WIM VAN DEN DUNGEN



BOOK OF LEMMAS

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Fundamentals of Ontology

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TAURUS Press Belgium 'We thus see that all the wrangling about the nature of a thinking being, and its association with the material world, arises simply from our filling the gap, due to our ignorance, with paralogisms of reason, and by changing thoughts into things and hypostatizing them.'

Kant, I.: Critique of Pure Reason, A394-398

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"Creativity" is the universal of universals characterizing ultimate matter of fact. It is the ultimate principle by which the many, which are the universe disjunctively, become the one actual occasion, which is the universe conjunctively. It lies in the nature of things that the many enter into complex unity. – Whitehead, A.N.: *Process and Reality*, § 31

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Preface

Logic, epistemology, and ontology are the cornerstones of these Studies in Philosophy (1). The present book captures its salient details. This philosophical project started about forty years ago. In 1981, I wrote Sketches of an Absurd World View; a somewhat absurdist and annihilationist analysis of existence in Dutch. In 1983, after reading Hegel's Phänomenologie des Geistes, this slightly suicidal view was out, and my long and vain search for eternalist answers initiated. The impulse to manifest a philosophical system became poignant. Given my daily exercise of Yoga (1982), the mystical experience could not be neglected or sidetracked. It had to become part of the equation. Won over by reading Kant's Kritik der reinen Vernunft that radical nominalism was unavoidable, a conflict arose between, on the single hand, the vogic fact of mystical experience, and, on the other hand, its 'explanation' in eternalist terms. The tension between reason and direct experience lasted until all substantialist (essentialist) superstructuring of the direct experience of the ultimate ceased, and a process-based, modal approach prevailed (2006). In 1992, integrating my comparative studies of the knowledge-manipulation of a wide range of Western and Eastern mystics (mysticology), the *Tractatus Logico Tragi-Comicus* got written. Besides a considerable reorganization of themes, this English text invited decennia of study and practice ahead. From 1993 onward, my Dutch texts⁽²⁾ were privately published, and reactions were gathered. From 1996 onwards, thanks to the internet (www.sofiatopia.org), my hypertexts were shared.

Starting with *Prolegomena* (1994) and *Kennis* (1995), both in Dutch, the issue of the *possibility* and *development* of knowledge (Kant) was further scrutinized in several English papers: *The Rules of the Game of True Knowing* (1999), *Clearings: On Critical Epistemology* (2006) and *Intelligent Wisdom: from Myth to Nondual Thought* (2007). These epistemological studies were summarized in *Regulae* (2016). Cognition is given form in terms of genetic epistemology. The traditional Piagetian scheme was improved by subdividing our cognitive capacity into three cognitive stages (ante-rational, rational, and meta-rational), covering seven modes: mythic, pre-rational, proto-rational, and formal, critical, creative, and nondual. The nondual mode is the gnostic mode characterizing mysticism, corresponding with 'intellectual perception' (Cusanus), 'intuition' (Spinoza), 'prehension' (Whitehead), or the Indian *nirvikalpa jñāna*. In transpersonal philosophy, this level of mystical experience is related to self-realization (preluded by self-actualization).

Hermeneutical studies, all available on the internet, of Jewish, Christian, Sūfī, Hindu, and Buddhist texts backed my mysticological efforts: YHVH (1995), Essay on Sūfī Themes (1999), Knowledge and Love-Mysticism (1994), Mystical Theology (1996), The Wisdom Discourse or the "Logia Iesu" (1997), The Gospel of (according to) Thomas (1997), The Third Life (1998), The Didache (2001), Thirty Verses (2015) and The Yoga-Sūtra (2014). Applying genetic epistemology to the ante-rationality of Ancient Egyptian thought was the topic of a paper entitled: On the General Cognitive Features of the Ante-rational Mind (2003). It assisted in translating and understanding a series of ancient sapiential discourses and religious texts, recently brought together in Ancient Egyptian Readings (2018). The influence of Ancient Egyptian thought on Greek philosophy (Hermes the Egyptian, 2002) and the Ancient Egyptian roots of Western monotheism (The Great Hymn to the Aten, 2001, Amun, the Great God, 2002), as well as a philosophical inquiry into henotheism (On Henotheism, 2004), made it possible to more clearly identify the Dharmic path (On the Deity, 2008) It distinguishes this alternative, process-based take on existence, from the theist, substance-based view prevalent in all theisms.

In 2006, the study and practice of the Buddhadharma⁽³⁾, as well as a neurophilosophy of spiritual experience, underlined the experiential possibility of meta-rational cognition (*A Philosophy of the Mind and Its Brain*, 2009), a 'special' nondual and non-conceptual mode of cognition known as *gnosis*. Strict nominalism was also found in Buddhist epistemology, particularly in the Consequentialist Middle Way School of Nāgārjuna. The distinction between Rangtong (self-emptiness) and Shentong (other-emptiness) points to how mystical experience is best superstructured (modally instead of substantially). These issues were recently covered in *Emptiness Panacea* (2017). *Criticosynthesis* (2008) discussed a series of normative issues rooted in strict nominalism, including epistemology, ethics, and aesthetics. However, the philosophy of the practice of philosophy and a critique of the concept of the Divine were advanced.

These hermeneutical studies served the purpose of finding a reliable ontological principal and, therefore, a metaphysical discourse taking heed of the limitations of cognition. This principal was found when substance-thinking was radically relinquished without eliminating rationality, science, or metaphysics. It could only be done by building on the foundations of process, becoming, and modality. The influence of Heraclitus, Nāgārjuna, Ockham, Tsongkhapa, Kant, Wittgenstein, and Whitehead was unmistaken. In my Critique of a Metaphysics of Process

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(2012), inspired by the traditional classification of topics, a division into two parts was worked out. In the first part, called 'General Metaphysics,' metaphysics in general and ontology are explained, laying the groundwork (chapter 1) and attending the necessary requisites for any metaphysical inquiry (chapter 2). After having clarified the conventional nature of immanent metaphysics (chapter 3) and defining the limitations of speculative thought in terms of creative thinking (chapter 4), the mind is prepared for ultimate truth (chapter 5) and, to ascertain the lack of inherent selfhood and lack of inherent phenomena, an ultimate logic was developed (chapter 6). Finally, the general features of the world were derived (chapter 7). In the Second Part, called 'Metaphysics of Specifics,' particular questions will be answered within the proposed ontological scheme framework. These bring to bear cosmology (chapter 8), cybernetics (chapter 9), biology (chapter 10), anthropology (chapter 11), mysticism (chapter 12), and theology (chapter 13). Need it to be written the author is incapable of giving a detailed account of all these specific domains? General headings may be defined and situated in the context of the present ontology. Still, even this needs further inquiry and so can only be provisional. Likewise, the demarcations suggested critical epistemology and general metaphysics are general characterizations.

The Book of Lemmas, introducing metaphysics, was preceded by Regulae, an introduction to critical epistemology, summarizing the historical and thematic roots of the strict nominalist epistemology at hand. The principles, norms, and maxims of Criticism are (a) normative and strictly nominalist (qua theory) and (b) genetic and contextual (qua practice). A 'lemma' is a subsidiary proposition assumed to be true to prove another proposition. Here, each of the lemmas is a heading indicating a possible set of arguments, annotations, summaries of outstanding points of metaphysics, and ontology put forward, thus assisting further development and alternative thematic avenues in following lemmas. They act as literary, textual devices introducing the basic framework of ontology (as part of metaphysics), rooted in critical epistemology (part of normative philosophy).

Because the lemmas are interconnected, they are not aphorisms. They outline process-ontology, the modular view on what is shared by all that exists, a perspective not introducing eternal substances but adhering to impermanence and dependent origination without eradicating the ultimate and the absolute.

The present book has in mind those who quickly wish to address the salient points regarding normative thinking and adjacent metaphysical speculation involving presentation, definition, foundational themes (actual occasion, domains of process), and basic demarcations (between science and metaphysics, between immanent and transcendent metaphysics, between world and world-ground, substance and process, etc.). Besides formulating the issues discussed here mainly in terms derived from the Western philosophical tradition, crucial Buddhist concepts are not overlooked. It promotes a transcultural synthesis, integrating what is deemed the best understanding irrespective of the general cultural background. It is indeed possible for the non-Eastern mind to grasp Eastern thought, assimilate it, and integrate it as part of a universal view.

May this book repel the ignorance attributing something non-existent (substance) to what exists (process) and clarify as much as possible.

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'As is the case with fundamental moral norms, the norms of knowledge must also be posited as inevitably presupposed in every cognitive act. It means that in this knowledge, one cannot choose in favor of or against these norms. Moreover, because not a single fact can explain them, they constitute the groundless ground of knowledge. This "fact of reason" reveals both the limitations of conventionalism and foundational thought.

Oger, E.: Kennis en Waarheid, 1976, p.298, my translation

'Experiences arise *together* with theoretical assumptions, *not* before them, and an experience without theory is just as incomprehensible as is (allegedly) a theory without experience ...'

Feyerabend, P.: Against Method, 1975, p.168.

Introduction

Natura abhorret a vacuo

Ontology, the study of what is *shared in common by all that exists*, is the capstone of the love of wisdom and the ultimate speculative goal of all metaphysical inquiry, both immanent (within the world) and transcendent (beyond the world).

Despite the wide variety of things (including conscious persons endowed with a human mind), ontology tries to lay bare the ultimate nature of all these phenomena. In vain, no doubt. However, in the process of this conceptual understanding, coarse, subtle, and very subtle ideas are put in place. In the new ontologies and the dialogue between various metaphysical views, alternative concepts inspiring science may emerge. To further the speculative, rather descriptive branch of philosophy or 'metaphysics,' the normative disciplines of logic, epistemology, ethics, and aesthetics are made to influence the mind first (Criticosynthesis, 2008). First are the *principles* of correct reasoning (transcendental logic), followed by the norms of valid knowledge (theory of knowledge) and the maxims of knowledge-production (the practice of knowledge), completing epistemology. Then moral judgments about the good (the just, fair, and right) are at hand, providing moral rules for what must be done (ethics). Finally, judgments of taste ensue about what we hope others may imitate, namely the sublime beauty of excellent and exemplary states of matter (aesthetics). These normative disciplines foster precise goals. Logic targets correctness, epistemology validity, ethics, goodness, aesthetics, unity, and harmony.

