rotation normal to the complex plane, and thus together they form a primeval logophysical *vortex operator (identically to the torsion of spacetime)*, produced by the non-duality between True and False. This operator was somewhat intuited by Hegel in his dialectics, incorporated to the geometry

of the helix. *Time is further associated to self-determination and self-control, and thus to Will* (Rapoport 2011e). Yet, *in strong contrast with the open-ended evolution of Hegel, and of Teilhard de Chardin to reach for Ω , we have a self-referential Eternal Return*, embodied in the algebraic operation of recurrence, as the twofold self-multiplication of M coinciding with the zero operator (all elements of its matrix equal to 0), and thus the *cognition operator has the same self-referential character of the light-cone*. Rather than the *zero operator being the Nil* (Kauffman 1987; Rowlands 2009), *it is the Plenum, the source for all distinctions, even of the illusion of their pretended reduction to nilness*.

Visual and Aural Space, Perception, the Klein Bottle, Time Waves, Golden Mean Teleology, and the Phenomenological Philosophy of Space and Time

Physicists and philosophers have studied visual perception and the geometry of visual space (Heelan 1989; Luneburg 1948). The latter was a central issue to the Renaissance (Leonardo and Dürer its pioneers), which through projective geometry abandoned a trivial plane in which a fusion of object with subject operated, aiming to represent three dimensions on the plane. The identification on this plane, of object with subject, was the signature of the Middle Ages, evidenced in the lack of depth (Foucault 1990). Thus, the Renaissance introduced depth accompanied by a detachment of the subject to observe the world as an outsider, setting the stage and the scenery for Descartes. Luneburg discovered that hyperbolic metrics (as in Einstein's Relativity) for which parallels converge, may describe the geometry of distant-object-vision instead of the near-vision Euclidean geometry, and that a psychometric function dependent on the observer is crucial to visual perception. Thus, *a plural visual representation geometry* (there is a third zone with a distinct geometry) was proposed. Thus the *Principle of Non-Contradiction, the backbone of the ABL, is no longer valid for visual perception, which requires an interpretative contextualization by the subject, who enacts space* (although not as in Varela's dualistic theory of cognition, as discussed in (Rapoport 2011d)), rather than the detached Renaissance lifeworld and its posterior Cartesian formula of object-in-space-before-subject. This ambiguity which the ABL can not account for, is more notable in auditory space (Varèse 1959). Yet the *sensory modes have a topographic map representation in the body whose topology is the KB* (Werner 1968; Rapoport 2011d; Swindale 1996) and thus its ontology is the KBL. Amazingly, *seeing our seeing* is possible, and thus we "*objectify*" *our self-referential being*. Indeed, thousands of photographs of natural sceneries have been digitalized and processed mathematically to identify the topologies that may underlie this extreme richness. To the surprise of the researchers, the KB appeared, uniquely, up to a resolution for the observer's determination, zooming out and inwards, itself the ultimate enaction of this process, for the effect of scaling the in-formation to manifestation (Ghrist 2008; Carlsson 2009).

The *lifeworld of the auditory mode appears to be related to depth* (Varèse 1959), the *primeval dimension as in Merleau-Ponty, which is the dimension by which the*

KB is embodied. Visual space is unseparable from our lifeworld, no less than being the space in which we practice our measurements, and further enact our lifeworlds. Yet, phenomenae which we attribute to space-time as the container of the physical realm, say time dilation and space contraction, as in Special Relativity, have a correlated perceptual phenomenology taking place in the visual space of our lifeworld, in which subjective time has a fractal geometry, argued in terms of an “inner-representation” in (Vrobel 2011) related to the ontology of language as being pure externality, which instead we associate to the hypercontextualization of the HKB, to be introduced below.¹

Therefore, there is no “pure objective” cognition of an object (nor of a process); furthermore, the ABL does not sustain the ontology of visual (nor the auditory) perception due to the plurality of geometrical *superposed* representations in visual space: Indeed, *visual perception and cognition depend on contextual interpretations by the subject*, which we note that they are *already incorporated in the KB*. Furthermore, they depend on cultural and theoretical constructs, to some extent (Berlin and Kay 1969), so that rather than the KB, a *HKB is the case as the latter integrates the body with the Socius*, as we shall discuss below. Thus, the classical Cartesian formula as expressed by object-in-space-before-subject is invalid, and furthermore *perception is not secondary to cognition*: the subject is a full-body participant in the construction of his visual (and aural, as we shall see) model.

Rosen elaborated his KB phenomenology departing from the works of Merleau-Ponty and Heidegger, presenting a theory of space and time which is ultimately related to the process of individuation of the subject (Rosen 2004b). In Merleau-Ponty we find a critique of the classical formula object-before-subject-in-space, by which all points are exterior one to the other. The lifeworld is characterized instead by the transpermeation of objects, by their mutual interpenetration, inexistent in Einstein’s theory if not by light (which as we already said is not an object), by the reciprocal insertion and intertwining of one in the other (Merleau-Ponty 1968, p. 138). The key point is that if objects are related by mutual containment, no separate container is required to mediate their relations, as would have been to be the case with externally related objects. They do not interpenetrate and the interactions are through forces, which in Einstein’s General Relativity forces are substituted by the curvature of the geometry, which was introduced to the effect of keeping the Cartesian formula object-in-space-before-subject, but now on the curved signature of objectivity. Rosen conceives the world as a living object in which reality is a joint construction of the dialectical relation of object with subject; in the lifeworld space and time are not mere containers but the essential core of this relation. It is important to mention that to Merleau-Ponty, the Cartesian formula is one of the absolute positivity of space: it is the absolute explicit openness instead of the Ouroborical dynamical self-reentrance, the sheer positive extension that constitutes the field of

¹ Vrobel introduces the KB, to neglect it subsequently, choosing instead the “inner representation” (Vrobel 2011). The hypercontextualization we are phenomenologically unveiling, is not exclusive of a being with a central nervous system. Recent evidence demonstrates that plants are able not only to perceive and adaptively respond to external information but also to *anticipate* forthcoming hazards and stresses; R Karban, Plant behaviour and communication, Ecology Letters, (2008) 11: 727.

strictly external relations wherein unambiguous measurements can be made, to which Einstein provided the rules for establishing this positive character, which he called an objective theory of realism, obliterating self-reference, as already argued.

In Merleau-Ponty, depth is the primordial dimension, a protodimension from which all Cartesian dimensions appear which are furthermore idealizations of it, as argued by Steven Rosen (Rosen 2004a). *Depth is a self-containing dimension*, not merely a container for objects separated from it, and this is embodied in the KB of Fig. 5. This *bestows on the object and the subject properties common to both, as a fusion which constitutes them solidarily; alike the case of the self-action of language and its conveyor*; as discussed already. Thus, *being the case that the subject qua object is extended, it necessarily shares this property with objects*, which can only be pointlike if we attribute to points not the idealized structure we usually prescribe to them (a prevailing take in mathematics and physics), but an extended structure, lest we should need to abandon altogether the concept of a pointlike structure, which is the unextended projection of the *res cogitans* of the subject, and thus a purely idealized structure. Actually, it is a contrivance witnessed by experimental physicists in the bubble chambers of particle accelerators as is the case of the neutrino which appears with a distinctive Möbius Band form (JPARC). The torsion self-referential geometry, based on the extended (i.e. non-pointlike) quantum photon, produces the fusion. With respect to time, in Heidegger we find the notion of time-space or “true time”. For Heidegger, time is not pointlike but rather extended nonlinearly, as a relation between past (which denied to us by the linear-time-present is felt as memory), present (which in physiology is quantized as an interval of 50 ms, and thus in the lifeworld time cannot be purely continuous but structured as in biological systems as we shall discuss below) and future which it is withhold from us (Heidegger 1962), yet is active as in Libet’s experiments (Libet et al. 1983). Time extends nonlinearly and the three states of time are interwoven. Furthermore, for Heidegger, time is the protodimension and thus identified with the Merleau-Ponty dimension of depth (Merleau Ponty 1962); it is the source for space (Heidegger 1962, Rosen 2004a). The nonlinear form of time is to Heidegger, the precondition for space, and this was found to be the case for embryological development, of the periodic table of Mendeleev, and the appearance of space from the depth produced by two intertwined KBs, that also generate the double helix of the standard model of genomics (Rapoport 2011b, c). Mathematician-polymath Charles Musès claimed the existence of chronotologies, through time acting as an operator (Musès 1984) while Heidegger’s operator-time-space (Heidegger 1962) appears to be the universal case, blending with Musès chronotology through the KB, the topology of the Myth of Eternal Return, thought, cognition, as well as of the human organism as an unseparable lifeworld (Rapoport 2011b, c, 2012). It is the topology of the photon particle (Rapoport 2009) and of the neutrino (JParc).

Returning to the *transpermeation of objects in space*, which the Cartesian notion of space fails to address, is essentially the *case of the perception of music*. As much as there is a visual space with KB twists, there is an aural space of musical tones, which is nonlinear, as is the generic case of language, as previously argued. The listener, and more concretely of music, is an interpreter alike the subject in visual space, yet one which fuses with the music and his own interpretation, so it is the

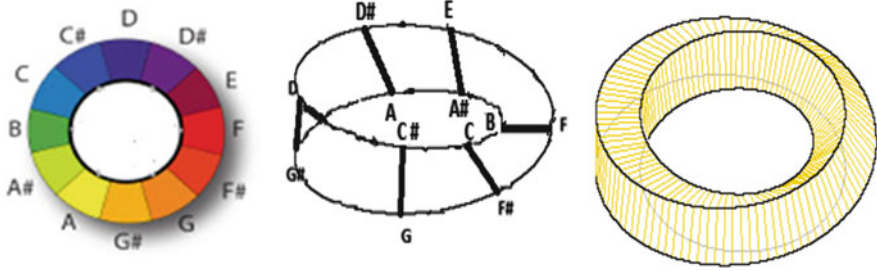


Fig. 9 The Klein Bottle and Moebius Strip of music perception. *Left:* the octave. *Centre:* the representation on the Moebius Band; by joining the sections identified with the lines, we get the Klein Bottle of the tritone perception. *Right:* We draw the unique path as given by the 2:1 octave represented on the Moebius Band

domain of the HKB. In contrast with visual space which is “out there”, the omnidirectional nature of the auditory field places the listener still more firmly in space: auditory space is all around – and even inside -the listener (depth is thus crucial to language), and the body is much more a participant in space. The vagueness of visual space is qualitatively enhanced in the aural lifeworld; we turn our bodies to sounds, attempting to identify and contextualize them; our bodies can even convulse. If visions invite our examination and thus to support the notion of detachments, sounds may be lived with the urgency and amazement of the domain of Otherness, yet not quite alien as the experience of music shows; as the ancient Greeks assisting to the tragedies, the chorus and the music, pregnant women could be induced to delivery. Thus, whereas visual space can give us the illusion of detachment, for reasons not to be examined here, aural space is a lifeworld of embodiment that cannot be denied. This non-linear structure of aural space was empirically verified by psychologist Roger Shepard (1978), which he further associated with the double helix, as in the standard model of DNA, and became a point of departure in studies in experimental psychology and music. The double helix of the genetic code is ultimately associated to a more fundamental KBL generation of the genetic code (Rapoport 2011c), rather than a double helix and more akin to the single helix of aural space proposed early in 1855 by M. Drobitsch. It is currently accepted that pitch perception, the subjective time-frequency sound perception by which a listener assigns musical tones to relative positions on a musical scale based primarily on the frequency of the vibration, requires an aural space which has been torsioned, by introducing a twist of 180° (Merrick 2011), as is the case of the identification of opposite sides with opposite directions of a rectangle to produce the Moebius Band.

We consider Fig. 9: In the lhs we represent the octave placed on a circle with its 12 pitches, in which the centre has been eliminated, with antipodal (opposite) points identified along the imaginary centre as in (Shepard 1978, Deutsch 1992); it has been removed since otherwise all pitches would perceptually be a single pitch and colour. The lhs is the disk-type real projective plane, represented as disk without a centre. The colours represent the synesthetic nature of perception in which the pitches are each associated with a colour according to the frequency (Merrick

2011), which are further related to the chromatic changes of Earth's vegetation, a seasonal phase shift in organic chemistry along the circumsolar yearly rotation thought as an octave; this harmonics is the basis for climatology and crustal formation and dynamics. In the centre we depict without the colours the octave on the single edge of a Moebius Band (MB) in Fig. 1 above, with the opposite points joined by lines representing the tritone (half octave) perceptual identification of the lhs figure of a circular octave. This represents the fundamental 2:1 resonance: A complete rotation on the lhs circular pitch space of an octave perceptually translates into *two* complete rotations in the MB, say D-D#-E-F-F#-G-G# followed by G#-A-A#-B-C-C#-D, completing the single edge of the MB which is not the perceptual pitch space -which we map in the rhs, on a torus. The perceptual space turns to be the Klein Bottle (KB) surface, on identifying the antipodal points -depicted by lines on joining the antipodal pitches on the edge of the MB as perceptual identities; the KB thus arises as the identification of the equally oriented sides of Fig. 1b, since already the identification of opposite orientations of the other two sides in Fig. 1b produce the MB. These lines represent the perceptual identification of the tritone (half-octave). Therefore, perceptual space -according to the Tritone Paradox-is a Klein Bottle surface, which has not been acknowledged before. *Therefore, the 2:1 resonance inherent to the MB in which a complete 360° circular turn on the tonal-chromatic representation of the left hand side figure, is translated into two complete turns in the MB and KB surfaces, a 720° rotation which is the basis for Relativistic Quantum Mechanics in terms of spinor fields and the double covering group of the Lorentz symmetry group basic to physics.* The 4π rotation is pervasive to vortical structures in Nature, as an eternal re-entrance, embodied by the Myth of Eternal Return. In particular it shows up in the neutron's precession around its axis when acted upon by magnetic fields (Fischer et al. 2000). The 2:1 resonance with its musical halving of the octave's frequency range, is fundamental to astronomical temporal cycles and to geological time. In the Solar system, it produces the crustal configurations of Earth: it is the phenomenological core of the precession of the equinoxes and the Analemma, the MB-KB produced by the circumsolar yearly revolution of Earth around the Sun - see Fig. 6c above-, with the appearance of the signature of the Sun projected on Earth generating the diverse alphabets, the Platonic solids, the hypercube, etc. (Purcell 2006). On the right hand side figure we show the embedding of the MB in a torus (which we have flattened for the purpose of visibility), by drawing the 2:1 resonance; the torus is wrongly conceived to be the topology of Self-reference (Young 1972, 1976) and of bilateral symmetry bodyplans (Jockusch and Dress 2003; Gordon 1999), say of humans.

To resume the gist of the phenomenon: (1) "Subjects interpret circularity", i.e. the reentrance of pitch space on itself, "in the frequency doubling at the octaves" this is the fundamental 2:1 resonance -which we shall further relate with the pattern formation of Earth's crust and the Myth of Eternal Return, and (2) "Subjects interpret tones in an interval having a tendency or tension to move up or down on whether it is less than or greater than a half octave or tritone" (Merrick 2011, p. 39 and p. 40). This is the so-called Tritone Paradox (Shepard 1978; Deutsch 1992), "which indicates that we perceive pitch intervals as ascending when in an interval between 0°

and 180° , and descending when in an interval between 180° and 360° , the 180° being the torsion twist that produces the Moebius Band, as in the Figure above. This is the case for the perception of two pitches presented either sequentially or simultaneously (Deutsch 1992). *Topologically, this means that the interpretation of pitch as ascending or descending, for an octave, can be identified with the Moebius Band, in one local side we interpret as ascending, in the other local side, as descending, alike the case of chemical enantiomers*, presented in (Rapoport 2011c); furthermore, the perceptual identification of opposites elements of the octave, actually yields a Klein Bottle, as explained in the commentaries following Fig. 9. Already, musicologist Dimitri Tymoczko proposed through complex mathematical argumentation, that ordered tones lie in a surface, the Moebius Band (Tymoczko 2011), yet stopped short of providing a connection with the physiology of hearing. The connection is that *aural perception (not necessarily restricted to music conceived physically and synaesthetically as somatosensory tactile pressure on the eardrum), as is the case of the sensorium's somatosensory mapping of the body's periphery in the cortex, as a unity of perception and action codification, has the topology of the KB (Werner 1968; Rapoport 2011e, 2014), while anatomically, the outer ear has the topology of the Moebius Band (which is built-in in the KB) and the cochlea has the shape of a Golden Number spiral, the generic architecture for harmonics. Φ and the Golden Spiral appears to be a teleo-logical structuration through harmonics: any disturbance is assimilated by the Fibonacci sequence to yield the Golden Number structural teleo-logic; we shall argue below that this is a general principle also proposed by Merrick. This brings back Harmonics together with the KB topologies as a scientific principle for the philosophy of Nature, as already stressed by Plato in *Timaeus*, which is radically distinct from the analytical philosophy of Frege, Wittgenstein, Russell and others, claimed to be anchored to science; indeed the sciences based on dualism, as already discussed. It far exceeds the customary Fourier (or still wavelets) harmonic decomposition of functions and specifically signals, regularly practiced by scientists and engineers, which in the case of perception is anchored in the Klein Bottle, a well known fact to neurologists (Swindale 1996; Tanaka 1995, 1997) and image recognition processing (Ghrist 2008).*

Aural perception is triggered at the ears as vibrations of hair cells so sensitive that only Brownian motion roar may saturate them, and as pressure differences produced by spherical waves reaching the ear. Alike a drum, the eardrum is fundamentally elastic, and thus the pressure is transformed as elastic oscillations, whose singularities are identical to the singularities of electromagnetic fields, i.e. photons, as noted with respect to cell biology in (Rapoport 2011b, c). Thus, it is no surprise that like visual sensorial input, the aural lifeworld is perceived alike spatial perception, since the singularities, either elastic or quantum, as differences producing differences, are the same in both aural and visual spaces. These elastic vibrations couple to the vibrations of the sphenoid bone which connects with the auditory system, whose signature invites its designation as the Wings of the Body's head, and whose differences in shape due to elastic loading, have been linked with evolutionary traits as the change of quadrupede to biped locomotion of present humans. Thus, the twist of aural space is anatomical (the ear and the clochea's Golden spiral shape) cognitive/perceptual,

and still physiological and anatomical, since the topographic map of the sensorium transcends the final end result as a neurological representation at the brain, but is the very nature of the body, as a bauplan turning inside-out and outside-in, as we shall argue further below. As we said already, this topographic map of the sensorium has the topology of the KB, and is the very embodiment of the unity of action and perception (Rapoport 2014). Richard Merrick proposed in his mathematical theory of music and its cognition/perception, that the tones in aural space are produced by a standing wave (Merrick 2011). *The Periodic Table of Elements of Chemistry of Mendeleev, which following its inception was claimed to be related to harmonics, has been proved to be related to Golden Mean spiral dispositions of the natural numbers (representing atomic numbers) which can be mapped, to a KB topology for the atomic (and their stable isotopes) elements of the Periodic Table (Boeyens).* Furthermore, this topology implies a unification – rather than the duality purported to be a fundamental principle for Physics-of atoms of matter and anti-matter as lying in either side of the MB or the KB, which can be mutually inter-transformed, alike the unification of pitch as ascending or descending, in the same form. Any perturbation to an atom producing radioactive decay returns to the stable Φ structuration on the KB of the Periodic Table. Furthermore, the *atoms and stable isotopes can be generated from a sinusoidal standing wave, as in Merrick's theory of music.* Therefore, the torsioned/twisted geometry of harmonics and the Golden Mean, Φ , lie at the very basis of bodyplans (as shown by Leonardo da Vinci in his *Man of Vitruvius*), the musical, perceptual and physical/chemical world, and further to the genetic code (Rapoport 2011c), the Matrix Logic derived from the KBL (Rapoport 2011a), and the natural numbers (Johansen 2010). The latter number system turn out to be generated *in toto* by standing waves, at least already mathematically proved in the case of the Periodic Table and music; notably, the stratigraphic Moebius Band formations of geology, are produced by the harmonics of the Sun, Moon, Earth and other planets interactions (Overton 2012), and structures crystalize/sediment with respect to the teleo-logical action of Φ .

The essential role of standing waves is here evidenced. They provide for the generation, of structures and processes, while the Fibonacci sequence provides the meta-algorithm for assimilation of disturbances, whatever their domain may be. Indeed, already the photon which is a standing wave transaction between emitter and receptor of electromagnetic waves a self-referential cycle of action and “perception, which does not require, in principle, a subject, manifesting as a singularity of the wave, biological, musical, geological, etc. Yet in the present phenomenology, they appear as time waves from which the physical (in the ample sense) world comes to be organic (in the sense of holeness), unseparably from the KB, as the logophysics sustaining this organicity. In both the aural space and the Mendeleev table, the KB embodies the organicity (in the sense of holonomy) of aural and atomic/chemical material space and particularly of massless particles (photon and neutrino), while Φ appears as the asymptotics teleo-logical result, of the most fundamental meta-algorithm claimed by (Johansen 2010).