The absence of these rules, which we must and have followed all the time, incapacitates any metaphysical enterprise. Speculative depth and extend will be lacking to conceptualize the ultimate nature of phenomena. When Andronikos of Rhodos (first century CE) classified the works of Aristotle, he placed the books on First Philosophy *next* to fourteen treatises on Nature (*ta physika*), called '*ta meta ta physika*' or 'the (books) coming after the (books on) nature.' Thus 'metaphysics' was born. The names given to his First Philosophy vary from 'theology,' 'wisdom' (Aristotle), 'transphysics' (Albertus Magnus), 'hyperphysics' (Simplicius) to 'paraphysics' ... Playing on the ambiguity in '*meta*,' it was also taken to connote what is *beyond* sensible nature. For Aristotle, metaphysics was (a) the science of first principles and causes, (b) the science of being *as being*, and (c) theology.

Did Andronikos leave us a hint? Should metaphysics, before starting to speculate, first study 'solid' physics, i.e., science? Can, without the strong backbone of valid empirico-formal knowledge, without plausible insights attracting the broadest consensus, the totalizing conceptualization sought to be anything other than incomplete and/or flawed, or worse: irrational?

Correctness and Validity

Logic and epistemology teach how formal and empirico-formal knowledge and its advancement are possible. They focus on conventional truth, the functional reality of sensate and mental objects shared with other knowers. The outstanding demarcation separates valid from invalid conventional knowledge. The former is a conventional truth, the latter a conventional falsehood. Science and philosophy seek to advance an understanding based on truth, conventional, and ultimate. Conceptuality is conventional.

Logic rules the architecture of conceptual reasoning. Classical formal logic identifies truth-values, fallacies, consistency, coherence, and completeness. It used the axioms of identity, non-contradiction, and excluded third. It invites us not to multiply entities needlessly (parsimony) and mostly builds on symmetry, generating elegance. Non-classical logic (formal and informal) develops systems of inference based on alternative axioms or principles to understand particular objects like action, possibility, or quantum phenomena. They teach us to work with paradox, absence of coherence, and various degrees of contradiction (paraconsistency).

Applying classical formal logic to the question of the ultimate nature of phenomena, or ultimate analysis (cf. *Ultimate Analysis*, 2009), results in the conceptualization of the absence of substantial reality of oneself (the identitylessness of persons) and the understanding of the lack of such in other phenomena (the identitylessness of phenomena). It means inherent existence has not been found, and all arguments leading to its possible affirmation yield unwanted consequences. This radical absence or lack of substantial, essential existence is called 'emptiness' (śūnyatā), as studied in *Emptiness Panace* (2017). It is the ultimate nature of all possible phenomena, their ultimate truth.

This emptiness found through ultimate analysis conceptualizes the absence of own-nature (*svabhāva*) or 'self' (*ātman*). This self-emptiness underlines no underlying substratum (*hypokeimenon*) is found. There is no *fundamentum inconcussum*, a stable, fixed, and permanent ground to erect

the conceptual edifice upon. It does not mean identity and function do not exist. The Middle Way approach steers from nihilism (underplaying existing) and eternalism (overstating existence). While no inherent existence can be found, it becomes clear that dependent origination remains after the actual superimposing of substantial existence on phenomena has been vacated. It is the ongoing sea of process, of relational existence, of entangled phenomena. This sea is a vast network of material, informational, and sentient occasions. Underplaying existence ushers in nihilism. Substantial phenomena can not be identified and are not functional. Overplaying existence leads to eternalism, affirming phenomena possess a substantial, essential own-nature from their own side. Both nihilism (absence of substance is nothingness) and eternalism (substance is all there is) are weak positions. A mind thinking along those lines is either self-annihilating or self-cherishing. Both tendencies point to incorrect ontological presuppositions. Self-grasping has not come to an end. If metaphysical insight (sophia) is to be gained, both mentalities will be abandoned.

In defining valid conventional knowledge, logic describes the rules of correct conceptual thinking, and epistemology demarcates the rules of true knowledge regarding valid empirico-formal statements of fact. Indeed, science is validated by experimentation and argumentation, metaphysics only by the latter (cf. *Criticosynthesis*, 2008, chapter 2). Both science and philosophy depend on logic, the building block of correct, well-formed conceptualization. Classical formal logic is the abstraction of our 'Newtonian' perspective on what exists. It accepts identity to be fixed (A = A), considers contradiction as disastrous (A $\neq \sim$ A), and does not accept a *tertium comparationis* (A $v \sim$ A). This axiomatic base reflects our familiar take on conventional reality. Objects remain the same over time and are not identical to what they are not. Between it and its opposite, no middle ground exists.

Rejecting substantialism (or essentialism), i.e., the idea phenomena are inherently established before and independent of the designations of the conceptual mind, metaphysical speculation focuses on becoming instead of being, on other-power instead of self-power, on existence-as-becoming instead of existence-as-being. Metaphysics of process takes full advantage of the practical conclusion drawn from the logic of ultimate analysis: no inherently existing phenomena exist. Metaphysics of process is not the mummification of ideas, the denial of diversity and impermanence (of life itself) for the sake of fictional stability, a Jenseits of imagination, or a Platonic world. Nor is it the reification of the objective and subjective conditions of all possible

thought. Metaphysics of process accepts the results of logic and science: absolutely isolated objects cannot be found. Metaphysics is not a speculation on substance but about process, modality, and relationality. The latter encompasses absence and presence; the arising, abiding, and ceasing of phenomena. It does so because only interdependent, impermanent phenomena come forth, stay for a while, and end. These define a stream of functionally interrelated happenings (efficient) and moments of creative advance (finative). Ergo, metaphysics is not equated with idealism or Platonism. Nor with realism or Aristotelianism.

Pliancy of Mind

Insofar as our speculative pursuit does *not* consider the link between, on the one hand, the existential conditions defining the egological state of the mind of *Homo normalis* and, on the other hand, the capacity to cognize the conventional and ultimate nature of things, ontology is nothing more than a subtle ornament of dry metaphysical intellectualism. Moreover, these intellectual activities miss the target, like someone describing how to swim without ever touching the water. The conclusions reached may be accepted or rejected without ceasing the existential dissatisfaction, both emotional and intellectual, present in those in which these ideas and their speculative study happen. This handicaps philosophy serves practical goals! How to outline a philosophy of the practice of philosophy?

Even if the necessity of the arguments of sophia (prajñā) cannot be obscured or confused, their influence on sensation, thought, feelings, action, and consciousness are insufficient to liberate the mind from innate mental obscurations and afflictive emotions, and this by unconcealing ultimate (absolute) truth, i.e., by the direct, non-conceptual and nondual experience or *gnosis* (*jñāna*) of the ultimate nature of phenomena. Without considering the maieutic dimension assisting human beings' liberation, speculative philosophy does not take off without engaged thinking. Then barren academia is what is left. The Socratic intent opposes this hold of dry intellectualism on the pursuit of wisdom. The latter encompasses theory, practice, conceptual apprehension, and non-conceptual, nondual prehension. Philosophy is both abstract and concrete, both rational and intuitive. Both form a unity. An integral part of society, the practice of philosophy is entirely part of philosophical life, involving theory and practice. To self-realize the spirit of wisdom, this philosophical life calls for spirituality, or the art and science of addressing consciousness, thought, affect, volition, and sensation soteriologically.

The necessity of such a 'practice of philosophy' derives from wisdom's aim to reduce alienation and disorientation, promoting:

- (1) (inter) subjectivity: self-awareness, conscious of being a subject, a someone rather than a something, the First Person perspective, the ability to interact constructively with others, with openness, flexibility, respect, tolerance;
- (2) *cognitive autonomy*: the capacity to reason, to self-reflect, to be able to formulate ideas independent of traditions, integrate instinct and intuition rationally, dialogical ability, using arguments to posit opinions;
- (3) balance: awareness of the importance of happiness, justice, and fairness in thought, feelings, and actions, communicational action, building peace, mutual understanding, and acting against extremes like fundamentalism, nihilism, virulent skepticism, closed dogmatism, exaggerated relativism, blind materialism, naive spiritualism, etc.
- (4) *intellectual and spiritual concentration, sharpness, and depth*: creative capacity, originality, inventivity, novelty, and the spiritual exercises aiming at wholeness, leading to increased mental concentration, intellectual acuteness, and extension of interests and compass.

The abortion of the practice of sapience by the academy is a recent one. Let it be rejected. In a critical approach to philosophy, academic philosophy is characterized as both theoretical and practical:

A. Theory of wisdom: philosophy of the theory of philosophy:

- (1) philologistics: the history and encyclopedia of philosophy, hermeneutics, linguistics, philosophy of language, psychology, neurophilosophy, etc.
- (2) normative (judicial): logic, epistemology, ethics, and aesthetics;
- (3) descriptive (speculative): theoretical philosophy or metaphysics incorporating an ontology of cosmos, life, and man;
- B. *Praxis* of wisdom: *philosophy of the practice of philosophy*: the tools to apply philosophy in society, in terms of psychology, sociology, politics, economy, advising, counseling, self-actualization, etc. The 'theoretical' activity of the philosopher (reading, writing, teaching) needs to be complemented by the 'practical' activity of the same philosopher (listening, advising, mediating, mediating). Without input from *real-life* and real-time philosophical management, the mighty stream of wisdom becomes a serpentine of triviality and/or a valid pestilence of details pointless subtlety). It is in-crowd philosophy, elitist, and mostly useless.

Working together, contemplation (theory) and action (practice) allow wisdom to deepen, touching a broad spectrum of different types of interactions. Risks are taken. Opposition and creativity (novelty) must be given their 'random' place in institutional architecture. One must teach philosophers how to integrate themselves into the economic cycle. Kept outside the latter, state-funded philosophy rises. This situation does not benefit philosophy entirely on the contrary. Moreover, it also limits the possibility *of entering wisdom*, the mind directly witnessing the ultimate nature of all possible phenomena. In doing so, the absence of practice of philosophy hinders the depth and extent of philosophy's development.