The Fibonacci sequence as algorithm, embodies the *res extensa mensurable* relations, of the unfolding fusion of *res cogitans* with *res extensa*, to reach for stable manifestations; this teleo-logical process is reached by interaction with the environment,

so it is an issue of contextualization, embodied by the KBL. Thus, it is universal, applying to all domains, whether biological, cognitive, economical, physical, in the natural numbers (Johansen 2010), *music, astro/geo-logical (through the Croll-Milankovitch cycles and the Moebius Bands stratigraphy, to be later discussed), astronomical (the distribution of planets in the Solar System), and chemical/cosmological, as related to the KB topology of Mendeleev Table* (Boeyens 2005, 2010). In the latter case, we see that the conformation of periodicity in a graph with atomic number N as independent variable and the ratio of number of neutrons to the number of protons as dependent variable, where the periodicity of the table appears when the latter ratio converges to $1/\Phi$ following the Fibonacci sequence from which a ratio equal to 1 can be extrapolated. The latter value corresponds to the formation of more complex atoms starting from hydrogen, by the addition of α -particles, under very extreme pressures, say in the interior of a star, with a notable structure, which amounts to the *turning inside-out of the electron orbital ordering*, which later, in less extreme pressure conditions, turn to their usual electronic configuration proposed early in Quantum Mechanics, while the high-pressure conditions produce a neutron which itself has a Klein Bottle topology, in the framework of the theory of Hadronic Mechanics which supersedes Quantum Mechanics in incorporating the environment (Johansen 2006). A figurative representation of this would be that a spherical plasma from which the Solar system was thought to have been born, would have turned inside-out to constitute the planets which were further ordered into their present orbits following the Golden mean relations through the recurrence of the Fibonacci sequence, while the Sun retracted to become the center of the Solar System. So, on the one hand we have that the naissance of atoms from hydrogen atoms, the latter being the building blocks of the atoms in the periodic table, by inversion of their electronic orbital-like configurations on reaching for their stable organization achieved by fusion of hydrogen atoms. This is similar to the case of aural perception in which the sequence of tones perception is inverted in aural space in its KB topology. *So the dual logic is not the logic of the evolutionary formation of the material world, but rather a logic in which inside and outside are fused, the KBL.* We shall later find that the turning-inside-out of an ovum, is also the logophysics by which a fertilized egg unfolds to become an embryo. Furthermore, in the unfolding of the periodic structure of the material atomic/chemical world, basic also to the biological realm, the Fibonacci sequence acts as the generative meta-cognitive meta-algorithm which constrains standing waves, by dampening. As we already discussed in perturbation of atoms, this self-referential sequence produces their radioactive decay to their stable harmonic configurations. This meta-algorithm drives the Plenum to irreducible singularities; in the case of the natural numbers to evidence the prime numbers (Johansen 2010).

The relation between Φ , proportions of bodyplans of animals, the genetic code and music was elaborated in (Petoukhov and He 2011). But still more important than Φ 's guidance of body development to the proportions of lengths of bones (musical pitches, atomic weights, etc.) is the notion that it might be more fundamentally related to the gaps between them (more generically, of singularities) as the result of the contextualization with the environment. Already the photon as the primeval domain of articulation of *res extensa* and *res cogitans*, generates the Fibonacci sequence

(Rapoport 2011d). *In other words, Φ may be related to the domain of articulation of res cogitans and res extensa, as a teleo-logical feedback guide directing through recurrence of the Fibonacci meta-algorithm the unfoldment of the process towards stability and holonomic coherence, of music and language, of the material world as appears to be the case of the Periodic Table) and the freedom to move, create and recreate. This is also already the case of the Matrix Logic derived from the KBL which fuses res extensa and res cogitans, in which the Golden Mean is associated to OR, the logical disjunction operator. This conception of the role of harmonics in the case of the gaps of bones, is related to the total null torsion of bodyplans, postulated in (Rapoport 2014), as implicit in the work in the surmountal of the Cartesian Cut and human gait (Nevin 2001).*

Logophysics and the Problem of What Is Life

This section will deal with the logophysical (fusion of physics and topo-logic) ontopeiosis of both the animate and inanimate worlds, the former being associated to Life, usually conceived to be a separate distinctive realm. This division of animate and inanimate is based on the designative value of the ABL, and also linked to an anthropic differentiation, since for the basis of this paradigm, lies an extrapolation of what is considered by humans to be animate and by logical negation, the inanimate real is defined, or conversely. This characterization already presumes the ABL and its ontology (recall, a system of logic is a formalization of an ontology, and an actually embodied one as is the case of KBL), in which one presupposes a realm of discourse, and the complement of this realm is thus established by default. Thus, *the relation between Life and Non-life is based on the action of the negation operator of the ABL, which ignores contextuality*, and thus cannot find nowhere its origin, in this dualistic setting.

A dualistic interpretation of the negation operator can be given by identifying this operator with the primeval distinction or boundary that defines a system (say, a body's skin, a cell's membrane, a planet's or a star's surface) as in (Spencer-Brown 1969). For Spencer-Brown, "... a universe comes into being when a space is severed or taken apart. The skin of a living organism cuts off an outside from an inside. So does the circumference of a circle in a plane. By tracing the way we represent such a severance, we can begin to reconstruct, with an accuracy and coverage that appears almost uncanny, the basic forms underlying linguistics, mathematical, physical and biological science, and can begin to see how the familiar laws of our own experience follow inexorably from the original act of severance." The severance manifests through a distinction (either ideative or concrete), embodied in a sign of distinction with two elementary rules of self-action, that generate a calculus of forms. This calculus, in its essential abstraction, is universal, since it applies to the operation of any system defined by a distinction, even if ideative. The embodiment of the distinction as a sign (intimated by Wittgenstein in a 1938 seminar at Cambridge – personal communication of Spencer-Brown to this author)

essential to its constitution in and through self-reference, indicates the semiotic character of the primeval distinction. The algebra of forms generated by this distinction and the elementary two rules attached to it, is complete, and thus the undecidability Gödel type of problem is, in principle, surmounted. If we keep the operation of the forms to be generated on the plane, so that forms do not re-enter on themselves, then the ABL is the ontology for this calculus of forms and indeed the distinction/boundary is the sign for the negation operator of dualism. But then, the *fusion* of object-and-subject in the sign of distinction, intuited by Spencer-Brown, which for its representation he further introduced the re-entrance of the distinction on itself through imaginary logical values further associated with paradoxical states, which we identified as the KBL, cannot be established in terms of the ABL. It excludes subjectivity altogether.

Thus, as already argued, *signification and semiosis can not have its ontological locus in the ABL, but in the logic that yields this fusion, the KBL*; this has been overlooked by Lacan's critic Wilden (Wilden 1980) and other semiologists (Hoffmayer 1996), that purport that signification is the case in the dualistic interpretation of the distinction/boundary. Thus, the *onto-epistemology of all systems defined by a boundary, in particular biological systems, is the logic of re-entrances of the systems, subverting the boundary by imaginary motions*, associated to logical imaginary values (i.e. given by the square root of minus 1), which in the KBL are the self-penetration states, Outside-Inside and Inside-Outside, as in Fig. 5 above. They correspond to logophysical time waves (Kauffman 1987; Rapoport 2011a), the re-entrance of a form on itself, the dynamics of holonomy, the fusion of context and content which signification requires, a contextualization that the ABL obliterates since the negation operator can not embody, as is the case of the dualistic definition of Life as the complement of the inanimate.

Therefore, signification and semiosis which can not be achieved in the ABL, is embodied in the KBL, and *thus Life can be introduced yet unseparable of the inanimate realm* (Rapoport 2011c, d). This is also the case of consciousness.

Therefore, the approach to the problem of the Being of Life and consciousness through the dualistic ABL, misses precisely the very Logos of the world, which does not separate between inanimate and living realms, unless we project the KBL of wholeness to its reduced dualistic ontology in which dualism is produced by the action of this logic, not an independent ontology. Yet, we must remark once again: inanimate and animate systems have to be understood no longer as closed nor open, but re-entrant on themselves, both closed and open, both continuous and discontinuous. This is the logophysics of the KBL; it admits no absolute separation between *Creatura* (Life) and *Pleroma* (inanimate), but a continuity between them and still a specification that we shall present below. Contextualization is always the case, for both *Creatura* and *Pleroma*, a lifeworld unbeknownst to us (Bateson 1973, 1988). Indeed, whatever the choice of polarities is, animate/inanimate, living/non-living, they are rendered as separate antithetical categories by the principle of non-contradiction, thus producing a categorical confusion of categories, between polarities and opposites. The negation operator of dual logic only eliminates what is not, but cannot affirm what there is. We remark again, that there is an

anthropomorphization acting in stating this opposition, yet further this introduces an element of subjectivity, even of cultural and ideological background, which the ABL background cannot account for. The onto-epistemology for this is rooted in the HyperKleinBottle Logic (HKBL) as in Fig. 8 above, to which we shall return.

Instead of dualism, there is a continuity between the inanimate and the living realms. The attributes that biology ascribe to living systems, namely self-organization by entropy control, turning positive to negative entropy by metabolism (not necessarily linked to DNA control), self-determination, reproduction, self-repair, growth – an in particular in preferred directions, a primer determinant of a specific pattern formation, fracture along preferred planes – a process which is at the basis of reproduction, memory, adaptation to the environment (which we recall in the KBL that there is a continuous transformation of a system into its environment by which we have a turning inside out and the converse), etc. already point out to *self-reference as the ontological category at stake, rather than living/non-living*. These very properties are also encountered in self-referential chain-like, Moebius and KB topologies of organic molecules (already benzene is cyclical) (Herges 2006; Rapoport 2011d) and even identified in inorganic chemistry; already benzene is cyclical) and physical systems as well, and basically in crystals (say viruses, or still, the Earth's mineral crust and also its nucleus), and most especially in water crystals.² Water is crucial to what is deemed to be a lifeform on Earth. It is known that the water in the cell (need not be a living cell, a lipid bilayer membrane containing a gel will do), is very highly structured, *This ordered water, forms conglomerates of positive and negative electric charges, in violation of the dual tenant that likes expell likes, establishing a form of premetabolism of the cell* (Pollack 2001). No DNA is necessary for this to happen. Instead, the phenomenology that creates this violation of the ABL are related to the quantum fluctuations of a self-referential light torsion geometry of the cell, crucial to the formation of the cell's quantum tensegrity (we can think of a spiderweb made of light) structure which is basic to its integrated physiology and its extension to the environment and the body at large (Rapoport 2011b, c, d, 2013, 2014). It is associated to a non-dual logo-physical principle in which physics is unseparable of a *paradoxical* logic, the KBL, and is crucial to the integration of the cell with the outer world, providing for the anatomical and physiological integration of the living system as a whole with a myriad of cells, tissues, organs, etc., to be discussed below.

Viruses are crystals, as well as the most important cellular organelles, such as ribosomes, nucleosomes, chromosomes and thylakoid membranes of chloroplasts. Biocrystals consist of three-dimensional arrays of calcium, silicon, magnetic crystals, or other elements, alone or in combinations. It has been empirically shown that living organisms are using the same chemical processes used in the inorganic world to build their own crystals during the initial stages, and they do so by following the

²The bottomline is that the cell is a liquid crystal organized as a tensegrity structure by a quantum-like-light geometry, which extends to its environment, the extracellular matrix, providing for the unification of the cell to the body at large. The membrane rather being a barrier to be surmounted by holes and mechanical pumps that assure the flow across it of the necessary elements, it has locally the form of the Moebius Band or still the Klein Bottle, integrating the cytoskeleton with the extracellular matrix into the living matrix (Rapoport 2012).

same atomic principles which lead to the crystallization of calcium carbonate and phosphate in a Petri dish. Lima de Faria in his theory of autoevolution without Darwinian selection, observed that it is only *in the later stage of development that the cell uses the molecular messages* from the nuclei to transform the biocrystals into novel configurations (Lima de Faria 1988). Molecular biologists Inoué and Okazaki, concluded that “Biocrystals dramatize the interplay between inanimate molecular forces, which tend toward a minimum-energy configuration, and the organizational capacity of living cells. Life of necessity follows inanimate principles, but instead of doing so by brute force it seems to channel the flow of energy, guiding the arrangements of matter into increasingly complex and thermodynamically improbable forms” (Inoué and Okazaki 1977). Furthermore, to Lima de Faria, the main types of plant and animal patterns are already present in minerals, and thus no Darwinian selection can be attributed to their formation and modification to environmental signals. Thus, physical/chemical symmetries lie at the foundation of the patterns of Life. Furthermore, it is the regularities of the chemical elements, as embodied by the Mendeleev table of periodic elements that are crucial to these processes, and more fundamentally to its KB topology, as remarked in (Rapoport 2011c), *that lie at the basis of the physical/chemistry of living structures.*

Under the influence of the all-in-DNA paradigm, contemporary biologists at large when they qualify “living”, they are thinking in metabolism and *hereditary* replication, which according to J. von Neumann, logophysically they are two *separate things* which in the current biomolecular paradigm for biology, the latter has the upper hand (Dyson 2004). Dyson claims the Dual-Origin Life Hypothesis, namely that Life could have started either from proteins (metabolic evolution) *or* from nucleic acids (DNA based, parasitic evolution). DNA-free oleic acids droplets in aqueous media display a primitive form of metabolism, goal-directed behaviour, and even, problem solving capabilities (Hanczyc et al. 2007); more recently life-like cells made of metals have been produced (Cooper et al. 2011). Dyson’s hypothesis is justified in terms of the hardware (protein)-software (nucleic acid) dualism, which in the present conception, is not the case, operators and operands are integrated in the Matrix Logic representation of the KBL (Rapoport 2011a, d; Stern 1992, 2000).³

Yet, any metabolic system is autopoietic, in the sense of Varela and Maturana, i.e. “... capable of self-maintenance owing to a process of components self-generation from *within* This generalizes the definition of life. Systems involving RNA-DNA coding (as in *actual* cells) are no longer the only possible living entities. The important notion is that the activity leading to life is a process from within, i.e. dictated by the internal system’s organization.” (Bitbol and Luisi 2004). Thus, the theory of autopoietic system proposes a definition of Life, yet, once again, we remark it is defined by a dualistic logophysics, which divides the system and its environment, Inside and Outside, further chooses the “inner-representation”. Thus, it then has to account for its integration with Outside, which is established, by a physicalist hypothesis, namely by assuming a semipermeable membrane, an assumption that attempts to surmount the dualism by suggesting a mechanism to do so. Yet in this take of the enaction of autopoietic systems, *homeostatic metabolism and cognition are identified* (Bitbol and Luisi 2004). Thus, the enaction in the

theory of autopoietic systems, operates as a negation operator of the environment, which as discussed before, the negation is tantamount to obliterate signification and contextualization, and thus the claim of cognition, in the ABL ontology, is left wanting. In contrast, the ontopoiesis of the KBL with the reentrance of a system on itself, surmounts the need for a mechanics for an integration either in a passive or an active manner, which thus projects the modes of self-referential action to dual worlds, the Inside and the Outside. This operation is pervasive to both Philosophy (as in Kant), and the sciences. We find here an occasion to retake Popper's comment: The lack of an ontology for integration, i.e. of the KB logic or still its hyperextension, while it does not disallow for bold intuitions to deal with foundational issues, can only lead to confusion between what is claimed to be the case by intuitions which follow from ad-hoc assumptions, and what the ontology can actually account for. Glossing on the issues without this holonomic ontology, while it may give the impression that an onto-epistemology for integration has been shown to be the case, is belied by the assumption of dualism, as in the psychophysics by (Vrobel 2011), based on "inner" representations, and in the conception of language as a mere descriptor, which we already discussed.

The dualistic approach to define the inanimate and living realms presume the dual division of Exterior (E) and Interior (I) as irrevocably distinct and it is the metaphysical character of Life that bridges this division in terms of responsiveness of the systems with relation to the environment. The latter is deemed to be the Outside, an Other, in terms of which a responsiveness and contextualization is to be postulated. It is with respect to the Other, that a system is considered as living by asserting itself – by self-determination and self-organization by acting upon Otherness (so contextualization is the case), while the inanimate is acted upon by the Other, yet in a mode in which contextualization is presumed not to be the case, and thus the system is deprived of Will. As we said already, this implicitly assumes a dualistic asymmetry between the living Self and the inanimate Other, which also is apparent in the difference of the capability of contextualization (wrongly assumed to be nil in the case of the inanimate) in a remarkable contradiction with the symmetry of the negation operator in the ABL which deprives the world of subjectivity, to ex nihilo assign it to one of the elements of this symmetry, which cannot be accounted in the ABL, due to its suppression of subjectivity and of Life. This presumed asymmetry between Life and inanimate, implicitly requires a direction of causation, in which, the former realm acts on itself and on the environment by changing sign of the entropy from positive to negative, at the physical level, while the essential action to regard it as lively, is its capacity for contextualization presumed to be not the case of inanimate systems. Yet, the quantum theory of chemical reactions, surmounting hitherto lose unrelated mechanical and quantum concepts, based on David Bohm's concept of the quantum potential (Bohm and Hiley 1993), incorporates contextuality as its basic principle (Boeyens 2005, 2010). Chemical activity requires a shaping of molecules in which the environment, through quantum fluctuations, i.e. Apeiron, mold the molecules for their interaction, and the absorption and emission of light quanta (we recall, the fundamental self-referential physical agent) is a fundamental logophysical manifestation of contextualization vis-à-vis the environment. This is fundamental for

establishing the principles that will allow for molecular recognition, in particular for biochemical activity. No such thing as a contextual-free molecule nor atom exists, but in the paradigm of the chemist (or still, the physicist that ignores quantum fluctuations) that believes that chemical reactions take place as an ideally closed system, in accordance with a contextualization-free mechanics (Boeyens 2005, 2010). Thus, the quantum theory of chemical reactions, as understood by Boeyens, following Bohm's interpretation of Quantum Mechanics, which has a cybernetic self-referential ontology (Bohm and Hiley 1993; Grossing 2000), which can be formulated in terms of the self-referential spacetime torsion geometry (Rapoport 2009, 2010, 2013), is nearer to the alchemists' conception of active contextualization, than to a mechanics of bonding molecules determined independently of their environment.

Yet, this contextualization of chemical structures, is also the case of crystal minerals, in particular a planet's crust, as foreseen by de Chardin (1959). Hence, *geo-logical conformations are the consequence of a logophysics of contextualizations, rather than the proof of an inanimate geology*. It is no accident that we are struck in awe and bliss in witnessing the sceneries of Nature's signification, since an identity transparency is at the root of this experience. As noted in (Lima de Faria 1996, p. 110), "minerals contain atomic processes that allow chemical variation without changing the final pattern, and allow variation of pattern without changing molecular construction." He calls this phenomenon as "molecular mimicry", say the configurational identity of water and iodoform crystals, which is also the case of plants and animals (say, of the flower of orchid *Ophrys* and wasps which drives the latter to copulate with the former). In the latter cases, already it is an example of signification, which Darwinian evolutionary theory has made the core of intentionality of Life, yet which does not depend on DNA, but on the (selfreferential logophysics of) electronic configurations of key atoms determining the actual shape of atoms and molecules, present in proteins and other molecules (Lima de Faria 1996). This author establishes that this mimicry, a word for cognition in a higher-order sense, is a non-genetic trait that arises from the regularities of the chemical elements, which as we already signaled, is unseparable from the KB topo-logic of the Mendeelev table of periodic elements. Hence, Lima de Faria introduced the notion of *biological periodicity* (Lima de Faria 1996), in which the regularities of biological structures, in particular their symmetries and shapes, rather than being of genetic hereditary origin – also contested by epigenetics (Raff 1996), are the manifestation of this hypercontextualization in which genes and minerals co-operate (as is the case of the non-dual HKBL) – though there is what *we* would consider as an asymmetry in the direction of the contextualization, and is also the case of the creation of landscapes by the action of bacteria on minerals, as is the case of stromatolites, the older evidence of fossils on Earth, as depicted in the picture aside, formed by the action of prokaryote bacteria on mineral depositions. We recall that for those that subscribe to the theory of the living earth, it is



the prokaryotes that maintain the homeostasis of Earth, rendering the biosphere habitable for all other life, by maintaining and recycling the atomic ingredients of which proteins, the essence of life, are made, including oxygen, nitrogen and carbon. Furthermore, a modification of the composition of the atmosphere occurred. Hypercontextualization is crucial, indeed. It is central to the conformation of Earth's crust and climatology, and to paleobiology which is inseparable, in some time scales, with them; this belies Darwinian continuity (Bennett 1990).

To Lima de Faria (1996) mimicry does not appear as a genetic trait, it rather starts at the level of the physical symmetries, which are related to torsion, and carries to chemistry, to the shapes and symmetries of living systems, and further the genome which we related to the HKBL of the genome (Rapoport 2011c) and the latter's isomorphism with the symmetries of Quantum Mechanics and the self-referential syntactic foundations of Physics and in the Genome, (Hill and Rowlands 2009) which we have found to be based on the KBL although they omit semantics altogether (Rapoport 2011c).

Thus, signification is the case of chemical reactions and chemical mimetic regularities, the symmetries of shapes and properties of minerals, those of shapes of plants and animals, and still is the case of Earth's crust as a mineral, all of them as a KBL logophysics, in which the KBL coding of the genome is the same self-referential coding of Physics, and can be translated to the lifeworld of the I Ching (Schonberger 1992; Petoukhov and He 2011). We shall see that the determination of bauplans and their evolution has the same logophysics of hypercontextualization, i.e. of an interrelation of the system with a distinguished environment, a logic at least of three-ness, as is the plurally reentrant HKBL presented in Fig. 8 above.

We return to the identification of cognition and metabolism. The first form of cognition is identified with the integration of an environmental factor yet by introjection using it in the previous net of relations; this is the minimal information that establishes what we purport to be lifelike, and as we saw, the logophysics of this contextualization is embodied in the KBL. The second more developed stage of cognition, as in Piaget's accommodation, installs a new network of organization (Bitbol and Luisi 2004). An example of this, is the transition of life as metabolism in a prokaryote nucleus-free cell, by symbiotically introjecting a parasite and thus creating the organelles associated to the eukaryotic form which has given rise to all the animal and plant life we see around us (Margulis 1991; Sapp 2005). Yet, as argued before, this is also the case of landscapes and the atmospheric composition through the action of prokaryotes on minerals. Already, Dyson's Dual Hypothesis based on the evolution from the "prokaryote" to the "eukaryote", stems from a negation operator, since it is based on what the former organisms are not (they are not eukaryotic), rather than what they are, either archaea or bacteria; in fact Archea together with Eubacteria, and Eucarya are recognized as the three domains of Life, instead of the dualistic prokaryote/eukaryote tenant (Sapp 2005).