Indeed, when human beings in general and philosophers in particular only care for their petty little kingdoms of trust and act accordingly, their minds miss the necessary *pliancy* to grasp, assimilate and integrate the truth concerning the nature of phenomena. The ability to be flexed without breaking comes from adapting to different conditions. This resilience goes hand in hand with a calm mind cherishing others more than oneself. The stuck, strained mind –accommodating itself first– loses the capacity to swim even if it wishes to do so by eliminating sapiential activities. Thus, when these minds enter the water, their views immediately drown. Only through love and compassion, i.e., the wish and activity of causing all possible others to be happy, does the mind slowly open up. Only with this pliant and calm mind may one try to take in the wisdom of realizing the ultimate nature of things (conceptually, as *sophia*, and non-conceptually, as *gnosis*).

Conventional truth, particularly functional interdependence, the bedrock of method and compassion, must be grasped before the wisdom directly witnessing phenomena as they may be discovered. One cannot philosophize with a mind stuck in the mud of self-cherishing and selfgrasping. Doing so leads to nothing except a waste of precious time and effort. It furthers no merit, reward, or solution. Ethics is thus a necessary prerequisite for the ultimate success of metaphysics in general and ontology in particular. It is an integral ingredient to make the mind capable of embarking with conventional truths, bringing them to the other shore of ultimate truth. Without compassion, indirect and direct wisdom cannot be found. Without wisdom, compassion is inefficient, i.e., it does not liberate from suffering. Reason without ethics is crippled, like seeing with one eye. Such reasonings are like poison in a pot, prompting the smart to put nothing in it. Of course, without compassion, the ultimate truth can be approached with ultimate analysis. Still, the resultant conceptual view on ultimate nature, lacking the functionality of conventional reality, will be nihilistic. Then, ultimate nature becomes a noumenon, a limit-concept, not

a nondual discovery of the natural Clear Light* of the mind. Emptiness is reduced to a void viewed as absolute nothingness, a mere formal condition (like Kant's transcendental unity of apperception).

To miss this important methodological role of ethics in ontology, so stressed in the East, particularly in the Buddhadharma, is to neglect the actual practice of philosophy to the advantage of a crippled theoretical definition of 'wisdom' as 'theory on the totality of being.' This mere academism is sterile, even in its subtlety. It does not lead to liberation, while ultimate truth *sets us free* from the obscurations caused by the 'Three Poisons' of ignorance (not knowing ultimate nature), craving (exaggerated attachment and clinging to sensate and/or mental objects), and hatred (rejecting and disliking sensate and/or mental object).

Unity and the Harmony of Mind

The mind can bring the manifold under unity. This is by integrating separate units and realizing a creative unison, an upgrading synthesis. This 'Gestalt' is more than the mere sum of its components. Complex aggregates ensue. And these are not disordered or amorphic. On the contrary, architectures and meaningful patterns are everywhere apparent in Nature. Pauli's exclusion principle rules even electrons. No two electrons can be simultaneously in the same state or configuration, accounting for the observed light emission patterns from atoms. The organization or code of these architectures is called 'information.' Just as noise is not sound, well-formed information has little redundancy. A compression of structure is aimed at; elegance, symmetry, a play of interdependence and interrelationality, highlighting the togetherness of all phenomena of Nature. These conditions are not part of logic per se but pertain to aesthetics, the judgment of beauty (cf. Criticosynthesis, 2007, chapter 5).

The metaphysical mind needs more than correctness, validity, and pliancy. A totalizing, all-encompassing intent must also be addressed. *Ti* tò ón? or: What is being? refers to this over-arching zeal of metaphysics. While for Aristotle, this 'being' was 'substance,' process metaphysics posits *actual occasions* as the final building blocks of that which is, i.e., the set of *all possible phenomena*. The totality of possibilities is thus aimed at. These are necessarily organized, for, to be arguable, metaphysics needs to be well-formed. Here, *forms of harmonization* enter the picture, for information is an architecture, i.e., a structure, form, or mathematical representation of process.

Harmony is a relatively continuous relational balance between phenomena, whereas forms of harmony are archetypal ways of balancing out. Balance can be weird, awkward, odd, strange, bizarre, absurd, grotesque, bombastic, exaggerated, etc. It evokes the pairing of symmetry and symmetry-break. The absence of balance is not a form of harmony but disharmony. In a mind able to speculate well, unity and harmony interlock. This final element capacitates the mind sufficiently to entertain metaphysics. Accepting correct reasoning and valid scientific knowledge, training mental pliancy, and fostering what brings unity and harmony, the calm mind becomes open, deep, sharp, acute, and clear enough to speculate.

NORMATIVE PHILOSOPHY					
OBJECT	'I THINK'	SUBJECT			
without an object not a single conceptualization	Transcendental Logic	without a subject nobody conceptualizes			
necessity of reality the idea of the 'real'	Factum Rationis	necessity of ideality the idea of the 'ideal'			
Epistemology knowledge – truth					
transcendental object of thought	Transcendental Logic Principles	transcendental subject of thought			
experiments correspondence	Theoretical Epistemology Norms	argumentations consensus			
research-cell	Practical Epistemology Maxims	opportunistic logic			

the production of provisional, probable, and coherent empirico-formal scientific knowledge we can hold to be true

Ethics volition - the good					
coordinated movement and its consequence	Transcendental Logic	free will			
duty – calling	Theoretical Norms	intent – conscience			
family – property – the (secular) state – the world	Practical Maxims	persons – health – death			

judgments about the good (the just, fair, and right), providing maxims for what must be done

Esthetics feeling - the beautiful

states of sensate matter or mental objects	Transcendental Logic	consciousness pursuing excellence and exemplarity
sensate and evocative aesthetic features	Theoretical Norms	aesthetic attitude
objective, social, revolutionary, and magisterial art	Practical Maxims	subjective, personal, psycho-dynamic, and total art

judgments about what we hope others may imitate, namely the beauty of excellent and exemplary states of matter

Conventional, Relative Truth

Because conventionally speaking, human beings only cognize through conceptual mentation and/or sensation, the conditions determining mental and sensate objects co-determine what we identify as a conventional reality. We thus prelimit objects in terms of the physical laws of perception, the psychophysical phenomenon of sensation, and the known cognitive mechanisms of positing mental objects with a conceptual, rational mind.

Conventional truth must accept the theory-ladenness of our observations, for a lot of objectivity does not eliminate subjectivity. The latter cannot be taken away. As long as the object and/or subject are not hypostatized, duality by itself poses no problem. Nevertheless, conventional truth does reify both the object and subject of cognition. Reified duality is always problematic.

Conventional, conceptual thought and its relative truth split every act of cognition into two independent and separate sides, juxtaposing a subject, defined as an object-possessor, and an object posited, designated, and owned by this endowed *cogito*. It is a dualistic elaboration assisting conceptual proliferation. However, both the object and subject are mutually dependent and inclusive. Without a subject, there is no object to possess. Without an object, there is no positing, grasping, or designating *cogito*. Moreover, all subjects are also the object of another subject. In such a discursive, concept-based cognition, objects, phenomena, events, or distinct entities are either sensate or mental.

Sensate objects are the product of perception (of physical forms) and cognitive interpretation. Thoughts, feelings, volitions, and consciousness are mental. The difference becomes apparent when considering dreams. Although the eye-sense is dormant, visual images do appear. These are purely mental and are not caused by changes in the sensitive surface of the retina.

Relative, conventional truth, or valid knowledge about how things appear (not how they are in and by themselves), is the concern of science. The latter involves the 'craft of magical conjurations,' manipulating (for example, causal) determinations, conditions, functions, and interdependent (re) organization. Although science may be sophisticated, we cannot, with the standards of the conceptual mind, discover the ultimate nature of things, only their appearance. By the best conceptual understanding (sophia), ultimate truth can only be approximated, not directly cognized (prehended). By designating and apprehending, conceptual thought fixates objects. In doing so, it allows objects to appear

as existing from their own side, as substances being-there according to their own essence or unique nature. Insofar as theoretical epistemology identifies this ontological illusion and eradicates its confusing influence on the foundations of epistemology itself (refusing to ground the possibility of knowledge and its growth in either object or subject), applied epistemology, in the context of the research-cell, endorses the methodological need to take objects and subjects at their face value, i.e., as if existing from their own side, independent from each other, without referent, as commonsense mistakenly dictates. So, conventional science may be valid but is nevertheless always mistaken (valid insofar conventionality goes, mistaken insofar ultimate reality is concealed).

This reifying characteristic of conceptual thought and science tries —in vain— to transform interdependent and impermanent phenomena into fixed, permanent, independent, and substantial things. Although Criticism must conceive facts as also theory-independent (if not, then by lack of object, knowledge itself would be impossible), we can never be sure this to be the case insofar as Verstand, the conceptual mind goes or not. Only the non-conceptual, nondual wisdom-mind can definitively discern or apprehend the ultimate truth, the suchness, and thatness of all phenomena.

Theoretical epistemology must accept facts also represent reality-as-such. Still, it is not equipped to take a look 'behind the surface of the mirror' and then conceptualize how things are there. Concepts are not able to pierce the membrane or lift the veil. Concepts are concealers. Therefore, although objects exist conventionally and can be identified and made to work, both realist and idealist metaphysics—claiming sensate objects represent reality-as-such and/or mental objects represent the actual order of things as they are— are conventional falsehoods. They play a considerable role in applied epistemology (cf. the 'as if' of methodological idealism or methodological realism) and the commonsense, nominal view on science (not to speak of their role in invalid conventional knowledge). But despite their essential role, they are always mistaken.

Confused because of its *concordia discors*, conceptual reason (in the pre-rational, proto-rational, formal, critical, and creative modes of cognition) eclipses ultimate truth. It designates objects to appear as a thisor-that independent, substantial, permanent entity. Science, producing consensual illusions, is not equipped to unveil reality-as-such. Conceptual interpretation is never put to rest on the level of sensate objects. In contrast, mental objects are merely (inter)subjective and thus dependent on context and perspective. Moreover, reifying duality is never relinquished. Despite the frailties of reason, we cannot abolish conceptuality.