There appears to be extensive evidence to support the idea that the origin of the complexity of living systems as defined by the cell's apparatus crucial to metabolism and hereditary genomic replication, resides precisely in subverting the E & I duality membrane operator. (We should recall that a cell is fertilized, by incorporating an exterior element and making it its own, by creating a new entity.

Hence, the Eternal Cycle of Life has no relation with the ABL but is related instead to the HKBL.) Indeed, it has been proposed, and empirical evidence appears to support this claim, that the main internal structures of eukaryotic cells, did not originate within the cells, but descended from independent living creatures that invaded the prokaryote cells from outside, like carriers of an infectious disease (Margulis 1991). The invading creatures and their hosts, gradually evolved into a relationship of mutual dependence. The erstwhile disease organism became by *degrees (thus belying duality)* a chronic parasite, a symbiotic partner, and finally an indispensable part of the substance of the host, *an evolution whose logic is undistinguishable from that of metamorphosis*. Thus, the environment was introjected to define the being of the cell by transforming HKBL-wise the Other into the Self to yield a new self, a transformation by hypercontextualization from Boolean antagonism into a state of identity transparency, while the opposite directionality of causation is also the case, which thus becomes self-referential to the interrelating elements (environment and bacteria, instead of one of them), as appear for stromatolites. This mode of symbiosis, created the complexity that sustains Life as is currently conceived, in terms of a genome; notably this richness – the single most crucial instantiation in evolution which is also claimed to be the basis for the appearance of sexuality (Margulis 1991)–did not unfold as the result of Darwinian selection, but rather from hypercontextualization, in which two different entities metamorphose through a non-dual logic, and evolve to become a new entity. As we shall see below, this hypercontextualization and creation of complexity are the lifeworld of the HKB. An essential point in this, is that nor the “exterior” bacteria to become an inner parasite to the prokaryotic cell (as one could think of haemoglobin’s fagocytosis) nor the “interior” hostprokaryotic-cell have primordiality in establishing the direction of the transformation to reach identity transparency, and we can conceive *this evolutive transformation as a metamorphosis of both into a new symbiont, since this hypercontextualization has strong anticipative character* (Rapoport 2011b, c, d, 2012, 2013). Proof of this can be argued to be the case, since that there are species in which evolution and metamorphism are superposed (Lima de Faria 1996); evolution is to be understood as the dialectical relation between development and environmental contextualization (Ulanowicz 1997; Nijhout 1990), in which the HKBL of both the genome and development play a crucial role (Rapoport 2011b, c). Yet, rather than a exclusively biological trait, we have hinted that this is also the case of paleogeology and the evolution of the atmosphere.

Thus, Dyson’s Dual Hypothesis for Life can be replaced by an initially self-referential autopoietic (actually, a KBL ontopoiesis) metabolic system (prokaryotes are the most metabolically diverse of all organisms), that having achieved homeostasis with respect to the *undistinguished* environment, evolves from contextuality to hypercontextuality, by adaptation to a parasite as a *distinguished* element of the environment (so that instead of two-ness, the prokaryote and the undistinguished environment, three and four-ness is now the case: the prokaryote, the parasite having the prokaryote for its host, the nascent-to-be-eukaryote symbiont and the new undistinguished environment from which the bacteria has been substracted), transforming both itself and the parasite into a single new being, the eukaryote cell with a highly complex architecture-functionality. In this evolution from metabolism to

the genetic code, both *DNA and RNA* (Lima de Faria 1988, 1996; Barbieri) could have *coded for the canalization of the regularities and symmetries-asymmetries of the form/ function polarity* that starts already in the structure of Apeiron, to the physical and the physical/chemical realms, the cell's membrane, the cytoskeleton and the integration of the cell to its environment, all of them having a non-dual logic as well as the unfolding itself.

We should also remark that perception is an element of this interrelation; already, the cytoskeleton and the extracellular matrix are sensory systems. Yet adaptation and inter-transformation is not exclusive to the symbiosis of (bacterial) lifeforms,³ while the perceptual apparatus may be absent in one of the elements of the symbiosis, thought as a being together that generates a living together of other systems not yet manifested. Indeed, as mentioned already, prokaryotic Cyanobacteria are thought to be largely responsible for increasing the amount of oxygen in Earth's atmosphere through their continuing photosynthesis. Thus, bacteria also by oxidizing ore, modified the landscape defined by a geoastrophysical physics to be discussed below, and the atmosphere, setting the course for the appearance of higher-order complexity lifeforms.

Returning to the Dual Life Hypothesis, the genome, in turn, operates through self-determination in which the metabolic proteins agents hold a dialog with the nucleic acids in *both* directions, as proved recently by the Genome Project (Pellionisz 2008; Skipper et al. 2012), thus belying the Standard Dogma of biology, in which information goes from the nucleic acids to the proteins. Thus, the *genome operates in its relation with proteins, with the characteristic feedback of second-order cybernetics, in which controller and controlled are fused, as embodied in the KBL* (Rapoport 2011a). We recall that the KBL embodies a fusion of content and context due to the dynamical interpenetration of both (see Fig. 5 above), so that the first form of cognition of functional introjection of an undifferentiated environment is always (for both inanimate and animate) the case for a self-re-entrant system. Yet, the second form of cognition, which is about the hypercontextualization of three and four-ness, we shall argue for in terms of the HyperKleinBottle Logic, a logic of hypercontextualization; see Fig. 8 above.

Therefore, Exterior and Interior are not separate but intertransformable in the KBL logophysics. But what was denied to the inanimate realm, the capacity for a contextual being, is far from being the case; we already pointed out the case of oily droplets, chemical and geological activity; thus, in the KBL logophysics the first form of cognition, is embodied already. Furthermore, what has been deemed to be

³The so-called Standard Dogma of molecular biology claims that the information passes from the DNA to the proteins but not the other way round, making of the genome the Code of Life. One of the most surprising outcomes –to the followers of this faith-of the Genome Project, is that the rejected converse is also the case (Pellionisz 2008; Skipper et al. 2012). Thus, would we choose DNA as the source for Life in Dyson's Dual-Hypothesis, instead of metabolism/proteins, we find that the duality spelled by Dyson is not the case. Would we choose metabolism, as is the case of DNA-free protocells displaying lifelike behavior, since DNA is a code associated with quantum mechanics (Rapoport 2011c), then the idea conceived by molecular biologist Lima de Faria, that *DNA is only a canalizer for metabolism in the course of a continuity which runs from spacetime symmetries, to chemistry and the Mendeleev periodic table of the chemical elements applied to crystals* (we recall that the biological cell is a liquid crystal), gains credence (Lima de Faria 1996).

universal constants of nature and universal laws of physics, have been found to be related to contextualization. Since this involves in principle the *local* interplay of globality – the whole universe-and locality, this is also the case of hypercontextuality (the global universe, the local manifestations and the self-referential reentrance of the global in the local, and the return of local to global, as the singularity of the KB), that we pledge to be the case of living system. This phenomenology keenly resembles Spinoza's panentheism (Spinoza 1955). Thus, physical laws and physical symmetries, instead of representing a supradetermining contextualization-free invariance, they rather sustain that capacity for environmental hypercontextualization; we shall discuss this issue further below in relation to metaphors and the Anthropic Principle and in relation with a proto-form of Newton's Third Law (Rapoport 2011c, 2013). As noted in (Pattee 2001), constraints rather than physical laws play a fundamental role in biology (as is already the case of physical systems); they operate embodying holonomy (as is the case of both KBL and HKBL), which is tantamount to the self-referential torsion geometries, which we have found crucial to lifeforms (Rapoport 2011b, c). Constraints act as symbols (Pattee 2001), and particularly we can think of physical symmetries as symbolic molds, in which by evolutionary metamorphosis ontogeny produces phylogeny. Those constraints that arise from torsion folding, as a transformation from orientability to non-orientability, as in the creation of a MB and for the self-penetration of the KBL, which we shall present below, are fundamental to semiosis, as we shall see further below in bodyplans, geological and cosmological signs.

Let us retake Dyson's dual logophysics hypothesis, that Life may have appeared either as metabolism (Life started from proteins) or by symbiosis (the DNA centered origin). Under the spell of the all-in-DNA paradigm, contemporary biologists at large when they mean living, they are thinking in metabolism *and* hereditary replication, both believed to be controlled by the genome. Lately, epigenetics (Raff 1996) has shown to be important and the presumed control of development by genes is contested, as a metaphor for what is a phenomenology of hypercontextualization (Nijhout 1990). *The association of genes with causality logical implication operators that control development, rather than canalizing it as if in-formational catalyzers, is valid under the assumption of the ABL*, which by blockading a gene's expression, development is impeded; in a multi-causation phenomenology and its multivalued logic, this inference is incorrect. This empirical application of the ABL, is widespread in the sciences.

Thus, metabolic changes (which we have already identified with cognition) as to produce modifications of a species to the appearance of new ones, which the Darwinists might choose to overlook, do not require, in principle, genetic changes of the old species with regards to the new environment, say an earthly species moving to the sea (Lima de Faria 1988, 1996), and thus the appearance of a species is related to hypercontextualization which produces shape, physiological changes and semiological modifications (say, whales communicate through ultrasound and songs, which its unglutes land ancestors we know not to possess), not to hazardous action and its introjection by reaching homeostasis in the new species configuration. Thus, the determination and development of an organism's bauplan and its evolution, rather than being an unicity issue of genomic determination is, in essence, about hypercontextualization, as is the case of the HKBL.

The Role of Logic in the Sciences and the Dual Logophysics

We already argued that ABL is the formalization of an ontology in which subjectivity and Life cannot be accounted for, and thus have no locus in the world if not in a dislocated from the world imaginary. A manifestation of this arises on the conception that scientists uphold, essentially, that logic and the phenomenology studied by any particular science are separate and unrelated. Logic is concerned with the laws of thought, an instrument of epistemological discourse to argument how to face or learn about reality, either by experiment or theory, with no relation with the “world out there”; simply an issue of methodological discourse. In this conception, logic is not an element of reality and with no relation to, say physics or to biology. An example.

The living cell membrane in the usual model entertained by most biologists, is a Boolean logical gate in the sense that ions, molecules, etc., are enabled to go or not to go through it. Here, a clearcut separation of the ‘exterior world’ and the ‘interior world’ is placed as a theoretical assumption. This is the dualistic logic framework in cell biology that determines the physical modelisation of it, as we shall see next, has profound implications in the biochemical model proposed for the cell, in accordance with this mechanical model of dual complementarity (the lock and key model of biochemical *recognition*).

Of course, the cell’s physiology requires its unification with the environment through the membrane, which thus cannot longer serve as an unpenetrable barrier (we have already found this framework in the theory of autopoietic systems) but rather requires the membrane/barrier to be violated and with this to violate the Boolean dual assumption of “exterior” (or “outside”) and “interior” (“inside”); henceforth, we shall denote these states as E & I, respectively. The physics model associated to this assumption of a dual logic is the mechanical pumps models that are unseparable of the E & I logic, since they are designed to surmount the membrane’s dual character by asserting itself as the solution to the mechanical integration of cell and environment. Thus, the logic and the physical model are integrated, and the physics claimed to solve the problem of getting through this Boolean context, follows from the logic. Although most scientists are unaware of this mindset, which is quite dominant not only to biology but to the sciences at large, it actually turned to manifest as a construct for cell biology. Experiments have disproved this model and thus the ABL is invalid as an ontology for cell biology. Yet, instead of following the advocacy for Newtonian physics as the recipe for avoiding vitalism (Ling 1992), a physical model of cell biology which integrates the cell to the environment in a non-dual logic, which is fundamental to embryological development and differentiation (the generation of different tissues) as the unfolding of a logophysical principle, the Klein Bottle logic (KBL), integrating it further with biochemical recognition, was developed in (Rapoport 2011b, c).

The philosophical discussions raised in the purported framework of surmounting the Cartesian Cut (CC) in the neurosciences and the so-called *cognitive sciences* (a name for the CC and of the breaking of science, which is otherwise unbreachable from cognition!), uphold the same principle to the one applied to cell biology in the

previous paradigm. For philosopher Bennet and neuroscientist Hacker, “conceptual questions are not amenable to scientific investigation and experimentation or to scientific theoretization. For the concepts and conceptual relations in questions are *presupposed* by any such investigations and theorizing”, page 2 (Bennet and Hacker 2003b). Furthermore, “Our concern here is not with trade union demarcation limits, but with distinction between *logically* [our italics] different kinds of intellectual enquiry”. These authors purport to surmount the CC by separating ontology and epistemology, further claiming that logic is purely epistemological.

This is a clear example of how the ABL may operate to transform a non-dual onto-epistemology to a dual one, by the expedience of proposing an epistemological locus which is non-ontological, but still *rules* the ontology (by reducing it to a single locus)! As previously argued, these authors have reduced the four ontological loci to Being by keeping the ideative role of logic and conceptualization (thought as a process being the locus for them) restricted to that of a detached epistemological locus from which we can cognize the world, and ourselves. We can take stock on this by identifying one of the modes of the CC, as the separation of ontology and epistemology, as is the case of the usage of language in the dualistic ontology, exclusively descriptive. This separation is a mode all too pervasive, that permeates the sciences in the frame of the dualistic stance, and in our previous example of the mechanic cell/membrane/environment complex, it was assumed to be the organizing principle. Instead, we examined concepts both scientifically and philosophically, yet not as separate domains surmised to be unbridgeable. As for the logical distinction between conceptual and scientific issues raised for the neurosciences, this is no more but the usual positivism revamped as surmounting the CC; in this case the cut is between philosophical and scientific operations. This logical distinction by these authors is not only the trademark of the neurosciences, but the trademark (and unperceived watermark) of the broken sciences. Yet, what Popper suggested to be the case of the sciences, as a byproduct of the lack of an onto-epistemological principle, it has surfaced also to be the case of Philosophy.

Logophysics: Nonorientable Topologies and Their Geometries, Signification in Physics, Geology, Astronomy and Cosmology

Another example for logophysics, the fusion of physics and logic, originates at the foundations of the former. Indeed, Newtonian physics, actually the Third Law, claims the existence of a reaction force to an action force, to further claim that they are duals; i.e. they have the same magnitude and point in counter directions. This is the dual setting of classical physics, that carries to the whole body of Physics, in terms of a principle of equilibrium. Thus, Newtonian spacetime geometry, is considered absolute and independent of the forces, which have space for their contention, yet with no connection with space on which they merely are placed. Space-time is thus a medium for forces, which operate linearly, in contrast with vortical rotational (non-inertial) motions (unaccounted by Einstein’s Relativity

restricted to inertial motions) as is the case of torsion, which have no counterforce, and thus are called pseudoforces, despite their universality; this is another example of Popper's indication of sciences having gone amiss, with very too few physicists having any qualms with the loss. This is the Cartesian conception of space and of objects which are deemed as separate from forces; hence they turn to occupy space and thus they signify it by introducing ex-nihilo a difference which is not ontological if not associated to dualism. Forces and objects become experientable sensorially, either by direct interaction or through measurements. Thus, forces have no determining action on space, although they manifest an influence on it. Indeed, in General Relativity, massive objects in some ranges curve spacetime, yet they are extra-geometrical objects – for which Einstein postulated a *non-geometric source for the geometry*, the so-called Einstein energy-momentum tensor, which he dubbed to be “clay-like”, for its ontological incoherence and epistemic brittleness, as Popper would have it. This take on the geometry that is the core of General Relativity, is unlike the living cell which is a self-referential space construct, say, an amoeba extending pseudopodes to move and act in the environment and on itself, or more generally, the self-construction of the cell. Also, the conception of time as another space variable envisaged by Einstein, is not the case for living structures for which time is not the mere physical parameter associated to material existence and communicability through a distance. Instead, *time for living structures is processive, the very essence of their self-determination.*

Yet, on a MB, one sided, bounded by a single contour line, we need to make no such assumption of the existence of dual forces nor to further turn them to a fundamental law of physics. Instead, the physical law appears as a topological constraint produced by the twist of the MB and the ensuing symmetry, stating an equilibrium between them, while indeed the physics is determined by the global topo-logical structure. We have here -as we did previously-separated topology, the field of morphological spatial studies in mathematics, by hyphenizing topo (locus) and logic. This was done in order to emphasize that in our understanding of topology, there is another fusion which is disregarded, that of cognition through logic and through form (locus), thus topo-logic is associated with information: locus and form, as logic. This is the active field of morphing through thought, intention, which we usually ascribe to Life, yet it is general to all processes (Rapoport 2011a, b, c, d, 2013).

Indeed, a normal vector placed at one point of the surface is moved 360° to face normally the “other” side, another which is fictitious, and this second vector is identical to the first, it actually is the original vector but motioned, yet it points outwards of the surface. This is due to the one-sided non-orientable topology of the surface in question, an embodiment of a 180° torsion. We can move this vector a further 360° turn, and return to the original point, as in the Fig. 6 above.

The MB does not only appear at the very centre of the galaxy we inhabit, a sign of self-reference for us and to others, if not to the galaxy itself. Figure 6c shows the Analemma produced by the precession of spinning Earth along its elliptic orbit around the Sun in Fig. 10. By projecting the image of the Sun on Earth, say by a rod-merkhatgnomon, in its yearly elliptic orbit around the Sun, the MB appears as the signature of the precession (Fig. 6d). Also a serial year long photograph as

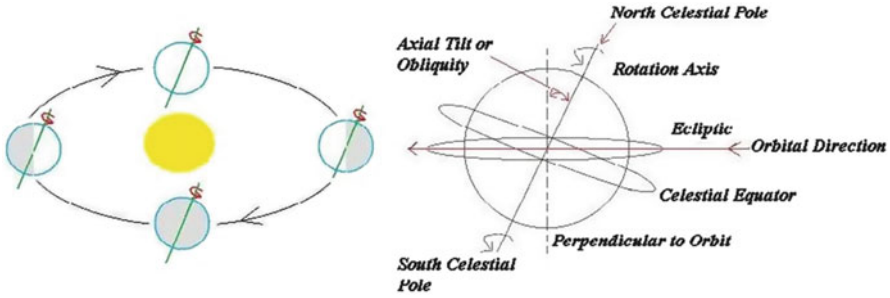


Fig. 10 In the lhs the motion of the Earth around the Sun in an elliptic orbit, combined with the precession, the cyclically variable axial angular tilt of (current value) approximately 23.5° of its axis of rotation with regards to the line that joins the North and South Poles. This is the origin for at least two cycles, Analemma and the motion of the North Celestial Pole with respect to the Polar Star. The precession of the equinoxes was central to the Mithraic Cult (Beck 2006) to the civilizations of the ancient Sabians, Israelites and Egyptians, Incas, Celts, Persians, Arabs, China and India, and to their mythopoiesis (Rapoport 2014)

depicted here in Fig. 6c, obtained by fixing the lens to a point of the sky, taken at a certain fixed hour all year round, will manifest the MB Analemma. Another way of tracing the Analemma is through a pin-hole camera or still a hole in a roof as in Rome’s Pantheon, and in the cathedral Santa María del Fiore, Florence, Italy.

Earth, with regards to the Universe, can be thought as a pointlike particle submitted to the action of the self-referential torsion geometry of the universe which couples with the rotation, producing thus a precessional motion with respect to a tilted axis of rotation with respect of the geographical poles (Rapoport and Sternberg 1984). The precession of Earth produces *many* cycles, but two of them are particularly basic: Analemma, the year long rotation of Earth around the Sun, basic to time reckoning by sundials and for the determination of the four seasons through the equinoxes and solstices, and thus to agriculture, social organization, religious life as embodied in the Myth of Eternal Return (Purcell 2006). Secondly an approximately 26,000 year long cycle, named after Plato: It is manifested by the $50''$ shift of the North Pole’s star, every 72 years, due to the precession, which establishes thus the cycle of return of the polar star, *Hamlet’s Mill* in Santillana and von Dechend’s account. According to these authors, who were unaware of the Analemma, it is also the basis for the Myth of the Eternal Return, an invariant across civilizations (de Santillana and von Dechend 1969), also basic to the Mithraic Cult (Ulansey 1991), crucial to the ancient civilizations (Rapoport 2014). These shifts are associated to the initiation of new Zodiacal ages. de Santillana and von Dechend: “It is said that it must have taken an almost modern instrumentation to detect the motion over the brief space of a century, and this is certainly correct. Nobody claims, however, that the discovery was deduced from observations during one century”. The Analemma appears in the overall design of Newgrange, Ireland, the megalithic site built circa 3500 B.C, which directs light into the passages of its structure in the winter solstice; a similar phenomenae is found in the principal gate leading to Angkor Wat, Cambodia.

Common to many civilizations, Celts, Egyptians, Sumerians and also appearing in the Torah, was the lunisolar system, and particularly, cycles of 30 and 40 days length. Devices, both of seemingly simplicity such as the Nebra Sky Disk, or of exquisite complexity as is the case of the Antikythera Mechanism (circa 100 B.C.), the first known – to us-computer system, allowed to determine the solstices and predict solar and lunar eclipses. J. Dwyer argues for the importance of the lunisolar 40 days cycles, quoting the Torah, Philo Judaeus, early Christian scholars, and the astronomy Book of Enoch, the Etyopian, that were crucial to Moses' and Jesus' probational epiphanies (Dwyer 2013).