We need it to relate to those stuck and misled by it. To end this confusion and eradicate ontological illusion, the ante-rational antecedents (mythical, pre-rational, and proto-rational cognition) and the mechanisms of conceptual cognition (formal, critical, and creative) must be understood. It is the work of critical thought. It yields the demarcations between relative (conventional) and absolute (ultimate) truth, between sensate and mental objects, between experiment (testing) and discussion (argumentation), between the theory-independent and the theory-laden side of facts, and between correspondence and consensus.

In creative thought, i.e., in the mode of conceptual cognition used in immanent metaphysics, the gradual process of ultimate analysis, resulting in an *approximate* ultimate, the rational wisdom-mind of *sophia*—the identity between interdependence and absence of substance—causes the ontological, substantializing, reifying strongholds of the duality of mind to collapse finally. Thus, it is opened to recognize or identify the nondual, immediate, actual, living wisdom-mind prehending ultimate nature. This gnostic wisdom is not produced, created, or caused but is *always there* as the mind's fundamental (naked) face.

Although the ultimate analysis does not necessarily produce or cause this $j\tilde{n}ana$ or living wisdom-mind, sophia works as a valid and potent preparation, leading up to an approximate, contrived (fabricated) ultimate, a gateway to ultimate truth. It is the conceptual mind awakening from the 'dream of Being' by strict nominalism, the end of intellectual grasping at substance. Thus, the best possible concepts (savikalpa) enable pure intuition (nirvikalpa) to enter.

Introduction to living wisdom mind, to the 'open heart' of cognition, is immediate and thus non-gradual, uncontrived, and direct. So, as often overlooked, from the side of the subject of experience, the *via negativa* yields a positive result: the possibility of a nondual dimension of mind beyond reason (formal and critical) and intellect (creative), beyond what is nominally called 'mind' *tout court*. On the side of the object, this puts down a clear message: the ultimate nature of phenomena lies beyond the conceptual and can, therefore, not be grasped in any of the conceptual modes of thought (pre-rational, proto-rational, formal, critical, or creative). One needs to move ahead!

It causes one to ask: What ultimate truth does gnostic wisdommind prehend that *sophia* cannot? What lies beyond the conceptual, and is it possible to call this 'cognition'? As mysticology shows, beyond the conceptual mind, gnostic insight offers a direct, non-conceptual vista.

Ultimate, Non-Relative Truth

Entities are posited in a conventional act of cognition or are revealed by the wisdom realizing the ultimate status of phenomena, implying an uncommon, implicit, hidden dimension of the mind, one able to recognize and prehend ultimate nature directly. It unveils the absolute, the ultimate, i.e., things as they are (yathābhūtaṃ).

On the one hand, in absolute terms, ontology aims to know the ultimate nature of phenomena. Thus, it reveals the ultimate truth. However, as we shall see, transcendent metaphysics is nondual, ineffable, and apophatic (without tales). It merely points (as does poetry) to something it cannot denote, designate or conceptualize. This experience cannot be explained in favorable terms, for the finite cannot contain the infinite. Easily broken by absolute truth, words are unworthy vessels. Conceptualizing it with the best conceptual wisdom or understanding (sophia), we are left with nothing but a non-affirmative negation. Needing a conceptualized framework, only immanent metaphysics is left. However, its periphery does not unveil a transcendent Creator fashioning Nature ex nihilo, but an intelligent pneuma or Anima Mundi, an Architect, limited by the creative freedom at work in Nature.

To cognize this ultimate mode of existence, i.e., the natural, spontaneous, uncontrived, unfabricated abiding of phenomena, is to know their ultimate truth gnostically. So, the ultimate truth is not an 'entity' above or behind an object, as in Platonism. It is merely their *natural condition*, i.e., their suchness/thatness or *what they are in and by themselves*. Although open to all conscious beings, this absolute state of every object is –unfortunately– realized only by the few. The reason is simple: eliminating the countless delusions obscuring the mind is very difficult, demanding the ongoing discipline of study, reflection, and meditation. The latter asks for renunciation, compassion, and the wisdom mind realizing the true nature of phenomena (in terms of *sophia* and *gnosis*). Hence, transcendent metaphysics is not impossible *sui generis*, but because of the vastness of our ignorance (emotional and mental obscurations).

On the other hand, ontology does not turn its back to the conventional truth of the nominal, 'common sense' hallucination of designated and named appearances entirely on the contrary. *The ultimate exists conventionally*. There are no 'ultimate objects' next, behind, or beyond conventional objects, but every conventional object has a veiled, obscured, concealed absolute nature, which is its ultimate truth. Unbridled, these misrepresentations of conventionality lead to mistaken,

confused agreements, opinions, notions, ideas, and/or theories stating how things exist as 'real,' 'extra-mental' substances 'out there' (as in realism), and/or as 'ideal' 'intra-mental' so-called 'pure' ideas 'in here' (as in idealism). However, this does not invalidate them as conventional, functional objects.

As the object of science, conventional truth designates the factual nature of relative and fallible empirico-formal statements arrived at through experiment and argument. In immanent metaphysics, conventional truth, based on statements of fact, one speculates about existence as such, the cosmos, life, and consciousness. Being non-factual, it only argues (cannot test). Its arguments are more than mere perspectives but slowly realize more excellent clarity and comprehensiveness, finally moving to the periphery of its field using the best wisdom conceptuality can muster, namely *sophia*. However, these same conventional objects, valid insofar as their identity and functions are concerned, are mistaken because they conceal their true nature, emptiness (or lack of inherent existence). Indeed, the absence of their own-power is not eliminated by conventional analysis. Entirely on the contrary. Physical objects are defined as isolated and separate. A pivotal mental object like the self is reified and so deemed substantial!

To cognize designated facts conceptually is to know conventional or relative truth. Although available through reason, it too —as valid science— is indeed a rare occasion. How many centuries have passed cherishing conventional falsehoods? These are far more common and easier to adhere to. Science aims at valid but mistaken empirico-formal truth. Immanent metaphysics tries to acquire valid but mistaken conventional speculative truth. Transcendent metaphysics points to ultimate truth, beyond validation and unmistaken, remaining ineffable.

Ultimate Analysis

In absolute terms, ontology claims to establish the ultimate truth about every existing thing, which is the same as directly cognizing the ultimate state of phenomena. This ultimate truth, the wisdom realizing what truly is, takes as object things *as they are*, not as they appear. As Kant and neo-Kantianism have demonstrated, reason and science cannot penetrate further than appearing phenomena. Hence, from their side, the ultimate truth is a *noumenon*.

So, although conceptual thought is not equipped to penetrate reality-as-such, it is nevertheless possible to gradually loosen the grip of substance-obsession on cognition and prepare the ultimate experience of the suchness of all things, including the mind. It is not an introduction but a springboard establishing an approximate ultimate. It is the purification of the conceptual mind, ending substance-obsession.

Dissolving the hardcore of conventionality facilitates the non-gradual 'jump' to the other shore of wisdom, to this direct cognition or *gnosis*. Specific, powerful conceptualizations end discursive thought's reifying procedures (instantiations). They 'zero' the impact of the ignorance superimposing a non-existent on what exists. Thanks to this, the direct recognition of the luminous, spontaneous core of the mind may happen. This is it's ultimate, always-present nature. One cannot say *sophia* causes *gnosis*, but without *sophia*, it will be very difficult to deepen nondual prehension. While the latter is non-conceptual by itself, non-conceptuality is not nonduality.

This ultimate analysis (cf. Emptiness Panacea, 2017), the gateway opening to ultimate truth, is a cognitive protocol aiming to arrest the reification of the conceptual mind using concepts and, with the most considerable subtlety, prepare nonduality, or the absence of the experience of object and subject (and thus of conceptuality). It accommodates the direct experience of the ultimate nature of phenomena, of things as they are, by way of a totalizing generic idea of the ultimate nature of phenomena. The ultimate analysis aims at ultimate reality, whereas conventional analysis deals with conventionalities only.

Regard ultimate analysis as an ultimate logic using concepts to clear away the reifying ground, preparing an understanding of phenomena's unsubstantial, process-based nature, i.e., their lack of inherent 'thingness,' essence (eidos), or substance. This emptiness, or absence of substantial core, is nothing more than their interdependence or dependent-arising (pratītya-samutpāda). The unity of emptiness and dependent-arising is called 'full-emptiness,' encompassing all possible phenomena.

In ultimate logic, concepts about the fundamental structures of conceptual thought are manipulated to end reifying conceptualization, collapse the substance-ridden conceptual mind under the weight of its reifications, and demolish substantializing theories and uncritical mental constructions. As specific conceptualizations stop the confused mind (clear it from mental obscurations) and lead to (not cause) the direct experience of the ultimate, it is hence *not* the case that conceptuality always engenders illusion. If so, science and rationality would play no vital role in the spiritual emancipation of human beings while they do. Ultimate analysis stops the substantial instantiation making the conceptual mind exclusively run on existential instantiation.

In such a mind, sensate and mental objects rise without further elaboration. They arise, abide, and cease without any further ado. This realization is necessary before *gnosis* dawns (if not, glimpses of nonduality will be dualistically recuperated).

Immanent and Transcendent Metaphysics

Ontology operates a 'double coding':

- (1) Ultimate truth or unmistaken absolute knowledge, the object of transcendent metaphysics, unveils the ultimate nature of phenomena. It is directly perceived by an absolute, nondual, ineffable cognition (called 'prehension' or gnosis). It reveals wisdom at its highest possible level, the level of suchness/thatness (or $j\tilde{n}\bar{a}na$).
- (2) Relative truth or valid but mistaken, conventional knowledge, the object of science and immanent metaphysics, deals with the conventional reality of things, grasped in empirico-formal statements of fact (called 'apprehensions') considered by all concerned sign-interpreters to be true, even if this only *appears* to be the case. The best possible understanding is the most excellent conventional (conceptual) wisdom (*sophia* or $praj\tilde{n}\bar{a}$). Invalid conventional knowledge or common falsehood, while common, is something else.