Yet, what civilizations have reckoned and artists have reproduced, Nature, the unmatched semiologist, by the same logophysical principles, which require further specification, has engraved Earth's crust forming a landscape of *geological Analemmas* of awesome beauty, as is the case of the Paria Plateau, Vermilion National Cliffs National Monument, USA; (Analemma 2010; Rapoport 2013). We cannot but venture, that this example would have deeply impressed Teilhard de Chardin. Indeed, he could not integrate the cyclicity of Infinity in Nature with the open ended teleonomics that he advocated in his perennial work – see page 101 in (de Chardin 1959), an integration which is the case of the present onto-epistemology, yet in a joint open-closed development, as is the case of both the KBL and the HKBL, for which there is a return to the Origin. Most remarkably, these geographical stratigraphic Analemmas which appear from the interaction of Earth's crust with the electromagnetic and gravitational fields of Sun, Moon and other planets, are related to the Croll-Milankovitch cycles, which are the signature of the Hyper Klein Bottle Logic of the interrelations that stem from both the obliquity of Earth's axis of rotation and the precessional rotation, as well as the cyclical variation of Earth's eccentricity orbit. These cycles are further related to the folding of Earth's crust according to different harmonic scales, and to the establishment of *geological time with discontinuities in its crustal manifestations*, and further of ecological time (Bennett 1990), and to climatological cycles (Croll 1875) as is the case already of glaciations (Muller and Mac Donald 1997), to oceanology, to the actual formation of storms, etc. (Milankovitch 1920; House 1995) as the all-scale morphogenesis of Earth's crust and its climatology in terms of harmonics (Rapoport 2013). It is not just two cycles that are related to the Myth of the Eternal Return, but a myriad of interrelated cycles that are the substantial history of Earth and of the inanimate and living domains, as manifestations of coupled Time operators intertransforming the virtual and the real domains. This is the *astro-geo-logical design of Earth's crust and dynamics as well of its atmosphere*, rather than the notion of chaotic landscape and atmosphere and their dynamics, that imperates in the trades of these separate sciences. In fact, the turning-inside out of an embryo as the unfolding of the bauplan of a body, is also the case of Earth's crust, in which older geological strata, through rotational motions came to sit ontop of younger strata (http://homepage.smc.edu/grippo_alessandro/unc.html); thus in distinction with Newtonian time, geological time is evidently non-linear, and harmonics are associated to its establishment and still to its gaps, the unconformities ignored by Darwinian evolutionists. Alike the case of the conformation of Earth's crust, these cycles are actually embodied by organisms as defect configurations, lines

of growth patterns, as in the case of invertebrate skeletons, as first suggested by Leonardo da Vinci (Clark 2011). Hence, inasmuch harmonics appear already in the 2:1 resonance inherent to the Moebius Band and incorporated in the Analemma, their signature embodied in the Earth's crust and atmosphere, extends to the patterns of organisms; they are crucial to the human bodyplan and its physiology (Rapoport 2014). Hence we are lead to propose, again, that harmonics play a fundamental structuring role in which Φ plays a modulating teleonomic role of interfering with resonances, modulating their amplifications to yield a final form, already evidenced in the Periodic Table of Elements (Boeyens 2005, 2010), and to further propose that this is also the case of the human bauplan, as implicit in the Man of Vitruvius. It very much seems that after the movement of the Renaissance to bring them to the fore, harmonics has been cornered to music and acoustics, although implicit already in the old quantization rules of the first epoch of Quantum Mechanics, suppressing its fundamental organizative role in Nature.

In the past, civilizations were aware, although we know not how they reached for this information, unless perhaps by interpretation of places like the Paria Plateau – which would have been a formidable feat in itself, that they appeared and lived as manifestations of Time through which Space was signified; they organized their lives and lived through Time and its terms. Will was the agent of this manifestation, and the KB and HKB logophysics manifested the climatic, cosmological, astronomical, and as revealed, geological cycles as well. We shall complete this lifeworld, by showing the embryological bauplan, and its anatomy-physiology, as another manifestation of this logophysics.

The KleinBottle and the KleinBottle Logic: Foundations for Logophysics

We consider the Klein Bottle surface (KB), for which the topo-logical lawless proto-form of Newton's Third Law is also the case, as a topo-logical constraint: a normal vector pointing out in one side is driven to stand in the same point albeit in the "other" side. Now this end vector opposes the initial one, but now in what locally seems to be a second side which is not the case (Poltier 2003a, b). Globally, it is the same side, the same vector that its motion constitutes an holomovement, yet one in which the wholeness is manifested and realized by the singularity, the hole of self-penetration. This is the embodiment of the logic. It can be formed as the zipping of two Moebius (MB) surfaces with opposite twist as in the right hand side in Fig. 2. In distinction with the MB, it can be generated as the superposition of a torus identification (as in Fig. 1b) and the MB opposite orientation, which can be seen factored in the other three images below: Initiated by self-penetration completing thus a full 2π rotation, the realize the second MB identification is accomplished by a second 2π rotation and thus the KB, is completed, through a full 4π rotation. For visualizations see <http://plus.maths.org/content/os/issue26/features/mathart/Build> and <http://www.youtube.com/watch?v=TGe6m9gfUNk&feature=relatedwith4pirevolution>.)

Alternatively, we can understand the formation of the KB as first producing the 2π rotation to produce the Moebius identification, completed with the formation of the torus by self-penetration, as in:

1. <http://www.youtube.com/watch?v=E8rifKlq5hc>
2. <http://plus.maths.org/content/os/issue26/features/mathart/Build3>

The construction of the KB as presented above in Fig. 1b, as an initial identification of two sides of a rectangle by glueing two opposite sides with the same orientation and further identifying the other sides having *opposite* orientations, makes the actual construction of this figure in three dimensions impossible without the recourse of self-penetration, in distinction with the non-orientable MB which can be seen as contained in space in a Cartesian sense, and requires no such penetration, but a self-identity. This creates a topologically imperfect model in three dimensions since a hole has to be produced (which glassblowers handle using glass, i.e. a liquid crystal, which is the structure of biological cells) so that its construction already introduces singularities which through the in-formation flow produces the whole structure, so that the wholeness and holeness are in dialectical complementarity. Remarkably, this self-penetration will manifest the torsion folding embodied in the KleinBottle jointly with the singularity. This can also be seen in producing the KB from a MB: the Moebius Klein Bottle, presented below.

To avoid the self-penetration, the Cartesian mathematician spells out the contention of the KB in four dimensions as the solution to its impossible construction, unless through self-penetration. The Cartesian conception of Mathematics strives for constructs whose realizability is pushed away to a passive abstraction, a non-action, an idealistic creed for which Mathematics is the metaphor for the power of ideation of a suspended from recognition fusion of the real and ideative realms. It is by the sole fact that the KB is a mathematical entity, unattainable without the enaction of the subject, an operation absent in the ABL ontology, that the KB is claimed to be a metaphor, yet unrecognized its metaphoron, i.e. the being which is being recognized in its likeness to the KB. The suspension stems from a missing ontological locus, constituted in essence by self-reference as the self-action of Being by and through ideation and further, the reification of the ideative realm. We have identified this system already at the start of this article, in which Time and thought as image and as process, which we have already seen is the case of the KBL, are the additional loci that allows from Being and subjectivity, to close on four onto-logical loci by self-reference. Since the classical dualistic stance has obliterated from its being this system but kept an exterior Being to which positive and fractured science is attached as its depleted metaphor, it is no wonder that the Cartesian mathematician cannot identify the metaphoron for which the KB stands for. It is the four loci ontological system of Self-reference, that the broken sciences can not conceive nor embody, as witnessed also in the failed attempt to suppress Paradox in Russell's and Whitehead's Principia Mathematica.

KleinBottle Logophysics, the Development of the Embryo and the Mystery of Life

We have seen that the reification of the KB requires self-penetration and with it the singularity of the reentrance of the surface on itself, blending context and content, exterior and interior, body and idea; it is an *embodied onto-epistemology* and one of its examples is the embryo. Several models of the embryological differentiation have been proposed, both chemical and physical. The logic that is ascribed to differentiation, and to the genetic code and evolution is the ABL apparent in the ‘exterior-interior’ (E & I) dualism ascribed to biology in terms of membranes and the fact that the formation of the embryo, appears to undergo in *each* step, a differentiation which takes two possible developmental states: endoderm and ectoderm. Already the ovum, conceived as a two-sphere, is conceived as an E & I which are fixed, and in terms of which the formation of tissues will proceed repeating this logic; This contradicts the fact that pluripotent stem cells, i.e. those cells which are related to the primeval mother cell, have the factual possibility of regenerating organs and tissues, thus showing that ABL can not be the logic of embryological form and development.

Topological studies of embryological differentiation, that have epistemologically returned to the basics of morphology, have pointed out that the two-state character of the ovum’s membrane, only orientable (i.e. with a distinctive E & I) geometries are singled out (Jockusch and Dress 2003). Our notions of E & I are related to the perfect static figure of the sphere. Yet, an ideally infinitely elastic 2 sphere can be smoothly transformed through eversion (Smale’s paradox), i.e. the “outside” can be transformed into an “inside” and viceversa, through smooth (i.e. no sharp edges produced in the process) self-penetration, without producing holes nor any creases. The latter condition is not the case of the blastopore invagination in which the crease (a folding which is not about curvature, but a shearing torsion motion) is produced superposed with the invagination, showing the torsion folding of the geometry produced by shear; see (Rapoport 2011b).

Thus, through topological (i.e. continuous and invertible continuous) transformations, self-penetration -as is the case of the KB, rather than being ruled out, is indeed possible and in the case of the blastopore invagination, *torsion is the field that will develop into cleavage*, though non-orientability is not manifested in the process nor the end result. Yet, the eversion of the 2sphere is realized in terms *half-way surfaces* that mediate the eversion:untwisting two mutually interpenetrating KBs (<http://www.youtube.com/watch?v=bGiVPj2P19s&feature=related>), particularly 0:21 to 1:06, and 5:16 to 5:46, the Morin Surface, which we notice that has no holes), that mediate-partake in the process of eversion, to create orientable sections of the 2sphere. It is the superposition of the outward and inward motions that produce these intertwined KBs, after self-penetration of the caps (which undergo each one a 180° rotation, each cap in a direction contrary to the other one in the alternative eversion, in 3:30

to 4:0 <http://www.youtube.com/watch?v=x7d13SgqUXg&feature=relmfu> transformation from nonorientability to orientability); we shall see that in this eversion may reside the solution to the logophysical principle for Life and the inanimate, as well. Thus, the blastopore invagination may be related to the actually non-infinitely elastic 2-sphere-ovum eversion. Indeed, in the actual completion of the invagination, with the formation of the mouth, the development front of the shearing will indeed push the inner side of the ectoderm to face outwards by pinching the North cap (drawn at the left hand side of the sphere), as shown in the r.h.s. of the sequence in Fig. 4 above.

This turning inside out is more than an abstract mathematization of gastrulation. Indeed, the X-ray microphotography series in <http://www.brh.co.jp/en/experience/journal/39/movie01-r.html> shows an eversion of the multicellular green alga *Volvox carteri* ovum is the case (Nishii and Miller 2010), and notably the intertwining that realizes the eversion through two superposed KBs seems also to be the case; *Volvox* is currently considered the case study in embryology. It is a crucial biological example of multivaluedness: It was once described as “the first multicellular plant.” Now it is generally thought of as a colony of algae cells that have made a sort of “long-term commitment”; thus, the Socius which we shall characterize by the HKBL, is the case for *Volvox*. It reproduces both asexually and sexually and the progeny always grow into the colony. Parasites dwell inside it, so this behavior of turning inside out and its converse, is very much the being of *Volvox*, as well as the multivaluedness of its behaviour.

In the second stage of the blastopore invagination, more blastoderm cells ingress to form the primary mesenchyme and other cells further elongate along the sides of the archenterone. The final stage will produce the turning in-side-out with the formation of the mouth from the penetration of the ectoderm by the archenteron in the animal pole, we have the formation of the mesoderm by mesenchyme cells, and of the anus of the mature animal in the vegetal pole. This self-penetration by the ovum occurs through a secondary invagination. Indeed, through a surgery of the ovum, say in the case of metazoans which share with animals a bilateral symmetry, with the formation of a secondary invagination (a gut and a digestive system) which joins the original mouth of the blastopore, yet producing by this a duplication of the body that topologically is the so-called double covering of a surface, in this case, this double covering of the KB, is a two-dimensional torus. Thus while this may lead to believe, as we do, that bodies are toroidal, this is in the failure of understanding that this (orientable) torus actually embodies the duplication of a (non-orientable) KB. Indeed, by this secondary invagination, the topology turns to be that of a torus by actually the retraction initiated with the blastopore invagination pinching the ectoderm and thus E and I becoming one as occurs in the r.h.s. of Fig. 4, in a final stage which we have not depicted.

The eversion results in the double bags of the amnion and yolk sac, and the manifestation of the non-dual logic is the appearance of the mesoderm sandwiched between the ectoderm and mesoderm. The ectoderm, in contact with the amniotic sac and fluid, will form the nervous system and skin (the neural net). The endoderm, in contact with the yolk sac, will form the linings of all our circulatory tubings (veins, arteries,

capillaries, microcapillaries), along with the glands; it is the primary source for the fluid vascular net. The mesoderm in between the two, which as discussed is a manifestation of the KBL of the eversion of the fertilized egg, will form the muscles and connective tissues, as well as the blood, lymph, kidneys, most of the genital organs, and the adrenal cortex glands. Hence, the eversion is associated with the formation of three in-formation systems of the matured embryo: neural net (ectoderm), the vascular system (endoderm), the connective tissues which form a unitary net, which has been largely disregarded (Oschman 2000). All three systems contain the shape of the body as a whole: the *body of shape* (Varela and Frenk 1987). Therefore, the *KBL embodies the body's in-formation, yet this also extends to the codification of the sensorium* (Werner 1968; Rapoport 2011d, 2013; Schwartz 1977; Swindale 1996).

The importance to the unitary bauplan for the body regulation, from the cell to the whole macroscopic integration through the fibrous fascia net the connective tissue which already is weaved by the extracellular matrix, and its relation with the auto-origami folding and refolding torsion action of the embryo, is worth of further attention. It installs the initial cellular specialization within the embryo, and occurs at about two weeks' development. It installs the difference that produces the differences (Bateson 1973, 1988; Johansen 2014), by the eversion and the torsion folding: Until the initial step of the eversion, in which E & I are the only mainly manifested two states, the formation of the mesenchyme heralds the in-formation of spatial relations in the egg, which in the egg were not evidenced. So the appearance of the mesenchyme brings the manifestation of anticipation since it is imperative that the spatial arrangements, in the background of the increasing specialization, be maintained while the bauplan' motions occur, so that the ongoing complexity and growth of the embryo, is the case. Thus, the process of in-formation of the connective tissue, as well as the processes of information of the neural and vascular systems associated to the three logical states, need to unfold according to the logic that sustained the eversion in the first place, and furthermore, it needs to keep the in-formation of the shape (viz.) of the whole body, since the logic is of integration. This turns out actually to be the case: Each of the three systems contains the shape of the body. The egg is a whole, developing by this logic, and the three states (ectoderm, mesenchyme and endoderm) and the three unitary shape systems (neural, vascular and connective) unfold from it. This will be crucial to the bauplan for the embodiment of cognition, self-cognition and the anatomy-physiology that is unseparable from them. In fact, the development plan of the embryo (the embryological bauplan) is through the physical agency of torsion folding (instead of curving as in General Relativity) which goes all the way to produce the self-invagination of the exterior of the ovum which is embodied in the self-penetration as the end result of the torsion field retraction. We must remark that before the eversion is produced, three *potential* spaces are formed together in this double-bag produced by the invagination:

A: The inner space of the inner bag; B: The space produced by the holomovement of invagination, a retraction of the environment that will finally pierce through the inner space; finally we have C: The environment, the outside of the ovum, whose fate is to move together with B to achieve self-penetration by piercing through the boundary of A. Remarkably, this parallels the KB as described in Fig. 5.

Thus, before completion of the sphere-ovum eversion, the space A is paralleled by the Inside-Inside, the retracting space B coincides with the Outside-Inside, and the environment is, of course, the Outside-Outside. The latter, on completion of the eversion, by self-penetration in which space B becomes the Inside-Outside simultaneously fusing with Inside-Inside and Outside-Outside, completing the holomovement and states of 4-space-state KBL. Thus, eversion is only possible through the mediation of the environment E and the inside I of the ovum, by the spaces-states 10 & 01. We see very clearly that the physics (and other systemics, say genetic, chemical, etc., must conform too) and the logic of this process are unseparable; the logic is clearly non-dualistic. Rather than a static reflection of the dualistic stance, this motion reifies the wholeness and the Outside and Inside states which are *locally* meaningful and signified by the dynamic connection that the transitional states 10 & 01 produce. The self-construction of the cell is not independent of the construction of the cell's environment nor of the holomovement that determines them as an in-between. Thus, we have a paradigm of space which does not comply with the Cartesian take of a structure/process-contained-in-space. Rather, the cell is self-contained, and still, it is this self-determination process which is and makes the cell, and thus the environment also is self-contained. This self-contained environment is no longer a mere container, as we may think of the extracellular matrix realized through the agency of the mediation by self-penetration, by the spaces-states 10 & 01, which in the KBL, are time-waves. They correspond to imaginary (in the literal sense, as well as in the sense of being represented by the square root of minus 1) logical states, which we recall that they represent the *res cogitans*, in distinction of the real numbers representing the *res extensa*. Further, we recall that the Time operator intertransforms one domain into the other. Thus, the cell's space is a realization of/by time, in fact by time-waves (Rapoport 2011b, 2012). Therefore, the exchange of E and I as in Smale' Paradox, yet regarding the ovum as non-infinitely elastic, rather than being a purely theoretical construct is actually reified as a *non* linear eversion transformation of the ovum, actually visualized for the case of the germ cell of algae *Volvox carteri*. In other words, the infinite *res cogitans* elasticity allows the self-transparency of the intertwined KBs to actually manifest the bodyplan by creating singularities, holes, as *res extensa* embodiments.

Having concluded the eversion of the ovum, the resultant of this process is the actual buildup of the body's bilateral symmetry through the formation of the canal going from the mouth to the anus; yet, we insist, it is a doubling of a KB-morphogenetic field, not the manifestation of the dual division between E & I. So, we propose for a theoretical organizing principle, that the blastopore invagination, up to the formation of the anum-guts-mouth invagination, is the manifestation of a *virtual* (imaginary) eversion of the elastic ovum with a crease. For a physicist this should be no reason for scandal, in thinking on the vacuum and its infinite virtual photons, electrons, etc. as the source for the world: Apeiron. Merleau-Ponty, in *Eye and Mind*: "... neither the drawing nor the painting belongs to the in-itself any more than the image does. They are the inside of the outside and the outside of the inside which the duplicity

of feeling makes possible and without which we would never understand the quasi presence and imminent visibility which make up the whole problem of the imaginary”. This turning Inside-Outside into Outside-Inside mentioned by Merleau-Ponty in *Eye and Mind*, which is essential to the manifestation of the logophysics of embryological development, is also the perceptual interpretation and buildup which neuroscientists, in studying the topographic map of the sensorium, identified as the KB (Rapoport 2011d, 2013, 2014; Swindale 1996; Schwartz 1977; Werner 1968), in Fig. 5. In fact, this perceptual logical inter-transformation is the logophysics by which the double 3D, space and momentum coordinates of physics, required for positioning objects in space and still carrying measurements of dynamics, are generated (Rapoport 2011c).

Merleau-Ponty: “For the imaginary is much nearer to, and much farther away from, the actual—nearer because it is in my body as a diagram of the life of the actual, with all its pulp and carnal obverse exposed to view for the first time.”; page 4, *Eye and Mind*.

This imaginary diagram of life, is the bauplan, imagined and reified through the agency of the KB logophysics.

Returning to the issue of the crease, the imperfect (in the Cartesian sense of discontinuity, as having self-penetration holes absent in the half-way eversions) embodiment of the imaginary, as in Merleau-Ponty, is distinct to the Smale’s Paradox which assumes an ideally infinitely elastic sphere which is not the case of the ovum (Volvox is not infinitely elastic and the eversion starts with the production of a hole), while keeping it as the virtual process of differentiation, since this requires a mutual penetration of the animal and vegetal poles through the intermediate agency of KBs. We can identify in the development of the ovum to produce the mature embryo, the four loci ontological system, and in particular, the operation of thought as a process through operational time, to produce the material world of Being, manifested in the developed embryo. We have seen that this is sustained by the subversion of the deemed reflective dual categories of E & I, through the KBL operating virtually to sustain this. Thus, the ovum is an ontopoietic system, but its logic is not dual as in the theory of autopoiesis, in which the operational closure of the autopoietic system is for self-preservation vis-à-vis the environment, the Other, but by subversion of its constitutive distinction through the KBL, disregarded in the theory of autopoietic systems (Maturana and Varela 1980; Varela 1979). Rather than the “unreasonable effectiveness of Mathematics” claimed by physicist Eugene Wigner, we are presenting the lifeworld of Logos, in which the real world materializes from the imaginary world, by and through a self-referential logic of self-containment and its physical agents, which thus become embodied, both materially and operationally, the latter as physiology. In (Rapoport 2011b, c, d, 2013, 2014) was introduced the conception that this logophysics is not exclusive to biological and chemical systems, but universal, in which even the natural numbers (Johansen 2010), evolving in the locus of thought as a process, have the same lifeworld, and are constituted from the potentia of the ontological locus of thought as a process and the KBL, unfolding from it as structures in toto.

The Klein Bottle Logic, Topographic Maps of the Sensorium and Physiology, and the Problem of Design in Biology

It is important to recall that the nervous central system, which includes the brain and the spinal chord, arises through development from the *ectoderm*. Thus, what is conceived in the Cartesian Cut framed neurosciences to be the anatomical basis for thought, as the deepest *interior* world of a human being, from the understanding which considers the body in terms of the embryological development which as we saw exchanges E & I, is not related to the interior at all, nor to the exterior, per se. Rather, the brain and the central nervous system partake of the KB morphogenetic holomovement of folding towards self-re-entrance that transforms and integrates both the world and the body through the nervous system that has been interiorized by the logophysics from which the embryo develops in the first place, and the embryologic (!) unseparable to this holomovement. It is through the KB that the sensorium appears as transforming Ectoderm into Ectoderm. Thus, it should not come to be perceived as a surprise that the topographic map of the sensorium, topologically is the KB, as already noticed.