The obstinate determination, tenacity, or degree of abidance characterizing the dreamlike mirage of appearances backs conventional truth. The latter manifests in science as facts we can hold for true and in immanent metaphysics as valid speculations about the totality of what convention considers to exist. The major themes to consider are existence, cosmos, life, and consciousness, i.e., answers to the questions:

Why something rather than nothing? Why cosmos? Why life? Why sentience?

Besides seeking ultimate truth or the ultimate status of phenomena, preparing to transcend conceptual thought by ending reification, thus possibly revealing the potential suchness of the mind, immanent metaphysics, when invalid, signals our ability to cover up our innate cognitive limitations by brontosauric theories on substance. Reifying, substantializing, and turning ideas into ultimate things or *self*-sufficient grounds, such *transcendent* ontologies forget the limitations of conceptual cognition and invalidate their position by not taking reason and science as their guide. In doing so, they do not even accommodate important relative truths, like the influence of ontological illusion on knowledge in epistemology.

The extremes of reification designate an absolute object (like in theism) and/or an absolute subject (a metaphysics of an 'immortal soul,' as in Vedānta). This grand story on the substance of the soul (ātman, puruṣa) accommodates a return to a static concept of the Divine, contradicting ultimate analysis. Moreover, such immanent metaphysics is often ill-informed about the objects of science. For example, they mostly do not integrate the distinctive features of large (relativity, Big Bang) and microscopic objects (quantum, DNA). Nor have they grasped the importance of non-linearity (chaos).

In practice, illusion (things appearing differently than they are) works. Circumstances, people, things, sensations, thoughts, feelings, volitions, and conscious meaning appear stable, unchanging, and graspable as 'realities' that either 'exist out there' or as 'idealities' designated as part of the mind 'in here.' However, under ultimate analysis, their material, informational, and sentient (conscious) operators are compounds or aggregates (of actual occasions) changing constantly. Nowhere can a stable, unified continuum be identified. Appearances seem independent existences, but this can nowhere be found under ultimate analysis. What seems to be a substance is always a process ...

Conventional appearances do not reveal the ultimate nature of phenomena. They conjure a dreamlike, echolike world of functional interdependencies. Upon these, the deluded mind projects (imputes, posits, attributes) the limit-concepts of reality and/or ideality, turning facts, true real things (or physical objects), and thoughts into true ideals (attended by a substantial self). These substantial things only *seem* stable, for ultimate analysis shows they are not. For example, geological formations seem solid, continuous, lasting, and permanent, but they are not. What then to think of the so-called lasting qualities of direct sensate and mental objects in general and our sense of selfhood in particular? All are compounds and so impermanent.

Insofar as conventional truth is concerned, the tenacity of functional interdependence –expressed as the regularity of Nature— is valid. Its degree of abidance is evident. Appearances exist functionally, and conventional existence is a fact. Things exist conventionally; there is something rather than nothing. Objects exist as imputed by the mind, but –if no minds are present— exist as resulting from fleeting determinations and conditions. There is not a single atom in existence determining its ground! All phenomena are other-powered.

Nihilism is refuted by accepting a 'base of designation' which, existing interdependently in Nature, is -so must we think- extra-mental. In epistemology, this acceptance is a norm necessary to be able to

think the possibility of knowledge, but it is not something 'found.' Otherwise, ontological realism would ground knowledge, leading to scandalous contradictions.

Staying within the boundaries of conceptual thought, i.e., the prerational, proto-rational, formal, critical, and creative modes of cognition, valid immanent metaphysics mostly serves relative, conventional truth. From epistemology, it receives the limit-concepts and conditions necessary to conceptualize the two sides of its *concordia discors*, namely the parts played by object and subject. From science, it gets the parameters to speculate about the reality of existence as a whole, the cosmos, the emergence of life, and the miracle of consciousness.

Hence, metaphysics has two faces. One is turned to conceptual thought and works out an immanent perspective on what is. The other is turned to the ultimate suchness of all things, approaching this through nondual, non-conceptual cognitive prehensions. Confusing this distinction and addressing the ultimate through concepts is the path of falsehood in transcendent metaphysics. In contrast, the path of truth regarding suchness/thatness is the gnostic wisdom-mind directly realizing the full-emptiness of all phenomena, i.e., the direct, nondual experience of the union of a universal lack of substance and the all-comprehensive interdependence between all things.

Objective and Subjective Immanent Metaphysics

Objectively, immanent metaphysics is a heuristic or *ars inveniendi* or a general, common sense formulation guiding investigations. Valid immanent metaphysics inspires science. It offers a 'grand story' about the world and expounds a thematic itinerary.

Answering the question: 'Why something rather than nothing?', two extremes are avoided: being is *not* posited as eternal, continuous, autarchic, unchanging, substantial, or essential, i.e., as non-referential. It is the (Platonic) fallacy of eternalism. Neither is the possibility of ultimate truth reduced to the 'truths' of the worldly continuum of valid but ultimately mistaken interdependent and impermanent phenomenal aggregates. It is a fallacy of nihilism, in vain, avoiding transcendent ontology and affirming nothing exists (for this, it must be a substance). While there is no substance, there is something, namely the sea of process, of the togetherness of material, informational and sentient occasions constantly interacting and depending on others.

Conventional existence is not denied. Things appear as spatiotemporal, intersubjective formations with functions, conditions, and determinations. Absolute existence is not denied. The ultimate nature of phenomena is *not* what appears to the conceptual mind. This negation is absolute and non-affirming, i.e., it denies appearing phenomena as a whole their fixed essentiality, leaving no choice (relative negations deny something and by doing so always affirm something else, for example: 'not male implies 'female,' 'not evil implies 'good,' 'not day' implies 'night').

The speculative study of functional interdependence calls for the origin of the cosmos, the beginning of life, and the meaning of human life. This order is imperative. After affirming, there is something rather than nothing, the actuality, nature, and meaning of this something are at hand. Operators must function together in a spatio-temporal framework for anything to be. How did this cosmos we find ourselves in happen? Next, we reason that the cosmos must cause growth and gestation for anything to be alive. How is life possible? For anything to be human, culture must indeed be present. What about consciousness and meaning? Subjectively, valid immanent metaphysics invokes the object-possessor and its various sensate and mental objects, speculating about the human mind, freedom, liberty, solidarity, democracy, spirituality, etc. It gives way to vast domains: consciousness, thought, feeling, action, and sensation.

- (1) consciousness: what is the nature of the mind? How to define sentience?
- (2) *thought*: how does thought arise? How do the various stages of cognition unfold? How does ante-rationality influence formal, critical, and creative thought?
- (3) *feeling*: what is the nature of emotions? How to define affective obscuration? What is the role of feelings in cognitive acts? How can emotional coloration assist?
- (4) *action*: What is the nature of the will? How does the coordination of movement relate to thought and feeling? Which activities harmonize with thought and affect?
- (5) *sensation*: What is the nature of perception and sensation? How do thoughts and feelings affect the way things are named?

The conventional, speculative truth found by immanent metaphysics, its *sophia*, is only true in a provisional sense. It is valid because its arguments are clear, sound, and convincing. Valid in terms of a given perspective. So, immanent metaphysics literally 'stand next' to science. It speculates in terms of totalized panoramas, incorporating

crucial theories belonging to both physical and human sciences. These are intended to inspire the inventivity and creativity of scientists, advancing discovery and expanding our conceptual horizon. As empirico-formal statements of fact warrant the arguments backing its speculations, immanent metaphysics is the ally of science. Insofar conceptual thought remains substantialist, advancing ontological realism or ontological idealism, conventional truth is reduced to delusional opinions and conventional falsehoods. It is the perversion of reason (cf. Kant's *perversa ratio*).

Itinerary of Ontology

- (1) conventional, immanent ontology: speculative totalization of (a) the sensate conditions involving space and time and the forces operating between material, physical actual occasions (particles, waves, fields, and forces), (b) the information, formal conditions or architectures about actual occasions and (c) the meaningful symbolizations of conscious entities.
- (2) *ultimate logic*: given the immanent sphere of sensation and mentation, as well as the totality of all realities and idealities, both sensate and mental objects are analyzed to discover whether *they truly exist as they appear*, i.e., as substances from their own side. As these cannot be found anywhere, one cannot posit objects to possess an inherent, essential existence without producing logical falsehoods.
- (3) absolute, transcendent ontology: beyond the conventional sphere, conceptual symbolization stops, and a gap, abyss, isthmus, or 'jump' is suggested. Direct, nondual, non-conceptual intuitive cognition (gnosis) is ineffable, has no mental residue, and is one with 'great compassion' (mahākaruṇā). According to the ultimate logic acting as an approximate ultimate (or sophia) to the gnostic wisdom-mind, refuting all affirmative, cataphatic statements about suchness (thatness), nothing substantial can be said about this pinnacle of human cognition, cultivated in meditation and unveiled in grand spiritual poetry. Such gnostic wisdom is a direct encounter with the luminous singularity of the mind itself, with its everenlightened nature, or Clear Light*. Ontology, to arrive at this speculative totalization, needs a first principle, an ontological principal.

Monist logic privileges a single principle or monad. Materialism and spiritualism are examples. The former understands matter as the *self*-sufficient ground of the edifice, while the latter posits spirit as first. The advantage of monism is its unity. The system of ontology is erected upon a single ground, so one does not need to explain any ontological

differences between entities, for there are none. All phenomena share the same nature on the most fundamental level of reality. Logically, such a solution automatically accommodates simplicity and the ideal of finding a single principle explaining the unity of science. A multiplication of founding principles is absent, allowing us to grasp the manifold with a single concept. The present metaphysics of process is monistic.

Materialism argues physicality is the ontological principal. Several reasons can be advanced. As Aristotle remarked, 'substance is thought to be present *most obviously* in bodies' (*Metaphysics*, VII, ii.1, my italics). If this is considered correct, physicality must come first and be promoted to the status of the founding monad. Also, Kant privileged the senses, rejecting intellectual perception (intuition or *gnosis*) as *not belonging to most men*. By doing so, the impact of stimuli on the sensitive areas of our sense organs was given a higher ontological status than mental objects, deemed to be derived from the former.

It eludes the materialist knowledge cannot be divorced from conscious apprehension, i.e., one cannot observe any object without an observer. The latter does more than passively register the incoming sensuous flux but *co-determines* it (cf. my book *Thirty Verses on Conscious Life*, 2016). Indeed, all observation happens in a framework of theoretical connotations at work from the subject's side or subjects of knowledge *in the act of observation*. For alternative reasons, spiritualism thinks consciousness is the first concept. Hegelianism is a modern, dynamic version of Platonism and Spinozism. Both positions fail to plunge deep and discover a more fundamental level. Criticism leaves these solutions to stand naked (cf. the papers *A Philosophy of the Mind and Its Brain*, 2009 and *The End of Physicalism*, 2015).

Non-monist logic always introduces more than one fundamental ontological principle (a duality, triplicity, quaternio, etc.). Duality, with its powerful reflective capacities, introduces *otherness*. It is a first step outside the monadic and monarchic continuum, adding *radical alteriority as a new unity*. However, herein lies the weakness of dual systems. For now, two principles are generated. How to reconcile their ontological difference in a single Nature?

Suppose the ontological difference cannot be reduced to a more fundamental stratum. In that case, the variety of fundamental ontological principles will cause ontology to miss unity, making it unclear how these two or more principles must be thought together without breaking up the world into as many pieces as there are principles. Given these parts are processes, the unity of process can be understood. But, if they are substances, their interaction within the organic whole will be confused.

Of course, one may single out one principle and consider the others as merely an illusion or depending on the former, but not to the point of being included. Platonism is such a solution. The world is divided into two (*chorismos*) without giving these divisions the same ontological and epistemological importance. The World of Becoming, due to its variety, multiplicity, and change, is not rejected but merely made dependent on the World of Ideas. So, although dualistic, Plato's solution is a monism in disguise. The Peripatetic doctrine maintained the epistemological division as the distinction between passive and active intellect.

Building on Platonic ontology, the most influential ontological dualism of recent times was introduced by Descartes. However, a radical difference must be noted. Plato considered the World of Becoming a 'shadow' of the World of Ideas. The latter is a paradigm for the singular things participating in it (*methexis*). For Plato, becoming participates in Being, and only Being has reality. Descartes introduced three different substances, each with distinctness leading up to a substantial difference between the *ego cogitans*, extended stuff (*res extensa*, matter), and God. The Greek depreciation of matter is gone.

As God is transcendent, mind and matter are the fundamental substances of the world. A central problem arose because Descartes defined these two in terms of substance, implying that objects endure from their own side, independent and separate from other objects, a central problem rose. How can two ontologically *different* substances, sharing no common ground (except God), work together or interact? Handicapped by this ontological dualism, Cartesianism could not tackle this, leading (after the *échec* of German Idealism) to reduce the mind to matter and a physicalist understanding of consciousness.

Returning to the elegance of monism, and rejecting both materialist (physicalist) and spiritualist essentialism, let us ask: What is the fundamental concept of bringing all phenomena under unity? Given substance-obsession, we may ask whether a single mental or physical substance can be consistently posited, i.e., a 'self-powered,' autarchic object existing from its own side, independent and separate from all other objects, one existing inherently? I think not. The rejection of essentialism is accepting the premise of process thought: there are no substances. Hence, there is no 'substance of substances.' So all phenomena are 'in process,' i.e., ever-changing, impermanent, and interdependent events, occasions not independent nor separate from other occasions. Moreover, phenomena are actual (not past nor future) things happening hic et nunc. There is no 'world' behind the 'world,' no Jenseits.

Process focuses on the things in their actuality. It rejects the *ousia* at the head of the categories of Aristotle and considers interactive relatedness instead of discrete individuality. Do thinking processes and actuality beg the question of the unit or standard of process? Before describing processes, their arising, abiding, and ceasing, and their efficient and final determinations, we must determine the first concept of this process-based monism, the ontological principal.

Processes (P) go the way of actual happenings, concrete actual occasions \mathbf{O} (o₁, o₂, ... o_m). Every existing object x or \Im x is characterized by a set of actual occasions $\mathbf{O} = \{o_{x1}, ... o_{xm}\}$, making \Im x unique. This set constitutes the *actual continuum* of \Im x. Everything outside the occasion-horizon of this continuum does not constitute \Im x. Can we do more than accept actual occasion o_x as a logical primitive, a given ? Following Whitehead and his 'quantum ontology' (*Process and Reality*, 1929), let us distinguish between :

- (a) actual occasion o_x , an instance of the set of actual occasions $\mathbf{O} = \{o_1, \dots o_m\}$ is an atomic and momentary actuality characterized by 'extensiveness';
- (b) event e_x , an instance of the set of events $\mathbf{E}=\{e_1,\ ...\ e_n\}$ is the togetherness of actual occasions, and
- (c) entity en_x , an instance of the set of entities $\mathbf{En} = \{en_1, ... en_p\}$ is the togetherness of events, while 'entity' or 'object' are synonymous.

Extensiveness is what all actual occasions have in common. This extensive *plenum* of the actual continuum is :

- (a) spatial: as in the case of geometrical objects;
- (b) temporal: as in the case of the duration of mental objects;
- (c) spatio-temporal : as in the case of the endurance of sensate objects.

Entities and events are actual occasions interrelated in a determining way in one *extensive* continuum, and an actual occasion is a limiting type of event with only one member. Nature is built up of these actual occasions. Events are aggregates or compounds of actual occasions. Entities are aggregates or compounds of events. Higher-order self-determination is at hand when an aggregate or compound forms a society, a marker to distinguish non-individualized and individualized aggregates (or societies).

Monism and essentialism cannot explain manifold, diversity, variety, differentiation, complexity, richness, and connection. This approach cherishes a single *static* factor. So, certain aspects of the manifold (of Nature) cannot be explained, for *no substances are found to exist*. The combination fails because *absolute* autarchy and self-determination cannot be successfully argued.

Thinking of a single *dynamic* factor solves many problems. In the West, such process-monism is rather recent. We find traces of it in Greek philosophy (Heraclitus) and the first draft in Leibniz. The logic of dynamic change was heralded by Hegel, while Pierce stressed chance, spontaneity, and syncretism. James emphasized the causal dynamic relatedness, the fluidity of an ever-changing reality. For Bergson, the *élan vital*, or organic life force driving creative vitality, is everywhere at work. In his 1920 lectures on James and Bergson, Dewey understood experience as self-creation, not Aristotelian, but open-ended, involving uncertainty, indeterminacy, contingency, and innovation.

With *Process and Reality* (1929), Whitehead initiated Process Philosophy, introducing a new ontological principal, the *actual occasion*. Process metaphysics, integrating relativity and quantum, remains close to physics and science. Moreover, process theology understands God as relational, no longer a remote, transcendent 'pure act' (or *actus purus*). Thus, many pitfalls of fundamental theology were avoided.

World-Continuum or World-System

Classical Occasionalism, first propounded by the 10th-century Muslim thinker al-Ash'ari and found in the writings of Cartesians Johannes Clauberg (1622 – 1665), Arnold Geulincx (1624 – 1669), and Nicolas Malebranche (1638 – 1715), rejects substances to entertain any relation. Earlier, in his *Fundamental Treatise on the Middle Way* (*Mūlamadhyamakakārikā*, chapter XIV), the Buddhist Nāgārjuna (2nd-century CE) had come to the same conclusion. When analyzing 'connection,' denoting the relationship between components in any compounded phenomenon and the relation among their conditions and determinations, he found these as non-substantial.

It points to the absence of reification at any level of ontological analysis. Even the functionality of the efficient determinations characterizing phenomena, their location in a causal and mereological nexus, defining the logical properties of the relation of part and whole, are not permanent, autarchic, and existing from their own side.

Of course, Classical Occasionalism had another plan. Using the Cartesian substances 'matter,' 'mind,' and 'God,' it elaborated upon the consequences of ontological dualism, claiming that finite things can have no efficient causality. Substances cannot be the efficient causes of events. In ontological monism, how two or more substances relate is a non-issue, for only one substance prevails. But as soon as the numerical singularity of the fundamental principle (the monad) is relinquished for

dualism, thinking change, and interrelatedness, the question of how different things relate emerges. Classical Occasionalism rejects the possibility of any relationship whatsoever. Different substances can a priori never bridge their natures. All physical and mental phenomena are mere 'occasions' or happenings on their own, devoid of any interconnectedness and efficient power, utterly incapable of changing themselves. Physical 'stuff' cannot act as the cause of other physical 'stuff,' for no necessary connection can be observed between physical causes and their physical effects (a view returning in the writings of David Hume, for whom causality and other lawful determinations are merely psychological habits). Moreover, the former cannot affect the latter because the mind and brain differ. Hence, a person's mind cannot be the real cause of his hands moving. The mental cannot cause the physical and vice versa. Ergo, as events do exist, they must be caused directly by God Himself. For what God wills has to be taken as necessary.

Note the idea *substances* cannot relate to each other.

Claiming substances do not exist is the same as affirming all phenomena are interdependent processes. Moreover, the conditions and determinations defining this interdependence or *universal togetherness of all possible actual occasions* are themselves co-existent with this stream of actual occasions, making up what exists *hic et nunc*. They do not exist 'outside' these dynamical streams of actual occasions, forming aggregates and societies of actual occasions, events, and entities. As someone swimming, they are adaptive archetypes, intelligently altering their format while performing with style, preventing their momentum from drowning. They are a form-in-movement.

An actual occasion is an atomic and momentary actuality characterized by 'extensiveness.' Although indivisible, an actual occasion is not a 'little thing' but a meaningful (creative) momentary differential change explained in terms of efficient and final determinations. These act as the two state-vectors of all changes in all the processes involving all actual occasions conserved in the interval or isthmus of the present moment of the world. The structural analysis of actual occasions does not reflect a temporal sequence. The two state-vectors of process are simultaneous. From the past, efficient determinations enter actual occasion $\Im x$. Because of its iota of self-determination, $\Im x$ makes a choice (a minimal indeterminacy or clinamen). This creativity enters the efficient determinations of the next actual occasion. In this way, a single actual

occasion evidences the smallest possible degree of sentience. Aggregates form, and these streams are interlinked and reinforced. Recurrent events form entities with their continuum streams, compounding and bonding into societies. At the level of societies, the experience of conscious unity is present, pointing to a higher-order consciousness, as can be seen in the four 'kingdoms of Nature'; minerals, plants, animals, and humans.