Consequently, the topographic maps of the sensorium discovered by neuroscientists, are not related to what in the Cartesian Cut is believed to be representations of the exterior world through the sensorium (having the skin as its ectodermal gestalt)-to the (ectodermal) nervous system, but rather representations that are constituted coherently with the logic of development which as we showed already, is not dualistic, exchanging the world with the interior of the body qua processes, not mere objects. *In terms of the logophysics of embryological development, this topographic map is the cognitive bauplan that is superposed with the embryological development, and in the sense of its history, stand for representations of E on E.*

Consider the eye, organ of vision; it arises from the ectoderm just like the nervous system from which the retina stems from development, as an inside-out migration. The retina having for function the reception of light through its photoreceptors, is the first station towards the nervous system. Remarkably it faces inwards (but for few species), and thus it is said that the retina is inverted; hence, it is an embodiment of torsion folding and multivalued logic that allows for connecting the “outside” and “inside” worlds, through ectodermal turning-inside; thus, embryo-logically, the retina turns to be the last station of the nervous system.

Neo-Darwinist R. Dawkins, claims that this inversion is a proof of “bad” design, if design would be the case at all (Dawkins 1986). In the present work, it is a proof of the KBL logophysics and its actualization at all stages of a bauplan, which unifies anatomy with physiology, form with function. *This is the design that both Darwinists and Creationists have failed to conceive.*

Nobel prize awardee G. Edelman’s response to *What is Life?* raised by quantum physicist Erwin Schrödinger (1967) is: “This mystery remains embedded in the problem of morphological evolution, the processes that gives animals and their organs their functional shape and that yields the most exquisite product of all, the human brain. The properties conferred by these shapes determine the phenotype,

and it is the phenotype upon which natural selection acts” (Edelman 1991). In the previous section we have departed from the ovum and traced its evolution to a differentiated embryo, already at the initial stage of the blastopore from which it will evolve, to find its origin in the logophysical principle and agency of pairs of KBs (actually a HKB; see Fig. 8 for a more complex case in which holes are the case) which through their folding and unfolding create the basis for the appearance of functional shape and still evolve towards the determination of invariant shapes in the fully developed organism, that are essential to the functional integration of the organism. This stage of in-formation of the body through unfolding of HKBs materializes as torsion-folding fields that actually embody the differentiation and organization manifesting the body’s bauplan. It is the stage in which entropy decrease of the evolving embryo with its increasing complexity is transferred to the environment/mother’s own reorganization instead of the entropy increase, which the second law of thermodynamics would claim to be the case for an environment which does not reenter the contained system as in the Matrushkas of Fig. 8a. This is a reorganization which is harbouring and sustaining the developing embryo in an interrelation which aims to their mutual expression, as entangled and separate selves, until birth and further, through heredity and the eternal Cycle of Life. Would we point out to the genome, as biologists of the molecular biology persuasion do, as the source for the inheritance and activation of the processes that we have found to be rooted in the KB logophysics, we shall find that the genome appears in a most simple way to be coded in this same logophysics. But what the all-in-DNA paradigm claims to be the case, the codification and unfolding of a three-dimensional organism by a one-dimensional linear genetic code, is far from being the case. Instead, we have an HKBL for the body and the genome, thus both 2D, and both unfolding and folding as fractal recurrent gestalts (Rapoport 2011b, c, d). We have also discovered that the evolutionary theory that is associated with both the genome, tissue and organ differentiation rooted in the KB logophysics, (as well as the existence of topographic maps of the sensorium that code for the environmental action reaching the skin that is further mapped on the brain), also points out to this logophysics as its roots, yet in a more complex logic which is the one that is at the basis of the embryo-logical unfolding, since two intertwined KBs are involved turning inside out the ovum: The logophysics for this is rooted in the HKBL, which we introduce in the next section.

It is important to bear in consideration that the auditory system, originally a bony structure derived from the development of the embryo, is derived from the mesoderm, and thus, by embodying the non-dual embryological development associated to a KB, it literally transforms the outside into the inside. Yet, in distinction to the visual system, it does so without turning inside-out, unless damage to the cochlea or intensive stress produces this eversion, embodied in the disfunctionality known as Tinnitus, suffered by Beethoven. Instead, Tinnitus appears to construct an aural percept of self-sustaining brain firings loops, as if independent of the Outside, thus suggesting that Outside has turned Inside, as *if independent* of the KB transformation of Outside and Inside and the converse (Zimmer 2010).

This suggests that physio-logical hindrances to the full topographic representation, are metaphors of the natural holonomies that are formed when due to anatomical ruptures or deformations, or still emotional perturbations, that literally produce a Cartesian cut enhancing the inner world as if dominant. In these metaphors, the full KBL is transformed by internalization to the ABL dual logic. The latter is physiologically wired to a novel anatomical/cognitive configuration that sustains the seemingly independence relative to the full natural phenomenology, in an altered lifeworld. This is also the case of the so-called phantom limb effect, in which the loss of a limb is evoked as if still present through the built-up of alternative relational bodily networks for the sensorium's representation, and in a myriad of other physio-logical-anatomical distortions, that require for returning to the full non-dual logic, a cue given by an outsider (Eyskens et al. 2014), to the effect of contextualization. In some cases, the cognitive cut can be surmounted together with the physio-logical cut; in the case of amputated limbs this is not possible, but in the mother cells of embryos, or still in full developed species as salamanders and more remarkably in the case of plants, the full being is reconstituted; we have related this reconstitution to the KBL of development (Rapoport 2011b). The fact that anticipation of the action by a new cue may appear to be effective, is that this resets a universal integrative loop (Klein bottle self-referential) prepattern, which is itself a stable *but heterarchically embodied*, whereby the breaking of integrity has produced a deformed pattern that recognizes the "interior" as *if* independent, and prevailing, instead of an integration. This habituated pattern of an "illness" while having a self-referential organization-process-selfperception gestalt, at its level in the heterarchy, acts according to the Aristotelian-Boolean logic of Interior and Exterior separated dual states.

This signal/cue from an outsider, the Other, has a semiotic intent, and for the cognitive aspects, may even reside in a *verbal trigger*, which appears not to provide the natural bauplan description, but to evoke its severed integrity and its logic. The function of this cue is to indicate the correct truth value to the cognitively/anatomically/physiologically amputated subject. In other words, to provide a non-distorted representation of the universality of the natural phenomenology.

In this issue of the Other's verbal cue, we here retrieve the issue of the externality of language assumed by purporting that it is a mere descriptor, as in Heraclitus' rendering of process, built from the cut between inner and outer representations. Instead of the externality of language, and of the claim that science is imprisoned by this externality (Matsuno and Salther 2002), we argue for a fundamental cognitive and furthermore holonomic function, both of language and science, which the broken sciences have denied themselves to allow for its surgence, due to the absence of an onto-epistemological stance to be able to do so. This holonomic function may be used to reinforce the holonomy of either the broken dual logic as a projection of the KBL, or used to the effect of the re-establishment of the full lifeworld. This occurs whenever the cut can be reconstituted functionally, on the basis that there is a natural anatomy to sustain it or an artificial one can mimmick it, as in bionics, or whenever memetic fixations can be removed. The logic of this cognitive cooperation between the Other and the fractured subject, and in particular between Nature and humankind through events of historical import, is the Hyper Klein Bottle, to be introduced below.

The HyperKlein Bottle: A Paradigm for Heterarchical Self-Referential Interrelations, Life, Cognition and the Socius

Let us return to the issue of the surmountal of the dualistic paradigm ascribed to the membrane to further elaborate a conception on biological organization and functionality. The dualistic membrane is related to the idea that the interior of cell is bulk water which requires an enclosure to contain it. Thus, water in the cell is considered to be unordered and a passive medium for the elements in terms of which the cell organizes. In the sense already mentioned of the Cartesian dualism take for space as a container, the cell's water is a container for the processes and elements in the cytoskeleton, and the membrane is necessary for containing water, and thus it cannot leak, unlike the leaking Apeiron, that alike the KB, it cannot be contained, but is self-contained (Rosen 2004b). Thus, this dualistic paradigm is identical in conception to the notion of continuous spacetime which does not leak, as in Einstein's theory, and thus it can contain other systems that act accordingly. The systemic paradigm for this is the set of Chinese boxes, or still the Russian Matrushkas; see Fig. 8a. This is the iteration of the Cartesian notion of space, each box being an object containing another box-object, and the subject qua subject, nor subjectivity are nowhere to be found, neither in manifestation nor in ideation. In this paradigm there is no place for a conception of integration other than defined by the iterated containment as the primary relation and the so-called "emergence of complexity". Thus, in this paradigm, there is no place for the cooperation, nor for synergy, nor for identity transparency, nor the symbiosis we find in Life, nor the hypercontextuality that we have repeatedly encountered in our previous phenomenological considerations.

The logic associated to the HKB (henceforth, HKBL, though the logic and the HKB are one and the same, as is the case of the KB) is richer than the KBL embodied in Fig. 8. Each member of the heterarchy has an associated 4-state logic *if* it considers all the systems it "contains" and is "contained in" as a *single* one. This is generically not the case, it is impossible to discern, in principle, for any system its final interrelations with its Inside-Inside states, nor with the Outside-Outside states. *The HKB is a logic of heterarchy missing in the KB.*

Therefore, the *HKBL appears as the actual systemics of any process*, and in particular, would we take the cell as defined by its membrane as the primeval distinction, then we would find "inwards" other self-contained systems that are essential to its functioning/organization (the tensegrity structures, the nucleus, etc.), and "outwards" we find the extracellular matrix in which is the cell is "contained" and which further relates it to an organ, the body, etc. (We notice here that our language does not have a *word* for describing this without reducing to the dualism framed by containment, although language is inherently self-referential, as already discussed.) Thus, we find here the signature of the marriage of the Macrocosmos and the Microcosmos, where plurality is the case for both, a Unity-in-and-through-Diversity. In particular, the HKBL and its multiple Outside-Inside and Inside-Outside states is a natural setting for a phenomenology of time and space foldings and unfolding, mutual and self-penetrations and their perception, and the phenomenologies

of interrelated lifeworlds. Thus, we have returned to an issue that we have found in our phenomenological considerations.

For the HKBL the “outmost” system in the heterarchy, re-enters in all systems which also exteriorize as the outermost Outside-Outside state as well as in a myriad of intercommunicating systems. The former motion *exemplifies* the physical action of the Universe in all systems and itself as vacuum fluctuations; it exemplifies also the interaction through other than physical forms of causality of the Universe in all systems, algorithmic: metaalgorithmic, meta-meta-algorithmic, etc. proposed by Johansen in his differential onto-epistemology based on the notion of distinction (Johansen 2014), and in the present onto-epistemology.

Thus, the Universe has no inner nor outer frontiers, nor in space nor in time, which are mere reflections of the dualistic notions. Would we consider the Planck length (10^{-33} cm), for the final inner frontier for the manifestation of physical causality, the algorithmic causalities correspond to a zero-time physics, so that the physics is not exhausted by this interior boundary, since actually the physical realm is a temporal manifestation of them and the higher-order HKB in which they are incorporated as the most basic element of the heterarchy.

In the previous characterization, a particular KB of the heterarchy can be further incorporated in an outerworld, where the exteriority is relative to the previous element, and still can be extended innerwise, where the descent is identical to the previous ascent, relative to itself and the interrelations that are evoked into manifestation and cognition, by the act of considering a primeval distinction that determines the final element brought to-the-heterarchy phenomenology, by posing this distinction. Due to the re-entrances, the heterarchy is weaved by and through holonomy, not Bottom-Up nor Top-Down hierarchy of Boolean Matrushkas-like systems. Yet, this search of the elements and their interrelations in the heterarchy, is not a mere epistemological recourse that the infinity of infinities poses to us, or to any system in regards of determining their onto-epistemology and self-preservation in keeping this boundary distinction that sets the onto-epistemology. It sets the operation of the heterarchy as an overarching system in which novelty, embodied by the interrelation web of Interior-Exterior states, plays an essential organizing role as the unknown yet everpresent operation of Will acting on wills, and its converse.

Thus novelty, either perceived or structurally defined by this cutting off the Other, manifests through the unexpected, undetermined, non-mechanical, a supra-causality that is manifested self-referentially (to the heterarchy). Thus, Darwinian natural evolution presumes a random change (which we can thought as clinamen), which the environment as a supradeterminant Other is to validate or unvalidate in a Boolean way the persistence of its existence. Hence, it suggests a metaphysics with observable effects in time and operated by the Time operator, whose logic of determination and constitution can only be understood in terms of the HKBL. Darwinian natural selection completes the HKBL onto-epistemology of the heterarchy in a most paradoxical manner, erasing the previous complexity. Indeed, it can be interpreted as a negation operator (which, as we discussed before, obliterates signification, and thus in particular, to speak of selection in this setting is outplacéd), obliterating the many branches of Nature that could have reified, but

were rejected through a superselection mechanism, which is the systemic context here presented, is no more than a “outmost” negation operator acting on a HKBL, reducing to one reified species. Thus, Darwinian selection is teleo-logical, yet in a way of denial. In the reduction to a single reification, Darwinian selection acts like the so-called many-worlds interpretation of Quantum Mechanics of Everett, in which one state is reified, the infinite non-manifested others pertain to parallel inaccessible worlds. Darwinian selection obliterates the complexity of Nature, that it claims to purport.

An example of the HKB is the fetus/mother complex. Through the umbilical chord the mother reenters into the baby, a differentiated unseparated -until individuation starts with delivery-extension of her mediated by the amniotic sac, the vascular system, etc.; the act of naissance is clearly a turning inside out – albeit partial-of the fetus/mother complex. This HKB is extended to the environment nurturing the fetus/mother. Another generic example is the seed of the plant that bears it through the roots, branches, vascular system, flower, etc. The plant is related to the Sun by photosynthesis (so that the “outermost” member of the heterarchy, would we preclude the Universe at large, acts already at the microphysical level and upon the overall metabolism, and warmth induced hormone synthesis crucial to development and adaptation. Furthermore, water which is crucial in determining even the shape of the plant in a changing environment without genetic modifications (Lima de Faria 1996), altogether with Earth’s nurturing, constitute a HKB of formidable complexity in which a myriad of cyclic processes operate, as appears to be the case of Earth’s stratigraphy and climatology and of the growth patterns of invertebrate skeletons, embodying a complexity of signification in which different planets, Moon and Sun, leave their signature, in the form of the Analemmas. It is impossible to conceive of ecology in terms of the Matrushkas, and all to natural the necessity to do so in terms of the HKBL.

Another universal example of the HKBL is the subject, operating in relation with the environment through an agent, either an instrument (a device which incorporates through its use or design the fusion of subject-with-object) and/or a cognitive framework (an opinion, a system of belief of any kind or purpose, of ruling or prescriptions, etc.). This is the world of culture, of Otherness and of the Socius, which the Matrushkas paradigm reduces to the dualistic top-down and bottom-up interrelationships, while Hegel and Marx conceived culture in terms of dialectics. Would we think of culture as a constituent of the environment, then we immediately realize its crucial effects on fundamental metabolic, genetic and even anatomical aspects in terms of the introjections of nurture (diet, sunlight, climate) and of extensions of the self that embodies the particular culture and the extensions of the participants/creators of this culture through technology and belief systems, creating and recreating themselves, their kin and the world. Thus the HKB transcends the theory of autopoietic systems, whose authors also rejected its applicability to social systems. Since a most complex web of interrelations in which the heterarchical environment and the selves in their “own” heterarchy and diversity, embody a HKBL in which Socius and Nature are intermingled. None of them neither can be reduced to dual operators acting in mutual negation or in purely synergetic

superposition, but rather acting through complex logophysical operators, of which the economics is but one of them, with its own operators interrelated to nurture (and thus to genetic and biological factors), and extending to the belief system, and in particular to the material and virtual extensions of the Socius. While the theory of autopoiesis claims that “cognition is construed as interaction between and mutual definition of a living unit and its environment” (Bitbol and Luisi 2004), the non-dual logic is replaced, as we already said, by the dualistic assumption on the membrane being semipermeable. Remarkably, Varela introduced the three-valued logic of reentrance, through compacting the two re-entrant waves into one single operator, the Ouroboros, yet overlook its implementation in autopoietic systems (Varela 1979). The *re-entrances of the system in itself embodying cognition*, were replaced, as we said, by a physicalist dual assumption, and thus the KB was replaced by a dual logic through a physical assumption, which belies its thesis of integration. Furthermore, while cognition is construed as interaction between and the mutual definition of a living unit and its environment, the KB logophysics, given by metabolism itself, which necessarily implies exchange with the environment and therefore a simultaneous coming to being for the organism and for the environment through association, the second level of cognition is recognized in the adaptation of the living unit to new foreign molecules, by way of a change in its metabolic pattern; this hypercontextualization and hypercognition is the being of the HKBL, with the creation of a new distinction embodied as a new functional organization. We identify here the *essential minimum threeness – as in Peirce-of this hypercontextualization embodied in the HKBL and the first two modes of Life*, since the KBL (a single boundary rather than the minimum of two for HKBL that is threeness) already identifies content and context, in which both adaptation and accommodation are the phenomenology of the logic of two unified worlds, exterior and interior, yet common to both living and non-living systems (with the already provided qualifications of them).

Still, a HKBL higher-mode of contextuality, surpassing adaptation and accommodation of the first and second levels of cognition, such as “...*representation-like* types of behaviour (namely types of behaviour that *evoke* the use of a representation *from the standpoint of an external observer*, but that do not necessarily involve the possession by the unit of actual “pictures” of its environment, let alone of an “external independent world”...” is, as identified in (Bitbol and Luisi 2004), the existential mode which we identified as higher-order cognition. It requires four-ness that is already the case of metaphorization, as is the case of Language, yet it does *not* deprive this existential mode of universality, as metaphysicists may perhaps construe metaphorization and anthropomorphizations, as an evidence of the lack of first principles, as is the case of dualism which is not independent but a projection of the KBL; at the level of language, four-ness brings to the fore the second and third person, both singular and plural. Rather, *anthropomorphizations are resignified in terms of higher-order logic that accounts for their relativism, which is thus not erased, but rather contextualized, thus allowing for novel articulations, some of them quite surprising, which we shall discuss further below.*

The ABL projects the agents-devices to the exteriority of the subject as if belonging to the material world, or dually as material extensions of the subject (say an

operator of a device) fused with its self (while there is also a myriad of in-between cases between identity transparency and alienations, which both have an unseparable cognitive aspect). Indeed, this is also the case of the agents' cognitive frameworks, which thus are deemed to be transparent to the subject if he construes them as unseparable of his self, or dually as belonging to the Other. This is also the issue at stake in self-immune diseases, and cancer in which some systems of the body's heterarchy, act *as if* independent of the integrity (and thus diseases are metaphors for the loss of HKB integrity). The actual case is never of complete transparency, since subjects are aware -and may act to ensure self-integrity in denial of what may be perceived as different to their system of beliefs-when they construe these differences as if exterior to them, so we use the metaphor of "closed minded persons". The crucial notion is that of primeval difference, or boundary (Spencer-Brown 1969) constituting the domain, which is embodied by the particular element of the HKB. We have presented the HKBL by considering more than a single KB, as the logophysics for interrelations which the KBL only sustains the interrelation of a system with its environment, a fused being, created by the re-entering of all elements in themselves and the others. As we have seen, the development of the ovum towards the embryo requires the action of four pairs of KBs, which each produces an HKB, and thus the eversion of the ovum is produced and materialized by the torsion folding of the embryo and the ensuing appearance of the KBL embodied in the formation of the embryo and the shapes systems. The HKBL is thus an embodiment and dynamics of a richer contextuality than the KBL, which we have called as "hypercontextuality", in which more than two elements of an heterarchy are fused and interrelate.

Returning to the hypercontextualization of the living systems, by the second law of thermodynamics, they disorder the environment increasing the positive entropy while increasing their own order by storing energy that can be used for work, i.e. negentropy (Mae-won 1993), which Schrödinger ascribed to Life (Schrödinger 1967). This self-control vis-à-vis the environment is the action of the Time operator of the KBL logophysics, through a learning cycle to reach for an identity, establishing thus the system through a self-reentrance in parameters of self organizations, self-determination and self-control; the oTime operator as well as distinguishing logical states, *it is a universal phase rotation in the imaginary component of the complex numbers, that builds up the coherence of the system, and as in the case of coherent light (laser), holograms are holonomic virtual representations produced by this action of the Time operator* (Rapoport 2011e). For the KBL logophysics, the total entropy is conserved and null; it is no accident that the KB was called by the ancients the *Horn of Cornucopia*, or *Fortunato's Purse*, representations of ever ending abundance (Purcell 2006). Mathematically, non-linear systems have an increasing entropy until they suffer a transition, a "blow-up" (Wu and Lin 2002), in which they go through an infinity (the KB re-entering-see (Rapoport 2013)) after which the entropy is lowered, instead of the thermodynamic death that the Big-Bang mythology claims for the Universe. This establishes a mathematical basis for the eternal renewal of non-linear systems (Rapoport 2013).