If merely product-productive, manufacturing the world could not display creative change and state-transformation. But the ongoing enrichment of the world is a fact of science. Negentropic transformation is an outstanding feature of life and consciousness. This creativity must ontologically be accounted for ...

Actual occasions, the actual units of process, are Janus-faced: they take from the past and, based on an inner, finative structure, transform states of affairs, paving the way for other processes. They are not merely product-productive, manufacturing things, but also state-transformative. In this way, several degrees of togetherness or concrescence can be identified, called events, entities, aggregates, and societies. This organic whole of actual occasions, the world-continuum or universal sea of process, extended from the extremely small to the humongous, is physical, non-physical, or mental. Both have distinct properties, consisting of actual occasions defined in efficient and final terms. The physical (the world of matter) is the domain of physical objects characterized by mass and momentum. The non-physical is, on the one hand, the domain of information (the world of embodied and disembodied mental, abstract, theoretical objects) and, on the other hand, the domain of consciousness (the world of the percipient participator endowed with decisive conscious choice and sentient self-determination). These three domains of hardware, software, and userware are complex societies of actual occasions. Moreover, the non-physical is not made part or reduced to the physical. The question of the functional role of the mental on the valuation of the possible physical outcome can be posed. Metaphysics no longer arrests downward causation, giving to both the mental and the identical physical weight and distinct functional roles.

'Efficient determination' refers to physical momentum and the mass of particles, waves, fields, and forces at hand. 'Final determination' is self-determination, creativity, valuation, and the experience of conscious unity, entering efficient causality and producing novelty. Although indivisible, actual occasions are not 'little things' but a differential change explained in terms of the efficient and final determination.

Advance process with a pluralist view on the *distinctness of occasions* (not on their ontological difference!) and embrace, in principle, an endless number of distinguishing attributes, aspects, or operators (hylic pluralism), reducing these to the three complex societies known to function in the world: matter (hardware), information (software) and consciousness (userware). Regarding the latter, the crucial distinction between consciousness *per se* (as a domain of the world-continuum) and conscious human experience (or inner life), as a very complex region in that domain, should not be missed. On this planet, the human mind is an extraordinary continuum of occasions, the only one capable of featuring inner life and conscious experience.

So, the world, or the totality of all observable events in the universe, may be divided into three logical basics or primitive. All three refer to the single ontological principal: the actual occasion. Each is a complex society of actual occasions or a domain of the world. Each is also an operator characterized by a function, enabling it to work a set of unique interdependent determinations and conditions, discharging its task in such a way as to make different events *work together*, thus forming more unified functional wholes and harmonizing their dynamic signatures, the universal intent of the supermind of the Architect of the World.

By collecting well-determined events into a single set, three interacting sets are formed :

- (1) matter or 'hardware' (of which all elements are mostly M-events): the physical space-time continuum, the *executive* hardware of working, physical compounds, defined by particles, waves, fields, and forces (in real numbers);
- (2) information or 'software' (of which all elements are mostly I-events): abstracts, universals, theories, codes, laws, architectures and algorithms, the *legislative* software of natural and artificial expert-systems (binary numbers);
- (3) consciousness of 'userware' (of which all elements are mostly C-events): (free) choice, self-determination, meaning, autostructuration, mentality, the *intentional* activities of subjectivity, and inner life (in complex numbers involving paradox).

These unique arrangements or world-domains are characterized by a prevailing type of mathematics, tendency, movement, and order:

- (1) matter: real number, dispersive, centrifugal, entropic;
- (2) information: binary number, integrative, algorithmic, natural, and cultural forms, limited integrated natural and artificial expert systems;
- (3) consciousness: complex number, paradoxical, centripetal, negentropic, meaningful, symbolic, and sentient.

Although functionally stand-alone subsystems, they continuously interact on various expression levels or functional co-relativity and interdependence. Because they are joined, *a super-interactionist model* allows us to understand the relations, conditions, determinations, and modes of communication between all actual occasions, events, entities, aggregates, and individualized societies happening in the world:

- (1) C interacts with M: sensation and mental states = domain of sentience (awareness of objects);
- (2) M interacts with I : algorithms and imperative codes of command = domain of Nature (evolution);
- (3) C interacts with I : symbols, science, philosophy, art, creativity = domain of culture.

Functional Co-Relative Interdependence

Functional co-relativity outlaws absolute isolation and points to general interdependence. To define *ousia*, substantialism (essentialism) has to defend absolute isolation. An object's essence (eidos) must have its 'own-nature' (*svabhāva*), i.e., something permanently existing from its own side, unaffected by the changes in its accidents, whether they be quantities, qualities, relations, or modalities. As monads, substances must have no 'windows.' It entails three logical consequences: substantial objects are static, non-functional, and self-referential. Because of these sordid features, they hinder the advancement of science and metaphysics.

Substantial objects are *static* because their substantial core does not change (without changing the object into another object). Unchanging objects cannot relate to other objects, for the idea of relation implies *openness to others and openness to fundamental change*. If an object is a self-identical monad, it has no 'exits' and cannot interact with other objects. These objects cannot move, produce, or cause. Constant autoduplication ensues.

Substantial objects are *non-functional* because they are isolated. They cannot produce effective action without any possibility of relating to other objects, leading to a relative impossibility to function. Where can these objects be found? Except for analytical objects, all apprehended objects are functional. Due to their self-identical, inherent 'being,' substantial objects have only themselves as the sole referent. They cannot apprehend anything other than the monarchic affirmation of themselves and their self-powered own-nature. Their solipsism is, however, based on

nothing else than this affirmation and therefore circular. Where can these objects be found? All synthetic objects depend on determinations and conditions outside themselves. At the micro-level of physical reality, all objects are interconnected, and at higher levels, this is also the case.

In natural systems, nothing is non-referentially 'on its own.' All events are part of a complex network of determinations and conditions. In artificial systems, processes may be isolated from their environments (like in atomic fission). However, this procedure entails much work to realize and sustain the quarantine, often with much environmental damage if reintroduced (depending on the nuclear waste involved, hundreds of thousands of years of containment are necessary). The interdependence of actual occasions, events, entities, aggregates, and societies implies function (efficient determination).

Two types prevail:

- (1) determined functions: in a system of general determinism, events are connected through many efficient determinations, like self-determination, causation, interaction, mechanical determination, statistical determination, holistic determination, teleological determination, and dialectical determination. Events are linked if the conditions defining each category are fulfilled. For example, in causation, the effect must occur to have an efficient cause and a physical substrate (propagating the effect in spacetime). In contemporary determinism, these determinations are not undeniably sure but relatively probable, for science is terministic, no longer deterministic;
- (2) nondetermined functions: considering the inner, mental structure of actual occasions and their togetherness (concrescence), as well individual actions of persons, cultures, and civilization, phenomena are also connected by way of various degrees of free choice, intention, freedom, self-determination, valorization, creativity, and conscious life, both individual as social. This final determination escapes the conditions of the categories of any kind of lawful, efficient determination. Indeed, without the possibility of positing nondetermined events moving against the system of efficient determination, ethics is reduced to physics, and justice is impossible. How is responsible action possible without the actual exercise of a degree of freedom, i.e., the ability to accept or reject a course of action, thereby creating an efficient-wise 'indeterminate' influencing agent, changing all co-functional interdependent efficient determinations or interactions by entering them, thus adding negentropy to entropy? How, without free choice, is genuine creative advance possible?

All actual occasions are characterized by their two-state vectors: efficient and final determinations. The former is their physical, outer, overt material activity, determined by particles, waves, fields, and forces. The latter is their mental, inner, covert sentient activity, determined by order, creativity, novelty, and self-determination. Although a single actual occasion has only a tiny iota of sentience, the fact of its togetherness with countless others, entering them with the result of an infinitesimal mental decision, brings about a cumulative effect. These successive generations of additions allow —at some point— for the emergence of societies, i.e., individualized aggregates endowed with the experience of conscious unity.

Although a single actual occasion has a minimal degree of sentience in the form of a *clinamen*, it is usually part of aggregates devoid of such experience of conscious unity. In that sense, remembering Leibniz, a crystal in a stone thrown at a cat, has more affinity with the cat than the stone. Process thought does not embrace full-fledged panpsychism, for then, even the stone would be sentient. As an aggregate of micro-sentient actual occasions, the stone is non-individualized, i.e., it does not experience unity. Thus, it drowns the micro-sentience of the actual occasions of a mere compound in the non-sentient togetherness of its aggregation. Panpsychism can no longer be defended when a single, nonsentient object can be identified. Indeed, nature abounds with mere aggregates. Societies (like molecules of crystal or living matter) and complex societies (like humans) are rare. Panexperientialism affirms actual occasions exhibit a (minimal) degree of sentience but denies their togetherness -devoid of the conscious experience of their unity- to be sentient insofar as this concrescence goes.

Observing the three domains of the world begs the question of their cosmic genesis. The conclusion these three functions, namely matter, information, and consciousness, were present from the Big Bang, albeit in varying degrees, cannot be avoided. Like the unfolding of a flower, the efficient determinations of the material domain came first, fixing the original physical parameters of the cosmos. This first physical unfoldment set the material ground. However, together with this event, resulting from the activity of the final determinations in the original 'primordial soup,' order and structure emerged. This second informational unfoldment sets the conditions of the architecture of the cosmos. Because of this structure, the cosmos could expand and generate stars, the breeding ground for the third, sentient unfoldment, bringing about life and consciousness. Only at this level societies emerged. First in the form of crystal molecules and, due to complexification resulting from more efficient interactions, as the first living cells. Billions of years were needed to allow living societies to

individualize their sentient component, eventually arising as the experience of conscious unity. Foreshadowed by plants, it exploded in animals and eventually evolved into humans. However, the root of these three cosmic flowerings can be found in the singularity of the actual primordial occasion of our universe: the Big Bang.