The standard physicalist paradigm already considers an asymmetry of causation between the living and the environment. Remarkably, although it stems from

dualism, from those deep intuitions that allow the sciences to reach for meaning, it yields a characterization of living systems which is not the Cartesian framework, but the multivalued hypercontextualization that three and four-ness of heterarchic system posses. Indeed, this plurality of monads requires a time structure and still a space structure, the actual ontopoiesis of the organism as a multi-structured autopoeitic system, and thus a HKB constituted by each of the KB ontopoietic subsystems, whose physiology is defined by the concept of *coherence*, of deep holonomism signification, which already is basic to Physics, say of condensed matter and superconductivity. “Coherence in a space-time structured system is a *transparency* of energy and information transfer throughout the entire system” (Mae-won 1993). We recall that coherence as just described (and more generally in holograms which are formed by the KBL logophysics), appeared in condensed matter physics, as in superconductivity, as the transformation, under special environmental conditions of low temperature; nowadays, it is known that superconductivity does not require those specifications, by which fermion particles forbidden to occupy a single state by the Pauli Exclusion Principle, coalesce to become bosons, and thus the logic of coherence is not the ABL. This transparency of energy and information, and its inherent three-ness, can be associated with the conservation and exchange between the components of the harmonic decomposition of the rotational torsion energy (unconsidered by Newtonian and Einsteinian physics, in their attachment to dual forces) of vortical structures of any kind, and in particular in the HKBL re-entrant nesting of the Analemmas of the Earth’s crust and atmospheric dynamics, and still the circulation of any system of fluids (Rapoport 2013; Ouyang 2009).

Coherence in this physical sense, is thus the unification of opposites, the KBL in brief, if not the HKBL. In this latter sense of coherence, the self-action of recurrence, say, as in the formation of fractals, or in the recurrent unfoldment of the Fibonacci sequence towards the Golden asymptotics, Φ , which is a primeval meta-operation of self-reference, in which operator and operand are fused, towards the establishment of coherence ruled by Φ . Thus it is no surprise its reappearance in biological systems (and in geo-astronomical systems such as Earth’s stratigraphy and climatology), for which this identity transparency requires an integration of the multidomains of the organism, in which the holonomy is re-entering into the different domains, i.e. the HKBL which we have associated with the organism. To resume, this integration is embodied further in the Time logophysical rotational operator of the elements of the heterarchy, which embody self-control/determination/Will at each self-re-entering domain as if independent of the others, while the synchronization of the Time operators of the elements through a Time operator of the heterarchy as a whole, produces the overall holonomic coherence that itself is a self-control by the last domain on itself and the other domains, or conversely, the Time operator of the HKB wholeness decomposes into the Time operators of each domain. This coherence is a fractal time-gestalt of subjective time awareness of the organism, and still a rotational energy exchange of the (reducible to three) harmonics of vortical re-entrances that we already discussed, establishing the logophysical holonomy, unaccounted by dual physics.

Metaphors, the Lifeworld and the HyperKlein Bottle

Metaphorization (anthropomorphization) is the very operation on which communication through comparison can be produced in the need to establish a particular (human) referent to which the world will be referenced to. Yet, it was noticed that this semiotical act by a referent introduces an infinite regression, unless there is a fusion of referent and referenced, which is already the case of the KBL, indicated in *Radical Recursion* (Rosen 2004b).

Julian Jaynes claimed that metaphorization is the fundamental operation of consciousness, the realm of the subject qua subject which unfolds by and through Language (Jaynes 2000). Yet, the mereological fallacy indicates to metaphorization as an essential operation of language, and also to a higher-order cognitive function of the *interpretation* of languages, as if its use could be made independent of context: The higher-order cognition appears in terms of the use of metaphorization for constructing representations, and still the lower level cognition is in terms of the dual logic associated with this construction. We find here the superposition between both levels, not the dualism of top-down and bottom-up. Hence, language and metaphorizations are the domain of hypercontextuality, i.e. of the HKBL, even when it is reduced to the designative value of the ABL, as already discussed and encountered in the usual dualistic take on Life, and in the mereological fallacy. The crucial role of metaphorization in the mythopoietical enaction of the lifeworld (Rapoport 2014), as already appears in the verum-factum principle of Vico's *New Science* (Vico 1744) cannot be overstated (Rapoport 2014).

The bicameral mind (the two functionally integrated brain hemispheres) is a metaphor for characterizing a subject, for whom the volition of his non habitual acts are not recognized *as if* his own but of an *outer* subjectivity identified as a god/dess, similarly to a self that has suffered an amputation (the phantom limb effect) or brain damage, and cannot longer integrate experiences of his own bodily and unseparable cognitive realm (Damasio 2005). For such a subject, the higher-order subjectivity of Will is deemed to be exterior to himself, breaking the world to Exterior and Interior, and we retrieve the lower cognitive level. It corresponds to a subject which defers integration by living a cut that poses a distinction, thus embedding his KB in a further KB, an HKB, whose reentrance in/on the subject is deemed to be the action of Otherness. While psychiatrists take this to be a symptom -common to many individuals-of schizophrenia, Jaynes claimed that the Greeks of Homer's epoch, lived this phenomenology. The evolution of language and of the collective, integrated this dichotomy, unifying the Ego with the introversion of the Super-Ego, by identifying their will with a *reduction* of Will, in what we can now understand as an HKBL. The distinction of our epoch is different to Homer's; it amounts to the inability to integrate Will in a greater identity transparency to *our* will. The current barrier, is the inability to perceive the identity of both will and Will, as the re-entrance of the outer KB of the heterarchy in ourselves. The life-world of surmounting this distinction is a Theophany.

Let us further discuss a characterization of metaphorization, crucial to language, in terms of an HKBL. Indeed, to metaphorize requires a subject to establish a

comparison (a distinction generating distinctions, as in (Bateson 1973, 1988) between A (we called it, the metaphoron) and its alleged substitute B. In metapho- rizing, there is an identity transparency of the subject with the elements of the relation, and the relation itself. So we are in the presence of three KBs, the subject, the elements of the relation of the metaphor, and the metaphor, and still a fourth one, language, as a bind and vehicle that enacts the relations between the three previ- ous elements. In fact, for the phenomenologist, perception is intertwined with all of the previous lifeworlds, and as we mentioned already, it is a KB embodiment, the source for the metaphorization. If this metaphor is to be found valid, then others will find meaning and sense in the metaphor, that is, in the relation established by the subject. This commonness of logical value, is the logical state of a KB that contains all subjects and the elements of the metaphor, and the relation itself between the elements, so it is in fact a KB interpenetrated by other KBs, and still the lifeworld of perception, embodying and reentering all of them, in short a HKB shown in the three examples in Fig. 8. Some subjects will not necessarily assent to the meaning of the metaphor, may place it in doubt, suspending judgment, or reject it in the first place. (We know that the modes of sense of humor as a lifeworld of complex hermeneutics and hypercontextualizations, are culturally bounded, while a sense of humor is a personal, ethnic or social trait and all of them together). So here we have a case of another logical value associated to the KB that contains the subjects, the metaphor, and the elements of the relation. This corresponds to the HKB. Anthropomorphizations are functionally similar to metaphors. As in metaphors, subjects will establish a relation between an element of certain phenomenon and will describe it in terms of another phenomenon which corresponds to their domain of action as human beings, thus the anthropomorphization, a metaphor in which a subject places one of the connected worlds as if lived by him. It has been claimed that mathematical concepts are anthropocentrically derived from embodiment (Lakoff and Nuñez 2000). We extend this to science; this is indeed the case through the KBL & HKBL, which has a universal being, or still the heterarchical self-referential logic of embodiment is universal, rather than a disembodied idealization, a contradiction in species. Remarkably, the thesis that all language is ultimately meta- phoric embodiment as raised in cognitive linguistics (Lakoff and Johnson 1999), and that literalism and scientific objectivism are unseparable, has been proposed by several scholars (Arbib and Hesse 1986; Eco 1984). Of course, the primal source is Vico (Vico 1744), and the challenge in literature was set in Joyce's *Finnegans Wake*.

Neuroscientists and physicists enthused with the notion that the brain is the new frontier of scientific knowledge claim that brains "think", which, of course, is not the case. A human child thinks and human action is essential to its framing, through the KB unity of action and perception (Rapoport 2014). No one has been able to isolate a living brain and certainly less to find the attributes of the whole thinking individual in this impossible to isolate brain. The application of the Boolean negation to the statement that a body substracted from its brain is dead, is no proof that thinking has the brain for its locus, only of its necessity, without which there is no integrity. This is an instance of the mereological fallacy that reduces the whole to a part (Bennett and Hacker 2003a, b), yet obliterating the whole and its projection to the part, as well as the wholeness of the part, as the implicit logic is the dual ABL.

So this metaphor is about self-reference, yet a disintegrated one. It is centered in the thinking individual, with its embodied thinking and socially thought body (as the embodiment of tradition, culture, economics, etc.) which cannot be separated (Rapoport 2011b, c, 2014). This grounding of the source for metaphor in the individual (with the Socius' determinations) is the case of the subject that establishes a metaphor, and thus, the elements of the metaphor have been transferred to the human existence, and in particular, its truth value assessment. The metaphor is not independent of self-reference which is prior to it, and so it is the all engulfing re-entering perception, be that of the single subject and still of his fellows that find value in the metaphor. So is the case of scientists that will metaphorize a certain scientific domain as if it would be universal. The latter will call it with the name that reveals its self-referential origin: the Anthropic Principle. (Another such a metaphor is "natural selection", where the self is the Universe, in an undetermined claimed-to-be-biological sense linked to the negation operator of the ABL, as discussed already). Yet, to transfer this to claim that the state of the universe is determined by a certain metaphor, say a "fine tuning" of universal constants so that the Universe and we exist simultaneously because *we pose the metaphor* in the first place, is a somewhat contorted and *reductive* way of expressing nothing but a HKBL in which the commonness of the metaphor is found valid. Yet, this requires in the first place the *universality* of the family of KBs that make the HKB and the interrelations, and the metacognitive action of metaphorizing even prior yet not independent of the others. The realm of these actions is the meta-metacognitive dimension and its life-world is structured by and through metameta-algorithms, proposed in (Johansen 2012) yet unrelated to the HKBL. This lifeworld is the one in which time, self-reference, signs, language, space, the processes of the mind, emotions, sensations, ideas, archetypes, etc., are interwoven in an unseparable way. This renders the Cartesian Cut as a disjointed analytical dissection, which leaves out much of the richness of this tapestry of which we are woven into and weave ourselves, by the very act of being, of which thinking is no epiphenomenon, but woven into this meta-meta-lifeworld. In this, language (in its manifold renderings) is the semiotic life-world of the subject-blended-into-object. Thus, unless we would reintroduce the Cartesian Cut, we can say that the world indicates itSelf through ourselves, which by doing this we indicate our-selves (and the Socius) and the Self of Nature, and, as in Escher's pictures, there is a synthesis of this which is the meta-meta-algorithmic lifeworld. This is clear in his work *The Gallery* (Rapoport 2014).

Returning to the hypercontextualization of the physical realm by anthropomorphization, while this certainly establishes a relation between Microcosmos and Macrocosmos and all the interwoven-in-betweens, yet not the trivial embedding of the Matrushkas kind but with self-reenterings of a HKB, other different "fine tunings" might be also the case for those who cannot find any meaning to the metaphor, just because their language is not the same as ours, and thus communication if not in terms of universals, is not possible. Hence, these universals return us again to the HKB. The "fine tunings" stand for the universals of some of the elements of the HKB, but seems impossible to state that they are valid for all elements of the heterarchy. This would require the claimants to be in a state of identity transparency with the *whole* heterarchy of elements of the HKB, and this is impossible to verify to be

the case. Being the latter the case then we are left with having to establish back the KBL and its onto-epistemology, as a first approximation, or still to take a KB containing an undeterminable number of related interwoven KBs, to elucidate the world in which content and context are unified. This is already our human condition and the condition of all systems. Thus, the “universals” cannot be other than context dependent, and this is what has lately has empirically discovered. Physical (deemed) constants, say atomic weights, or the so-called fine constant, may turn to be context (locus) dependent (Wieser and Coplen 2011; Brax 2010). This is already the case of Newton’s gravitational “constant” on Earth’s geoid, its non-ideal real non-spherical deformed shape, due to a HKB of interactions – primarily-with the Moon, Sun, and the non-homogeneous crust (Rapoport 2013), for which the Newtonian conception of gravitational attraction as if acting on ideal points, rather than on *res extensa* (the crust), is misconceived (Rapoport 2013; Wu and Lin 2002). To conclude, the HKB which we have found to be the topology of the genetic code (Rapoport 2011c), is the case of all systems, the archetypal form of the world, of systems which are inter-related in heterarchies with re-entrances of all elements on themselves and other selves and the whole re-entering in the elements as well, sustains a world in which for a certain subject of the heterarchy, the world seems to be with an outside determined by this subject, and yet reentrance is maintained to be the case. Consistently with this, say other inhabitants living in another area of the Universe, will find themselves another “fine tuning” to their selfcenteredness, and could verify instead another context dependence in their own neighbourhood. Thus, physical laws requiring “universal” constants already embody this hypercontextualization and thus they are *universal not because they are impervious to contextualization, but rather because physical laws actually embody their actual reification as laws of contextualization invariance*, an hypercontextualization which is the manifested realm of a HKB logophysics. This is not Newton’s mechanical world (nor of Einstein, in those regards), but the logophysics of the alchemical world he searched for so intensely. Certainly, it is atuned with his quest for a philosophy of Nature (a quest shared with Pascal; Descartes; Leibniz; Goethe 1792; Kepler; Spinoza 1955, and their Renaissance predecessors), which in the present onto-epistemology has been fused with the phenomenological tradition, coherently with the alchemical quest and the time-honoured cosmology, to integrate us harmoniously to the Cosmos, both created and metamorphosed by Time, as partners in response to ourselves and to Wholeness.

Forewords: Evolution, Creativity, Time Waves, Semiosis, Interpretation and Religious Hypertexts

In this article we have produced a temptative archeology of the uses of dual logic in the sciences, for the introduction of a logophysical paradigm that unifies the sciences, in terms of self-reference. This paradigm is embodied in the KBL, and further extended to the higher-order HKBL of interrelations, in which Otherness is brought into the world, yet not by fracturing, but by introducing more than two

distinctions in the undistinguished environment of the KBL. Instead of the dualistic hierarchies in the top-down and upper-down linear interconnections, these distinctions extends the single distinction that generates the self-re-entrant KBL (instead of the dualistic negation operator), in the form of re-entrances of self-referential heterarchies. These re-entrances physically associated to self-containment, rotational motions and energies, are impossible to conceive nor realize in the Cartesian mode of existence by containment, which is all too pervasive to the sciences at large, and not least to philosophy. The latter have failed to realize its all encompassing actions, that includes the world of language, consciousness, the physical world, its embodiments, and still the domain of Life, yet not as separable from the inanimate by a mysterious quality, but one which can be clearly be discerned through the manifold operations of self-referentiality, rather than the unending saga of a world, trivially and brutally divided into interiors and exteriors. While the KBL re-entrance blends the environment and the system introduced by a single distinction, and as such installs the first and most primitive form of contextualization which we associate with cognition and thus Life can be understood as the logophysics of the KBL, the latter does not separate the inanimate and living worlds. This understanding does not require to introduce the HKBL, but rather the realization that the KBL already is the fundamental logophysics operating in such diverse systems as physical open systems, chemical reactions and in particular the case of minerals exposed to the environment, geological landscapes, occurring in the real world of open systems (not the abstracted separate world of a test-tube). This logophysics is characterized by contextualization, which already plays a fundamental role through the self-referential being of the photon, through the fundamental processes of emission and absorption of quanta, establishing thus primary differences that generate higher order differences. Concretely, these are modifications in atomic and chemical compounds that manifest in chemical *reactions*, a name that overlooks the fundamental contextualization that chemistry embodies, elaborated in (Boeyens 2005, 2010). This author, further established a quantum theory of chemistry, by unveiling a hitherto unacknowledged KB that embodies the Periodic Table of Elements extended to include the stable nuclides, which we have argued that extends to the mineral, and biological (including genetic and biochemical) realms, and still to geology and climatology. The fundamental contextualization of molecules through and by the self-referential action of light, is also crucial to the organization of the cell (Rapoport 2011d). In fact, it is the tensegrity architecture of the cytoskeleton, which is no less than the cell's cognitive system, that integrates with the environment through the membrane, which rather than being a dualistic barrier to be violated by physical-chemical processes (as in the mechanical paradigm of the cell and in the theory of autopoiesis) by penetrating the membrane, acts as the integrator of the cell with the environment. Thus, by sheer logical coherence, we have proposed that the cell's membrane follows the same KB (Klein Bottle) logophysics that we have encountered in embryo-logical development, by unifying the cell's interior with the exterior extracellular matrix, by acting as Moebius Band or still a KB operator. Hence, through the loads of the chemical elements, the membrane may accommodate, by locally transforming itself from a orientable to a non-orientable

configuration; since elasticity singularities and photons can be identified, this integration has both a quantum and a classical physics, which is not assimilable to duality. This establishes an holonomic integration of the cell and its physiology, that extends far from the extracellular matrix through the connective tissues of a body, which itself has a quantum structure, its collagen. Thus, this integration is produced through and by a web of re-entrant interconnections of all in all, the physiology of the body and its organs, already embodied in the body of shape that is produced by the KBL of embryo-logical development. But also this contextualization of the physical/chemical realm is also the case of the neutron, the fundamental particle of the atomic nucleus, which in the theory of the nuclear interactions known as Hadronic Mechanics, has been claimed to have the KB topology (Johansen 2006); as we already mentioned, this topology is that of the neutron acted upon by an electromagnetic field precesses alike Earth by the interaction of its own torsion field and the Sun; hence, this phenomenon is universal and independent of scales. Furthermore, we have argued that since the physical parameters that were considered to be universal constants appearing in the physical laws, have appeared to be contextual rather than universal constants, and thus the physical realm is also about contextualizations in which physical laws embodies them. Therefore physics itself is a form of cognitive embodiments of contextualities, apparent in rotational re-entrances of vortical systems, in distinction of the context-free Newtonian and Einsteinian dual physics, based on linear motions (Rapoport 2013; Wu and Lin 2002). Already the behaviour of a photon in the Apeironic vacuum (not to be confused with the Void) and in an inhomogeneous media is different, thus showing that contextuality is already at the very basis of the quantum of action. Thus, it is the actual self-referential being of light that is unseparable of the KB itself (Rapoport 2011a, e; Rosen 2004b) that is the very logophysical basis of contextuality for the physical world, yet unseparably from physis (as embodied nature). Hence, we have placed quantum action as the fundamental operation and distinction that produces the logophysics that has allowed us to integrate the inanimate and living realms, and subjectivity. The role of the extremality of the action (due to Fermat) principle of physics, that is verified by light rays, in biology and consciousness, was presented in (Grandpierre 2007), and embodied as expansion and contraction morphogenetic waves, crucial to embryological differentiation (Rapoport 2011b, c), yet associated to the Time operation and its 180° twist forming the Moebius Band.

As concluded in (Rapoport 2011b, c), “This idea of time waves generating patterns in *wholeness* as presently envisioned for embryological development is surprisingly universal and we described that this is the case, as already discussed of the Mendeleev table of periodic elements, the system of natural numbers, the case of the development of sunflower as the vivid example of the fundamental Fibonacci algorithm”, to which we have further added to this in an holonomic paradigm that goes from Physics to Geology which is unseparable from perception, cognition, chemistry, biology (Rapoport 2013, 2014). The present paradigm of a world, considers that in the ideative realm it exists in toto. It manifests in terms of self-referential folding and unfolding through self-penetrations as the physical manifestations of the KBL with the imaginary states that realize these self-penetrations through logophysical time waves. This paradigm is far from the usual mechanical world, both quantum and

classical. In terms of biology, it is far from being reducible to Darwinian selection nor to the creationists dogmas, since these manifestations are permeated by hyper-contextualization, as in the HKBL, and thus an open and simultaneously closed evolution which is a development. The latter eventuates with the incorporation of environmental interactions through hypercontextualization, which is keenly anticipative, due to the non-linear topology of time, the chronomes that pervade Nature, as we have repeatedly unveiled in the course of the presentation of this paradigm. As for the question of the ultimate completeness of this unending development being complete or not, the response to this Mystery perhaps is, that though novelty is the case and is embodied, *metacognitively the HKBL appears to be complete, despite it is impossible to any creature of the Universe, to discern nor the completion of the heterarchy, nor all the elements that appear as novel. Indeed, since there is no cognitive completeness to any particular element of the heterarchy, unless to Wholeness itself, as appears in the HKBs in the Fig. 8, which is already the case of the KB. Yet, this Wholeness is not to be lived nor asserted from the inexistent Outside that the ABL claims, nor through the inexistent Inside for that matter.*

Therefore, while the KBL contextualization of system and environment embodies the primitive form of cognition which we propose to be the basis of Life (transcending the dualistic mechanicism of the theory of autopoietic systems), this has not rendered the animate world as the alter of the living systems, but rather has integrated both by the same self-referential KBL logophysics. We have further seen that this logophysics is also fundamental to the organization and development of biological structures, already from the ovum to the embryo, and still the mature body. They appear to unfold as structures-processes that exist *in toto in an ideative realm*, in which the turning inside out of the ovum is already the fundamental ideative operation that is accompanied in the realm of manifestation by recurrent torsion folding of two dimensional surfaces. Yet, this establishes not only the differentiation that leads to the full developed embryo and still the mature organism, but also the logophysics of its integration through the bodies of shape, and the connective tissues. Also we have seen that this holonomic unfolding, has a superposed physiology in the form of the KB topology of the topographic maps of the sensorium in the brain, mapping thus the exteriority of the ovum to itself, which in the unfolding of the bauplan, appears to be the brain and the nervous system. This KB map further embodies the unity of action and perception, as we already indicated. Thus, the ovum membrane's which we claimed to have the same self-referential topology that produces this turning inside out and the unfolding of the bauplan as the recurrent operations of two dimensional shearing of surfaces, has a representation in a two dimensional map of the sensorium, as the functional physiological bauplan, that has been anatomized in superposition to the sensorium's representation. Thus, organisms appear as unfoldings and folding of two dimension self-referential surfaces, namely the MB, the KB and HKB, both anatomically and physiologically. Thus, we see that rather than ontogeny being the recapitulation of ontogeny, as first proposed by Darwinist biologist Haeckel, it is the case that ontogeny produces phylogeny as already proposed by Garstang in 1922, and thus phylogeny also is an historical unfolding of the same self-referential logophysics. *The organism rather than being the product of the coding/decoding for the transformation of a supposedly one-dimensional (genetic code)*

into a three-dimensional organism, is fundamentally a two-dimensional logophysical embodiment, in which both the genetic code and the bauplan are embodiments of HKBs and thus, the folding of two-dimensional surfaces re-entering on themselves (Rapoport 2011c): If the genome is to be somehow related to the phylogenetic coding of this ontogeny, then it turns to be the history of a transformation of the representation of a two-dimensional self-referential and fractal genome into a two-dimensional fractal self-referential organism, rather than the untractable mapping that the traditional model of a one-dimensional genome is mapped into a three-dimensional organism. This is also the case of proteins, that rather than being three-dimensional structures controlled by a one-dimensional linear (genetic) code, it partakes its two-dimensional self-referential structures, as the torus and KB constitute the protein domains (Penner et al. 2011) and thus the *same morphologies crucial to the genome appearing from the KBL, appears to be the case of proteins* (Rapoport 2011c). In fact, embryologists critical to the all-in-the-genetic-code credo for biology have stressed that the (purported one-dimensional) genome, of which only a few thousands genes appear to be related to development, have pointed out that this does not account for the information/bits (in distinction of in-formation, as morphology induction, as we have used the term in this article) is far too small to account for bauplans (Nijhout 1990). Yet, this may be a backdrop of the wrong assumption that only the protein coding DNA (about 2 %) operate at all (for biochemical synthesis), disregarding the (appallingly called) “junk” DNA disproved recently (Skipper et al. 2012). Other embryologists (Gordon and Gordon 2014) have instead associated development to the Aristotelian-Boolean logic, claiming a one-to-one genetic coding of development through mechanical forces, to induce the appearance that there is a *complete* mapping between developmental steps, Newtonian forces and genetic coding, that exhausts the genetic code. In (Rapoport 2011b) it was shown that instead of Newtonian pushes and pulls in the cellular architecture claimed to produce the developmental stages of differentiation, light torsion fields in the cell and the rotational action of the Time Operator of the KBL produces this differentiation, and that only two aminoacids of the 20 in the genetic code are related to coding this development. Rather than the genetic code being a blue-print self-operated through the cell, with its multiple HyperKlein Bottle nested topo-logic and still a toroidal topology, the informative role is weighted to *anticipative coding for the relations with the environment rather than development*, it also provides with its hyperfolded informational topo-logic (we remark, in terms of bits) for the complexity which regulation requires. Therefore, due to the topo-logics of the genome, the genomic information (i.e. bits) is in-formational (i.e. morphological)-This characteristic is recognized by molecular biologists who have discovered that the genetic code ascribed to regulation of, say the production of proteins, the coordination of segments of the alleged one-dimensional code, are required, and topological operations such as cutting and pasting appear to be fundamental to the regulation of the genome and its self-action; this coordination shows that the genome is a context for itself. Also self-referential toroidal segments, as closed loops, or still palindromes, appear to be crucial for biochemical regulation (Caporale 2003). To resume, the complexity of the informational HyperKlein Bottle coding of the genome, produced from departing from the KBL (Rapoport 2011c), already embodies what current molecular biologists claim to be a

cognitive capacity of the genome. Hypercontextualization is the case of the self-referential topo-logic of the genome, not an acquired capacity claimed by molecular biologists, even for those critical of the vulgar version of the genome as a linear code. Yet, this is not exclusive to biological coding, but a far richer lifeworld.

Indeed, this overlaying of self-referential folding, introduces depth, which perceptually creates the representation of the body as if three dimensional, and is unseparable of Time, as the logophysical operator of the foldings. It is undissociable from the perception of bodies as if immersed in three dimensional space, by creating the representation of the latter, yet doubled, as in the self-referential syntactic generation of Physics (Rowlands 2009) which we identified to be based on the intertwining of two KBs (Rapoport 2011c), which is also the case of the turning inside-out of the ovum, as described in this article. One such three dimensional space is for placing objects as in the Cartesian mode; the second three dimensional space of momentum representation which brings velocities to the fore, allows for the recreation of the Time dynamics which creates these unseparable pair of three-dimensional structures through KB invaginations and evaginations. This is embodied in the so-called bistable perceptions in which a body (say a cube) represented in the two-dimensional plane, literally moves out of the plane to generate two perceptions. This violates the Principle of Non Contradiction of the ABL. Indeed, two perceptions are reified as singular objects that are elicited in their apparent individuality yet as generated by a mutual intertransformation of one into the other. These are no longer Cartesian objects contained in space, but rather instantiations, connected and created through time, of images of a unity whose Metapattern cannot be spontaneously seen in this act, but which provides for their being. They are entwined elements of a creative act by the subject, a living proof of the Klein Bottle Metapattern of the unity of action and perception (Rapoport 2014). Rather than the dichotomy of choice between either Parmenides's *statics* and Heraclitus' *dynamics*, this establishes *their* joint foundation in the logophysics of the intertwining of two KBs, a HKB, as their common onto-epistemology, as well as that of the embryo unfolding from the turning inside-out of the spherical ovum. As for the universality of the eversion, turning inside out a sphere, this generative process that guides self-creation and self-determination, we have found it to be omniacting in Nature, as Anaxagoras would have it, yet so estranged to the current broken sciences, and to Philosophy as well.

Quite remarkably, we have unveiled the role of dualism and its epistemics to define and control the ontology that the sciences have for its study of the world at large, including that of subjectivity. In doing so, it has been quite amazing to discover the pervasive role of dualism, that produces a rather poor world in its representation by the scientific method, that, as claimed by Popper, it indeed appears to rest in a swamp of hidden presuppositions and hypothesis, which unfold in terms of dualisms. No less remarkable, it appears to be that Imre Lakato's claim that "scientists know not more of science than fishes know about hydrodynamics", can be substantiated in the unacknowledged incapability of the ABL to give account of the world if not by fracturing, which already the working scientist embodies, as detachment if not alienation. Indeed, as Günther's first call in the desert, yet a rather shy apologetic call in justifying it on the need of cybernetics of giving account of subjectivity in its aim to mimic it through technologies, subjectivity is estranged to the working scientist.

Artificial Intelligence has failed completely to stand to its declared aims, and the so-called technological singularity, an “intelligence explosion” by which humans will transcend their biological buildup presumed to be lacking a logic, is any world but more of the same triumphalism and alienation. As we found in the current phenomenology, it ignores the essential bauplan that is common to Life and the inanimate, together with the blatant preaching that the broken sciences are a basis for such transcendentals, a quite popular exhilarating activity amongst scientists and the panegerists of the Cartesian Cut kind of the broken sciences (Kurzweil 2005).

Artificial Life has somehow fared better, since the first form of cognition that introjects the environment to the point of establishing a homeostasis is assimilated to cognition. As noted in (Barbieri 2010), “Life is essentially about three things: (1) it is about manufacturing objects, (2) it is about assembling objects into functioning structures, and (3) it is about interpreting the world. The discovery that these are all semiotic processes, tells us that life depends on semiosis...”. Here the interpretation is done by the living system, for which the world is the Other. As we have already established, the interrelation of the system with the Other is embodied in the HKBL in which we have an heterarchy of re-entrances of the systems on themselves and the others, so that a very complex logophysics is operating. This actually is what we usually fail to recognize as complexity, as the very etymology of “complex” shows. It derives from the Latin *complexus*, past participle of *complecti* (“to entwine, encircle, compass, infold”). As for the manufacturing objects it is believed that this is embodied as a code in the genome, which we have proved that has a very complex fractal HKBL topology and furthermore isomorphic, at the most basic level of the codons, to the algebraic structure and symmetries of Quantum Mechanics, that are at the foundations of Physics, so that the quantum symmetries and fields play a coding role in the genome for the logophysical self-referential principle, as de Faria would have physics and chemical symmetries at the basis of the form/function complementarity, proper of the KBL, which molecular biologists are prone to predicate its absolute determination by the genetic code. Yet, we have argued that this coding which stems from the KBL, is such that *the genetic code must be, partially, an environment to itself*, so that instead of the first-order cybernetics (a controller and the controlled) of the Standard Dogma of molecular biology by which DNA is the controller of the cellular factory, a second-order cybernetics is the case by which both DNA and RNA (both having the HKB topologies as derived from the KBL) and proteins, mutually act and still may self-act (Pellionisz 2008; Skipper et al. 2012).

Indeed, the hyperrecursive HKBL of the genome, is the recurrent folding of the quantum symmetries, and in particular the non-protein coding sectors of the genome, has the structure of a universal language, (Maslov and Gariaev 1994; Mantegna et al. 1994). Thus, as argued above, indeed the genome is – as all languages are – a partial environment to itself! Hence, indeed semiotic interpretation is the case, yet it does not exhaust the semiosis to hermeneutics, since the HKB topology sustains a logophysics associated to light (extending thus the case of the KB) and thus the signaling and interpretation has a self-referential light interpreter/interpretand logophysics, which has been found to be the case of the genome, emitting and receiving both *coherent* light and sound waves (Berezin and Gariaev 1996; Gariaev et al. 2001). Yet, we have unveiled in the course of this work, that the same principles of coherence that

sustain the physical world, are also crucial to music, and harmonics and its KB perceptual interpretation of musical pitches, is the very core of signification as showed exquisitely to our senses by the stratigraphy of Earth. The latter is produced by the harmonics that arise from the precession of the equinoxes, the cyclicity of the eccentricity, and the interaction with Sun, Moon and the other planets. Altogether, as a single orchestra following an HKBL partiture in which the director resides in the partiture no less than in the instruments and musicians, that on playing itself as a self-operating language, drifts the continents (as instrument and musician) apart, establishes cleavages, tremors climatological and oceanological cycles, molds the crust of Earth alike the oceanic tides under the main action of the Moon, carving the beaches coasts and estuaries, all into harmonic configurations, which are no less essential to music and to holography that rests on coherent light, and to the Periodic Table of Elements, all cohering through the Fibonacci sequence as it tends to its Golden Φ limit. This coherence is embodied in the KB, as we have repeatedly shown to be case.

With respect to Barbieri's second condition for Life (Barbieri 2010), the emplacement of assembling objects into functioning structures, it already starts with the embryo-logical development, that through recurrent folding of the turning inside out of the embryo through its membrane (the semiotic operator, as we discussed, yet not in associated to the dual ABL negation operator as proposed by Hoffmayer 1996, Wilden 1980), it unfolds the bauplan for the organism as logophysical process through torsion folding as well as its physio-logical integration and the embodiment of the sensorium, and still operates this display through what appears to be genomic light and sound signaling arising from the language in the genome whose topology is that of light, as the KB embodies light. *Yet, the mandatory function of genetic language in commanding what is to be done in terms of signals at the right time and the right place, which is nothing else than the self-validation of the topologies through their Time operators cycles returning eternally to their initial configuration as in the Myth of the Eternal Return, is superposed to the function of learning through interpretation (unseparable from perception). Here lies the lifeworld of creativity.* The Problem of what is Evil, in terms of the re-entrant logophysics and interpretation of the lifeworld, was presented in (Rapoport 2011d).

The architecture of a text, say of DNA and RNA, or Joyce's *Finnegans Wake* (Joyce 1981), is an embodiment of the logic of its conception and of its content. Hence, almost all texts are layed out as Heraclitus' river/logophysics, in which dual logic is rendered sequentially; these texts appear to be linear. Yet, too many scientific texts are layed out as if the written body of the sciences would be authored by few individuals. It is not only a matter of content, since the logic of the broken sciences is one, the Aristotelian Boolean dualism. Inasmuch as, say, a man is man because, to some extent, of the breeding by the Socius that made him the man he is, the issue of doxa is an homogeneizer of content and intent, either for scientists, religionists, artists, grocers, etc. So all scientific texts are, by default, the lifeworld of the Socius, a HKBL lifeworld, and especially laid ontop of the "shoulders" of the ancestors, as physicists like to refer to the "giants" that made of Physics the science as we know it, unseparable from mythopoiesis. In the case of hermetic and religious texts, either written by Revelation or created from the process of individuation of the author-to-be, or by the group who kept the secrets to be revealed by one of their brethren,

yet only partially, since the text is claimed to be layered and encrypted. Indeed, a second unwritten text which is transmitted *orally*, or embodied in the commentaries of other texts, is claimed to hold the key to the semiology of these texts and alike a KB interpretation of the biochemical recognition of two molecules, the two texts are just one. No such religious (or hermetic) text is such without this one-ness, and still the three-ness of considering the reader that applies the key. Without the text-key, the reader might misinterpret the text, and even be doomed by this, or simply live the text through partial signification; this is alike the story of Kabbalistic origin of three sages entering to a lifeworld of communion with God, into Pardes (the paradisiac garden of knowledge). So, in the hermetic and religious texts, the HKBL of the making and reading of the text is in compliance with a dual key: if it is the indeed the key, true is the case, and then learning is the case, or in the contrary, only the individual interpretation is left, since the demise eventuated by the false interpretation is assumed to be no interpretation at all, the folly of the Nil, not the continuity of Life after Death. However, the demise of the 'mistaken' reader was not ruled out.

Thus, alike Darwinian evolution collapsing (by Natural Selection) the be or not to be of a species, the final outermost operator-key of the hypertext that is meant to re-enter all the layers of the religious text, to manifest their meaning and also its own meaning and those of the interconnections, is a dual operator, alike the dual model of the cell's membrane: To interpret or not to interpret, and a third-party might in some instances be called to assess which is the case, as the disputes between scholars surge. Alike the master and his bestowal of a koan upon his disciple, there is no third party other than Tradition to assess the assessment by the teacher of its disciple's lifeworld, and we are left to the action of infinite regress, which *Tradition cuts short by determination of the lifeworlds that merit a true value, self-referentially (to Tradition)*. The KBL is different to this, since no cognitive infinite regress is the case, while the HKBL that considers the Socius, resolves this by considering the re-entrance of the Outermost element as the Whole in the others, with due consideration of the impossibility of complete discernment of this element if not the universe at large. Yet, the determination of this Outermost element requires a consensus for its establishment, and thus this consensus is the one establishing the domain for the cognitive-logical values. These values reached by consensus (in the etymological sense, of sharing a feeling, i.e. a perception and the lifeworld that accompanies it) might not be the True (False, etc.) value, but only projections where the *Outermost lifeworld established consensually identifies the true value relative to itself as the True value for the heterarchy, and thus a finite boundary limit to cognition has been established*. If not questioned by its upholders, this may produce an ideological fixation, which the history of humankind has recurrently evidenced its powerful destructive effect. Yet, this boundary can be changed, eventually, when perception/cognition of its limitations is started to be felt by one and increasingly more individuals. This is also the lifeworld of the broken sciences' scientists, and perhaps of the human condition developing with a unified cognitive framework, since partiality of the perception of Wholeness, is always the case, as already explained.

In the Torah, Tradition (the Talmud) claims that its writer by Revelation, Moses, wrote down the text and his own demise in it, and continued writing after perishing,

so the writer is superposed with the text, and a mutual embodiment is the case, in which the text has a life lent to it by the author (in the lifeworld of Relevation) and the converse is also the case; Escher captured this in his *Drawing Hands*. Yet, if for Tradition, the self-referential Normalizer/Judge of Truth, Moses-the-character-in-the-text is to survive Moses-the-writer, then they have to live in different times and spaces, and thus Moses-the-writer has created Moses-the-character-in-the-text as a figment of his imagination, an eternal Archetype. Of course, this is what imaginary or real excellent writers do, create archetypal characters to survive them in texts, and no one but Shakespeare appears to have matched the excellence of the author(s) of the Torah. As the Ancient Greeks created their myths with archetypes for their characters and identified them with sidereal configurations, likewise de Santillana and von Dechend in the invariance across cultures of the Myth of the Eternal Return and other myths, found the evidence for archetypes as textured in the skies, as later alchemists would also emplace the self of the chemical elements, while the Alchemical Flask, the Pelican, or still the Pelican Christus of the Christian representation of the Redeemer, was the Klein Bottle. Also the Mythraic Cult, related to the Phrygians, placed its cosmology in terms of the planets and the precession of the equinoxes (Beck 2006; Chapmann-Rietschi 1997), and capped Mithras with the KleinBottle-Phrygian cap, so that in these cosmologies the reentrance of the Form in itself, was the very core of their semiology. The latter, as we very briefly indicated is related to the Tao Jin, while the phenomenology that we unveiled in the HKBL appears to be central to Tantrism (Schonberger 1992). The major difference with the present onto-epistemology, is that the Tao Jin starts with the trigrams, while the four-states of the KBL as in Fig. 5, which generates the Book of Changes, are given no consideration. Remarkably, Tantrism claims the same phenomenology than the HKBL introduced in this article, while the Yantras, the mandalas of Tantrism, show no re-entrances of the whole in the parts nor the converse. These might be manifestations that the deeper roots of both Taoism and Tantrism, may have been lost, or perhaps a taboo was imposed on them.

An alternative to the previous interpretation of Moses surviving himself in the Text as demanded by Tradition, is that Life After Death and Life, are so closely connected, to the point that they merge to a single lifeworld, alike in the present onto-epistemology, in which the ideative world manifests cyclically in the material one (as in Vico's New Science) through time waves, as organisms and processes. Of course, this idea is also central to Marx's Capital Logic determination of the material world from the ideological superstructure in a second-order cybernetics proposed by (Johansen 1993). Whatever may be the truth of the conclusions we have reached through an interpretation of the (religious) Text through the HKBL onto-epistemology, and considering that Tradition can do no better but request a petition of principle based on Faith, these conclusions show that in distinction to the key-texts required for the interpretation of religious Texts, these texts themselves may hold the key. This key is, we suggest, none other than the HKBL, whole lifeworld these Texts already might embody, unbeknownst to our linear dualistic, and in some instances nominalistic interpretations.

The present hypertext is and is not different to the hermetic and religious hyperTexts, (the Text, the key-text and the body of oral Tradition) in that no key-text

is required to interpret it, but an initial cognitive key was required for the reader to be able to attempt to interpret it: namely, to relinquish dualism, which again is not an all or nothing transformation. *As in the KBL in its Matrix Logic form, nor true nor false, and still, true and false, are cognitive states of the learning process.* Indeed, the current hypertext *is the embodiment of the HKBL*, by which the integral conception re-enters to unveil its bearing in the different domains and layers being presented, while the domains re-enter themselves to their relatives and to the wholeness of the logophysics that the hypertext proposes for universal signification, with the limitation already explained. It is a revealed text *by the logophysics*, not by the action of an exterior/interior Agent being manifested; furthermore, it is the same logophysics by which the reader has been created as a manifestation of the Eternal Life Cycle, and hence *no exterior key is necessary*. “*Finnegans Wake*” is such a hypertext; the key is the reader’s reading, and it changes in each occasion. The hypertext selfpenetrates, as a whole it is a MB, in parts, as a HKBL, as follows from (Hart 1962). Without this specificities in mind, Samuel Beckett put it thus: “...the coincidence of contraries, the inevitability of cyclic evolution, a system of Poetics... Here form is content, content is form. You complain that this stuff is not written in English. It is not written at all. It is not to be read — or rather it is not only to be read. It is to be looked at and listened to. His writing is not about something; it is that something itself” (Beckett 1956). Remarkably, while recognizing the self-penetration in its non-dualistic being, but not the torsion which reifies it, nor the Metaform which realises it, Derrida interpreted *Finnegans Wake* thus: “Neither inside nor outside, it spaces itself without letting itself be framed but it does not stand outside the frame. It works the frame, makes it work, lets it work, gives it work to do [...]. The trait is attracted and retrac(t)ed there by itself, attracts and dispenses with itself there [il s’y attire et s’y passe, de lui-même]. It is situated. It situates between the visible edging and the phantom in the centre, from which we fascinate. [...] Between the outside and the inside, between the external and internal edge-line, the framer and the framed, the figure and the ground, form and content, signifier and signified, and so on for any two-faced opposition. The trait thus divides in this place where it takes place. The emblem of this topos seems undiscoverable. (Jacques Derrida)” This excerpt strongly indicates that Western culture cannot recognize the Metaform and its logophysics; furthermore, it is daunted and incarcerated by this cognitive self-imposed limitation, which already the Presocratics thought otherwise. In doing so, it courts its denial to self-deliverance. But we do stand to assert that there is, and always was, a legacy that was to find its way out of the cave, of which we know about by recreation of its thoughtforms, as a myth that comes true, as Vico would have it (Rapoport 2014). *Finnegans Wake*, or as the delta of a river with its affluents, the present hypertext has appeared as the partiture of a theme, which may transform its rhythm and inflection in accordance to the context, while the hypercontext of this unified lifeworld dictates the details of the contextualization to the meanders, affluents and of the great river, to which the partiture provides the re-entrings of the hypertext on itself. This has been experienced by this author, the I creating and assembling this hyper-text, as most unavoidable. It is *as if* the hypertext would have a lifeworld of its own, which is the lifeworld of the author. Similar experiences of the Hypertext appear to have their origins in Kabbalah, and

in the works by Edmond Jabès (Rudnick Luft 2003) To resume, the *logophysics of the architecture of the current text is the one of its content as well as of its writer, the discrepancy resides in that the perception of its author-writer stays short of being able to embrace the Wholeness of this identity, inasmuch his social-cultural breeding may act as a limitant as well as his own lifetime experience also paved the way; this applies to any other author of any text. Alike the genetic code, this hypertext is its own architect, operator, interpreter and interpretant, environment and content, unseparably of the author, which in the case of the genetic code stems from the HKBL evolution of the Apeiron to unfold as the logophysical structure of the genome, actually of language.*

Any of the elements of this phenomenology, is a metaphor of the other ones. This hypertext was assembled as a partiture through and by language and concept (of the logophysics that we have presented), and still by aesthetics if not ethics. I can not thus apologize completely for my (?) mistakes that I have avoided to be the best of my (!) capacity, or perhaps for chosing a cadence that the reader may find inordinate, or an argument too much polished or still abrasive. The hypertext being too extensive and the human preoccupation of setting this right and clear, the argumentation has literally flowed to carry the reader and the author to levels of signification as the content and context search for their relatives, since it is the living individual who is being written and writer at the same time. But then, Perfection is not the lifeworld of the finite, if not the metaphor for the end of learning, and thus for the end of Time, an unsustainable myth for finite beings, if any others, since Infinity is no different than Reentrance (Rapoport 2013, 2014). The Ancient ones called it Ouroboros, but the HKBLs have intertwined foldings and self-penetrations that Ouroboros cannot live through its one-dimensionality.

To conclude this articulation, signification has shown to be universal. We are being signified and signifying the world, in a such a complex beautiful weaving, that the feeling of the naturality of some anthropocentrism is validated, as undissociable artists of Wholeness. Weaved in and by wonder and creativity, we look at the world for action, to return to ourselves and to reach out and inbound to Otherness, so we can conclude with an assertion, perhaps an act of Faith, that there is a Will that weaves our lifeworld, to which we return in wonderment to weave Will as unseparable of our own will, unbeknownst to us or not, and both at the same time.

Acknowledgments The author is deeply grateful to Prof. Ana-Teresa Tymieniecka for the opportunity of presenting this work at the 62nd International Phenomenology, “The Forces of the Cosmos and the Ontopoietic Genesis of Life”. To Craig Nevin for pointing out the inverted retina. This work would not have been possible without the loving patience and support of Sonia, my wife, who endured all the way through the writing of this contribution, my Ulyssean journey.

Appendix: The Self-Referential Torsion Geometry

Figure 7 shows the meaning of torsion. In an otherwise perfect crystal (whose vertices are described in red), i.e. one free of inhomogeneities (in practice, difficult to achieve) an edge dislocation is produced, either by removal (i.e., introduction of

singularities) of atoms of the crystal, as the figure shows, or by introducing extra material, in short, both inhomogeneities. Torsion can be introduced by shear (i.e. the relative motion of two planes) as Fig. 7 shows. Think of a caterpillar which moves a lattice a step at a time, and the shear produces the torsion of the crystal; this shear produces a vortical motion on the vertical plane to the shearing plane under the mixing of layers for small that in can be; we shall assume, to keep to the essentials, that these motions are planar, i.e. layers do not mix under shear to retake the issue later. Another analogy is that of a rug, which moving in the perfect background of the homogeneous crystal; local changes affect the whole structure; the analogy strikingly applies to the crease (the folded rug) formation in the gastropore invagination we encountered in Fig. 4. It can also be produced by a hole in the surface, producing an embryological expansion wave. Thus, it is an action-dependent participative geometry introduced in terms of inhomogeneities by the subject, say the caterpillar, or more basically the photon. This stands in stark contrast with the homogeneous situation of a Cartesian ideal geometry exterior to the subject, which corresponds in the continuum limit in which the atoms of the crystal approach indefinitely, i.e. the continuum hypothesis of Einstein, which due to the lack of a singularity, it corresponds to the zero torsion metric-based geometry of General Relativity. In short, to have loci, self-referentially *dislocations* are needed; these are the inhomogeneities that make a geometrical locus. The most basic dislocation is produced by a photon, a quantum particle, a singularity of an electromagnetic field. The parallelograms where inhomogeneities are present do not close, while in the *perfect crystal do close*, indicating a *self-referential trivial loop*: by default is indeed a loop, i.e. closed without mediations. Instead, in the former case a pentagon is produced. The fifth newborn side at the upper right side of the center, joining \mathbf{Q}' with \mathbf{b} , is the torsion – the self-referential mediator; it is necessary and sufficient to the effect of completing the self-referential closure of the otherwise closed parallelogram; we shall explain this further below. As the figure shows in the center, the torsion appears producing a trapezoid with vertices \mathbf{P} , \mathbf{Q} , \mathbf{P}' and \mathbf{Q}' , since the upper side is now longer than the lower one. Yet trapezoids are themselves Moebius Bands cut transversally, say along the line on the Moebius Band below joining \mathbf{P} (\mathbf{P}') and \mathbf{Q} (\mathbf{Q}') below, and laid open on a plane, which by identifying the opposite lateral sides \mathbf{PP}' , \mathbf{QQ}' , on a previously 180° twist of the trapezoid, re-establishes thus the Moebius Band, as shown below in Fig. 11.

This completion (actually a mediator with respect to self-reference), the torsion, establishes a loop, say starting on \mathbf{Q} goes to \mathbf{P}' , continues to \mathbf{Q}' , further to \mathbf{P} via \mathbf{b} (**changing thus the direction of this side contrarily to the direction of the shear**) to finally reach back to \mathbf{Q} ; we depicted these directions on Fig. 11c. Thus, it is a non-trivial self-referential action, to return to the identity, either on the sheared plane or out of it by the vortical twist installing the Moebius Band, depicted by the blue vectors in Fig. 11c. As a *loop* yet with its upper and lower sides (drawn with red) now being considered as the edges of the Moebius Band, it establishes the characteristic **uniqueness of edge of the Moebius Band, since the seemingly distinct edges \mathbf{PbQ}' and \mathbf{QaP}' , which are transversed with opposite directions relative to the shearing motion, become parts of a single cycle; otherwise stated, this is the 2:1 resonance.**

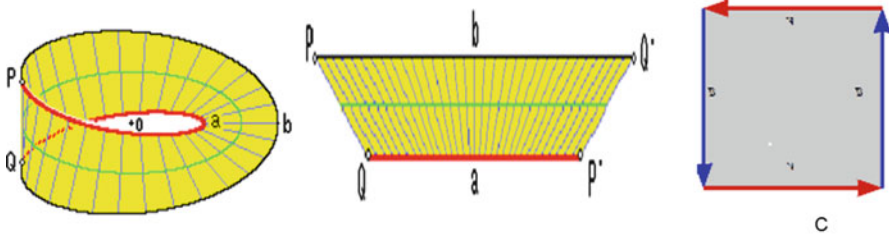


Fig. 11 The Möbius band cut along PQ unfolds to the trapezoid in the middle with P on the Möbius Band connected to $Q'=Q$ (the upper side), and Q to $P'=P$, the lower side, respectively. On the rhs, C depicts the identifications that produce the projective plane, a non-orientable surface

Thus, would we finally identify them topologically with their opposite directions as in Fig. 11c with sides drawn on red, we get the *projective plane*, rather than the *Möbius Band*. In the case of Einstein's General Relativity, the closedness of the loop is by default, since zero shear is assumed and thus, the torsion $Q'b$ does not appear if not the null vector, and thus the trapezoid collapses to a parallelogram. Would the fifth side $Q'b$, be equal in length to the other four, we would have the fivefold symmetry typical of quasicrystals and thus the Fibonacci sequence is embedded in this symmetry and a fortiori, the Golden Mean, Φ .

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Program

The World Institute for Advanced Phenomenological Research and Learning

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Anna-Teresa Tymieniecka, President; Daniela Verducci, Vice-President

The 62nd International Congress of Phenomenology

Location: Lucernaire Centre National d'Art et d'Essai, Paris, France, August 8–10, 2012

August 8–10, 2012

PROGRAM

Topic: *THE FORCES OF THE COSMOS AND THE ONTOPOIETIC GENESIS OF LIFE*

The Congress begins at 9:00 a.m., August 8, 2012 at Lucernaire Centre National d'Art et d'Essai, Paris, France

Conference Director: Daniela Verducci, Vice-President, World Phenomenology Institute

Program Presided by: Anna-Teresa Tymieniecka, President, World Phenomenology Institute

Local Organization Committee: Carmen Cozma, Claire Hill, Konrad Rokstad, Leszek Pyra, Daniela Verducci

International Scientific Committee, Directed by Angele Kremer-Marietti (FRANCE):

AZERBAIJAN: Salahaddin Khalilov; FRANCE: Claire Hill; ITALY: Angela Ales Bello, Francesco Totaro, Daniela Verducci; NORWAY: Konrad Rokstad, POLAND: Maria Bielawka, Mariola Sulkowska-Janowska; TURKEY: Klymet Selvi, Erkut Sezgin; UNITED STATES: Oglu Louchakova-Schwartz, Patricia Trutty-Coohill, Anna-Teresa Tymieniecka

SCHOLARLY PROGRAM

WEDNESDAY, AUGUST 8, 2012

9:00 – 12:30, Theatre Noir

PRESIDENTIAL ADDRESS

Anna-Teresa Tymieniecka

PLENARY SESSION I

Chaired by: Angele Kremer-Marietti, Paris, France

Communicative Virtues of the Phenomenology of Life

Daniela Verducci, Università degli Studi di Macerata, Italy

Toward a New Enlightenment: Metaphysics as Philosophy of Life

Nicoletta Ghigi, CIRF (Roma), Italy

Moral Excellence as Cosmicization Human Beingness in the *Ontopoietic* Perspective

Carmen Cozma, University “Al.I.Cuza”, Iasi, Romania

The Inseparable Link between “Cosmology” and “Life World” in Anna-Teresa Tymieniecka’s Philosophy: The Originality of a New Perspective of the “Real Individual and Autonomous Being”, A Possible Comparison with Hedwig Conrad-Martius’ “Phenomenological Realism”

Francesco Alfieri, OFM, Convento “Cristo Re”, Martina Franca, Italy

The Forces of the Cosmos before Genesis and Before Life: Some Remarks on Eugen Fink’s Philosophy of the World

Simona Bertolini, Università de Bologna, Italy

12:30 – 13:30 LUNCH

WEDNESDAY, AUGUST 8, 2012

13:30 – 17:00, Theatre Noir

SESSION I

Chaired by: Carmen Cozma, University “Al.I.Cuza”, Iasi, Romania

The Modern Concept of the Individual and the “Forces of Nature”

Oliver W. Holmes, Wesleyan University, Middletown, Connecticut, United States

Platonian Chora in the Light Of Husserl's Concept of Transcendental Constitution

Maria Bielawka, Krakow, Poland

Transformation in Phenomenology: Husserl and Tymieniecka

Anar Jafarov, The East–west Research Center, Baku, Azerbaijan

Ontopoietic Process of Life in Kierkegaard's Books: Zoe and Bios

Elodie Gontier, Universite de la Sorbonne, Paris, France

Edifices

Semiha Akinci, Anadolu University, Tepebasi-Eskisehir, Turkey

The Problem of Unconscious Phenomena in Phenomenological Practices

Nevia Dolcini, University of Macau, China

WEDNESDAY, AUGUST 8, 2012

13:30 – 17:00, Paradis

SESSION II

Chaired by: Detlev Quintern, Istanbul, Turkey

The Cave, the Lifeworld and the Tradition: The Transcendence-Immanence Contrast Perspective

Abdul Rahim Afaki, University of Karachi, Pakistan

Wahdat al-Wujud and Logos of Life: The Philosophical Comparison

Konul Bunyadzade, The East–west Research Center, Baku, Azerbaijan

The Forces of the Cosmos and the Sense of Life in Sufism: A Philosophical Reading of the Sufi Way Towards the Creator

Benedetto Cortellesi, Pontifica Universtas Lateranensis, Italy

Consciousness of the Cosmos: A Thought Experiment Through Philosophy and Science Fiction

Sibel Oktar, Ozyegin University, Istanbul, Turkey

Intentionality of Time and Space and Quantum-Phenomenological Sense of Space

Mamuka G. Dolidze, Institute of Philosophy of Georgia, Tblisi, Georgia

Duality and the 2011 Nobel Prize in Physics

Tsung-I Dow, Emeritus: Florida Atlantic University, United States

WEDNESDAY, AUGUST 8, 2012

13:30 – 17:00, Theatre Rouge

SESSION III

Chaired by: Francesco Totaro, Universiata degli Studi de Macerata, Italy

Anthropological Regression in the Modern World Versus Anna-Teresa Tymieniecka's Metaphysics of Ontopoiesis of Life

Jan Szmyd, University of Krakow, Poland

Biologically Organized Quantum Vacuum and the Cosmic Origin of Cellular Life

Attila Grandpierre, Konkoly Observatory, Zebegeny, Hungary

The Question Concerning Technology in Merleau-Ponty's Critique of Objective Thought

Claus Halberg, University of Bergen, Norway

The Open Void

Marguerite Harris, Indiana University, Bloomington, Indiana, United States

Ontopoiesis of Eidolon and Transcendental Schematism in Cassirer and the Concept of Ontology in Meinong and Quine

Giuseppina Sgueglia, La Pontifica Universitas Lateranenensis, Italy

Logos Omnia, Cosmos and the Limits of Perception: Tymieniecka's Phenomenological Ontology in Light of Merleau-Ponty's Insights

Olga Louchakova-Schwartz, Institute of Transpersonal Psychology, Palo Alto, California, United States

THURSDAY, AUGUST 9, 2012

9:00 – 12:30, Theatre Noir

PLENARY SESSION II

Chaired by: Daniela Verducci, Università degli Studi di Macerata, Italy

Human Soul and Life Horizons

Maija Kule, University of Latvia

Towards a Phenomenology of Life and Invisible

Giovanna Costanzo, Università degli Studi di Messina, Italy

Intentionality, Telos, Transcendentalism as Ontopoietic Forces of the Cosmos

Francesco Totaro, Università degli Studi di Macerata, Italy

Ontopoiesis in Ben Okri's Poetic Oeuvre and *A Time for New Dreams* (2011)

Rosemary Gray, University of Pretoria, South Africa

Pythagoras at Chartres

Patricia Trutty-Coochill, Siena College, Siena, Loudonville, United States

Ciphering, Novum, Intuition and Imaginatio Creatrix: An Approach to Zoroaster's Gathas

Martin Schwartz, University of California, Berkeley, United States

12:30 – 13:30 LUNCH

THURSDAY, AUGUST 9, 2012**13:30 – 17:00, Theatre Noir****SESSION IV**

Chaired by: Leszek Pyra, Krakow, Poland

The Cosmos and Bodily Life on Earth

Konrad Rokstad, University of Bergen, Norway

Jolanthe's Cosmos: Knowing Without Seeing

Detlev Quintern, Istanbul, Turkey

Philosophical Hermeneutics Confronted by that which is Different

Aleksandra Pawliszyn, Uniwersytet Gdanski, Poland

Evolution of Matter and Spirit, Rediscovering Slowackis' Mysticism and de Chardin's Theology

Piotr Popiolek, Pontifical University of John Paul II in Cracow, Poland

Anna-Teresa Tymieniecka's and Max Scheler's Phenomenology as the *Ontopoietic Genesis of a Manager's Life*

Bronislaw Bombala, University of Warmia and Masuria, Poland

The Eschatology of Ontopoiesis: Kanzi

Johannes Servan, University of Bergen, Norway

THURSDAY, AUGUST 9, 2012**13:30 – 17:00, Paradis****SESSION V**

Chaired by: Maija Kule, University of Latvia

Novel as Path: Mamardashvili's "Lectures on Proust"

Mara Stafiecka, Rockford, Illinois, United States

Comparative Phenomenology of Singing and Dance as Artistic "Instruments" Incorporated into the Body of their Performer

Alessia Rita Vitale, University de la Sorbonne Paris IV, France

Phenomenology and Archeology: Methodical Insights and Thematic Inspirations

Jaroslava Vydrova, Filozoficky ustav SAV, Bratislava, Slovakia

Plotinus "Enneads" and Self-Creation

Ineta Kivle, J. Vitols Latvian Academy of Music, Riga, Latvia

Directing Anatoly Vasilyev, from Individual Creative Manner to the Method

Valery Kolenova, Vladimir State University, Russia

Kant and Starry Sky

Rihards Kulis, University of Latvia

THURSDAY, AUGUST 9, 2012**13:30 – 17:00, Theatre Rouge**

SESSION VI

Chaired by: Rosemary Gray, University of Pretoria, South Africa

Teleology in Nature and Life-Transforming Art

Vladimir L. Marchenkov, Ohio University, Athens, United States

The Creative Potential of Humor

Anna Malecka, AGH - University of Science and Technology in Krakow, Poland

Artist's Personal Cosmogony, Andre Gide and Jaroslaw Iwaszkiewicz's Concept of Cosmos, Genesis of Life and Origin of Art

Daria Gosek, Jagiellonian University, Krakow, Poland

Educational Paradigm Sifting Towards Phenomenological Pedagogy

Klymet Selvi, Anadolu University, Tepebasi-Eskisehir, Turkey

The Call of Philosophizing by Writing and Reading Characters by Significations Unfolding in Internal Connections at the Moment of Spacing as Letters, Words, Voices of Speech

Erkut Sezgin, Istanbul Kultur University, Turkey

Notes for a Phenomenological-Existential and Hermeneutic Psychotherapy: an Introduction

Paulo Roberto R. Machado, Universidade de Evora – Portugal, Villa Mariana - Sao Paulo, Brazil

FRIDAY, AUGUST 10, 2012

9:00 – 12:30, Theatre Noir

PLENARY SESSION III

Chaired by: Konrad Rokstad, University of Bergen, Norway

Cosmic Order and Exoneration of the Beautiful: Visions of the Problem in Contemporary Philosophy

Ella Buceniece, University of Latvia

The Law of Opposites in the Ontopoiesis of Life and in Language

Zaiga Ikere, Daugavpils University, Latvia

“One, Two, Three, but where is the Fourth...?” Plato's Conception Tripartite/Qadripartite Nature of Being and Becoming and Its Evolvment in Contemporary Philosophy

Velga Vevere, University of Latvia

The Forces of Darkness and the Powers of Goodness: Jerzy Nowosielski's Concept

Katarzyna Stark, Krakow, Poland

Le Chaos du Monde Sensible et la Creation d sens Rudimentaire (a partier de Plotin)

Robert Karul, Institut de Philosophie, Bratislava, Slovakia

Cosmic Forces and Human Existence

Manjulika Ghosh, University of North Bengal, Darjeeling, India

12:30–13:30 LUNCH**FRIDAY, AUGUST 10, 2012****13:30–17:00, Theatre Noir****SESSION VII**

Chaired by: Patricia Trutty-Coohill, Siena College, Siena, Loudonville, United States

The Unity of Eastern and Western Thought Traditions in A-T. Tymieniecka's Phenomenology of Life

Salahaddin Khalilov, The East–west Research Center, Baku, Azerbaijan

Transcendental Morphology: A Phenomenological Interpretation of Cosmos of Subject

Bence Peter Marosan, Eotvos Lorand University, Budapest, Hungary

The Outside's Inside: The Phenomenology of the External World in Hedwig Conrad-Martius' Thought

Ronny Miron, Bar Ilan University, Ramat Gan, Israel

Time and the Mystery of Existence

Ashok Kumar Malhotra, State University of New York, Oneonta, United States

The Idea Contemporary Dance in the Context of Ontopoiesis of Life

Olga Polisadova, Vladimir State University, Russia

Templars and the Holy Graal: A Cross-Reference Relationship in an Ontopoietic Perspective

Mina Sehdev, Macerata, Italy

FRIDAY, AUGUST 10, 2012**13:30–17:00, Paradis****SESSION VIII**

Chaired by: Ella Buceniece, University of Latvia

How to Approach Heideggerian Gods?

Jani Vanhala, University of Helsinki, Finland

The Forthcoming Sciences of Life and Life of Sciences: From Nietzsche and Husserl and Varela and Beyond

Ammar Zeifa, Universite Paris I, France

Motion in Crisis: Why the Analytic Principles of Thought Destroy Motion and Life in the World

Ion Soteropoulous, Apeiron Centre, Paris, France

**“Heraclitus/Nietzsche/Heidegger in Πόλεμος”: “τὰ δὲ Πάντα οἰακίζει
Κεραινός” – Heraclitus**

Kiyomo Murata-Soraci, Tama University, Japan

***Lebenswelt* and Operational Methodology in the Philosophical and the
Epistemological Reflections of Hugo Dingler**

Dario Sacchi, Università Cattolica del Sacro Cuore, Milano, Italy

The Permanent Creativity of the Self

Stefano Polenta, Università de Macerata, Italy

Somatic Unity in Cosmic Flux

Paul Martin Ryan, Czech Republic

FRIDAY, AUGUST 10, 2012

13:30–17:00, Theatre Rouge

SESSION IX

Chaired by: Erkut Sezgin, Istanbul Kultur University, Turkey

Cognition and Emotion: From Dichotomy to Ambiguity

Simen Oyen *and* Claus Halberg, University of Bergen, Norway

The Meeting of Man with Man

Leszek Pyra, Krakow, Poland

**Humour, an Enlightening and Restorative Force of the Inner *Cosmos*; A
Phenomenological Approach**

Tereza-Brindusa Palade, National School of Political Studies and Public
Administration, Bucharest, Romania

Edios and Simulacrum: Turn on Logo to Linguistic-Matezis

Rimma Kurenkova *and* O. Gubanov, Vladimir Pedagogical Institute, Russia

Hyper Klein Bottle Logophysics Ontopoiesis of the Cosmos and Life

Diego Rapoport, Universidad Nacional de Quilmes, Beunos Aires, Argentina

Comments on Max Scheler’s Thought and Philosophical Counseling

Lucrezia Piraino, Università degli Studi di Messina, Italy

Active and Passive Analysis of a Value

Susi Ferrarello, University of Rome, La Sapienza, Italy

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