This Big Bang singularity is a discrete moment in the inconceivable, beginningless, and endless cycles of arising, abiding, ceasing, and re-emerging worlds out of the world-ground, the possibility of all *universa*, the multiverse.

Speculate everything acquired by countless conscious societies, well-ordered (informed) aggregates, and efficient physical systems returns, at the Big Crush (or Big Evaporation) of the present universe, to the original singularity and from there to the multiverse. Not an iota of material, informational and conscious actualities is lost but contributes to the evolution of the ongoing process of subsequent world-emergence, abidance, and collapse. The multiverse evolves. The new world to come is not a 'tabula rasa' but endowed with what happened in the ones before.

Eventually, at infinite infinity, all possible worlds have evolved out of the world-ground into fully sentient societies, and the 'Jubilee of Jubilees,' as the Qabalah calls it, is celebrated forever and ever. Then, at this point, Kemet speculated way before the Greeks, the eternal recurrent cycle of light-manifestations (*neheh*, mythologically linked with the cycle of Atum-Re), the periodic process-worlds, joins everlastingness (*djedet*, Osiris). An eternity of cycles finally comes to a close in the everlastingness of the primordial base.

Unity of Relative Appearance and Absolute Reality

After repeatedly inviting *sophia* to inspire thought, cleansing the conceptual mind from its reifications, may prolonged ultimate analysis *facilitate* the opening of the gate to 'seeing' or prehending the ultimate, absolute nature of all possible phenomena, ultimate reality as it is. Ultimate analysis merely assists the conceptual mind in directly recognizing the nondual truth regarding a non-affirmative negation. Again, *sophia* does not cause *gnosis*. Indeed, immanence is not a ladder from conceptuality to non-conceptuality, from the relative truth of conceptual thought and apprehension to the ultimate truth of naked, non-conceptual, nondual cognition and prehension. Immanence only offers a threshold, an approximation, the generic idea of emptiness encompassing the emptiness of the world as a whole. Indeed, the direct, naked, gnostic state of ultimate cognition cannot be caused. The itinerary is not a

certainty, but the preparation will undoubtedly be welcome to sustain the awareness after it spontaneously dawns. Indeed, if the conceptual mind has not been thoroughly purified, reification will recur.

An ontology based on confused cognition is the screen upon which the tragi-comical illusions of realism and idealism are projected and made to play. However, although conventional reality does not appear as it truly is, being *like* an illusion, it 'is,' in an ontological sense, not identical to illusion. Appearing like an illusion is not the same as being an illusion. A saint may dress like a dirty pauper. The pauper is like the illusion, for he appears not as he truly is. Whatever appearance the saint chooses, s/he remains sacred.

Conventional truth (the relative property of phenomena) is how ultimate truth (the ultimate property of phenomena) *appears*; the ultimate exists conventionally. Phenomena can be simultaneously experienced as lacking substance and as functional, interconnected, and mutually dependent.

Prehending the ultimate does not cause 'another' world to appear suddenly. However, it does allow the mind to recognize the absolute properties of any phenomenon. Awareness of what exists is being conscious of the full-emptiness of every phenomenon (its emptiness and universal connectedness). The difference is, therefore, epistemic, i.e., intra-mental. Directly perceiving this-or-that *ultimate nature of appearances*, this-or-that actual absence of substance *hic et nunc* and this in the fullness of interdependence or, on the contrary, only experiencing dualistic appearances, merely depends on the discovery of an approximate ultimate (by way of *sophia*) or on identifying the root of the mind (by way of *gnosis*).

As long as the nature of the mind remains undiscovered or obscured, conceptual thoughts overlay it. Mental designations are reified, producing 'objects' such as the idea of a self-powered physical body, a substantial mind, and a solid, separate self. These cover the nature of the mind, bringing emotional afflictions, sickness, an unhappy old age, and an unwholesome death.

Ultimate truth, as approximated by the logic of ultimate analysis, the pinnacle of conventional ontological truth, clarifies all phenomena to be full-empty, i.e., *full* of functional interdependencies but *empty* of inhering, intrinsic, substantial, non-referential, essential qualities, characteristics, natures, etc. Full-emptiness contradicts substantial existence but not functional interdependence. 'Full-emptiness' translates to the union of emptiness, interdependence, wisdom, and compassion.

Ultimate truth, as given by direct, nondual gnostic experience, makes us 'see' how all possible phenomena, while devoid of substantial essence, are interdependent 'displays' or the 'sport' of the brilliance of the ground-luminosity, the ultimate base of all, the world-ground.

Transcendental Philosophy and Nāgārjuna

Transcendental philosophy (Criticism) aims at the process of the synthesis of phenomena rather than on a supposed sufficient ground underlying them. Pre-critical epistemology based the possibility of knowledge on this Ding-an-sich (Kant), called noumenon, the thing in itself or the absolute (ultimate) ground of phenomena. Criticism ends this. Indeed, the object of science is *not* a pre-epistemic ultimate Real-Ideal (the unity of absolute reality and absolute ideality). So, it does not depend on a self-sufficient ground preceding cognition but exclusively on the interconnectedness between actual occasions and their modes of togetherness. These are dynamical architectures, coordinated movements or dances, and artistic displays of various degrees of order (negentropy), i.e., unfolding, showcasing, and folding things. They are only relative to movement and process and result from a universal and necessary connection between phenomena. This denotes objectivity, not the 'Being' of some absolute thing like a Real or an Ideal before and outside knowledge. An Archimedean ground is not found.

Indeed, something is objective if it holds true for any active subject of knowledge, not because it denotes intrinsic, inherent properties of entities supposed to be independent, separate, and autonomous. It is the leading idea of the transcendental reflection on the conditions of the known, of knowledge, and the knower. Science is, therefore, not the revealer of a pre-existent underlying self-sufficient ground or hypokeimenon. Epistemology is not the rooting of the possibility of knowledge in something before knowledge. The Real-Ideal is not the object of science. However, neither is science random, Indeed, merely conventional, science is a temporarily stable but ever-moving product of the process-bound reciprocal relations between the subject and the object of valid empirico-formal knowledge. Kant's Critique of Pure Reason still has residual foundationalist streaks. Although defined as a noumenon, the absolute ground lies across the knower. This indirect relation is to be differentiated from the direct stream of perceptions on the side of the knower. The latter arises in a subject only crosswise affected by the thing itself! One cannot say this contact with the absolute causes the direct perceptions recorded by the knower, for causality happens during

categorial synthesis, two steps later. This *transversal relation* between the knower and the absolute is a residue of the substantialist tradition seeking a *self*-sufficient ground (before knowledge). It is Kant's Achilles' Heel, but it can and should be removed from transcendental philosophy. Indeed, this remnant of substantial dualism between the knower and the absolute has been eliminated by neo-Kantianism. It promoted an immanentist and relational transcendental philosophy of science. Objects do not bear intrinsic properties but result from interdependence, relations, and interconnectedness. They are process-based instead of substance-based. There is no ground or pre-given, pre-existent, and pre-organized absolute 'substance of substances.'

Moreover, the static framework developed by Kant has been replaced by dynamical a priori forms and their plurality. His highly abstract view made way for studying the pragmatics of the game of 'true' knowing. The interchange between the knower and the known is pivotal here. Interlocked but cherishing different interests and outlooks, they continuously engage in a concordia discors. Therefore, this view on science is anti-foundationalist, immanentist, and relational. Science provides the best conventional perspective ever. In the Critique of Pure Reason, Kant wanted a philosophy as universal and necessary as Newton's law of gravity. His aim was not soteriological. In Mūlamadhyamakakārikā, Nāgārjuna aims at the wisdom of realizing the ultimate truth (paramārtha) of all phenomena. Not because this satisfies philosophical or intellectual pursuits but because such realization liberates sentient beings, awaking them to the nature of their mind. In this foundational treatise of the Middle Way School (Madhyamaka), he presents this wisdom in accord with the profound and refined rationalism of Buddhist logicians, philosophers, and scholars. Nāgārjuna's exclusive quest was to free all sentient beings from reified conventional truth (samvrti). Take away the reification and the absolute dawns. However, the latter is indeterminate and non-accessible to the conceptual mode. The possibility to directly experience the ultimate nature is not denied.

Contrary to Kant, Nāgārjuna and the Buddhadharma at large accepts (a) meta-rationality (the nondual, gnostic mode of cognition) and (b) the possibility of directly cognizing the absolute. It realizes the wisdom of the enlightened ones $(j\tilde{n}\bar{a}na)$. His work is foremost soteriological. Keeping this in mind, let us discuss Madhyamaka (Nāgārjuna, Āryadeva, Candrakīrti, Śāntideva) in the light of a few parallels with transcendental philosophy.

For different reasons, both Nāgārjuna and Kant attack all possible substance-thinking. Kant defined the *noumenon* as a limit-concept, only

pointing obliquely towards our sensibility and thus of negative use only. However, he also maintained a quasi-causal, transversal (indirect) relationship between the thing in itself and the knower, leading to inner inconsistencies. Later, neo-Kantians considered the thing in itself as nothing beyond the brute fact of its givenness, not being produced by a deliberate act originating in the subject. Criticism goes a step further, replacing the description of the cognitive act with a normative system of conditions producing valid knowledge. One must consider facts to represent the absolute, but this may be mistaken! This normative move evaporates the residual substantialism and brings to the fore a few interesting similarities between transcendental philosophy, epistemology of science, and Nāgārjuna, the founder of the Middle Way school

Nāgārjuna's analysis is immanentist throughout. Like Kant, he insists the world should not be construed as a single absolute entity on which something can be predicated. It is like an indefinite series of flickerings, much like the flame of a butter lamp. Moreover, conventional knowledge is empty of any relation with a solid, substantial, and inherently existing objectivity. Objectivity is not a pre-epistemic substantial ground. Conventional knowledge has no access to the thing itself, the supposed absolute or ultimate nature of all phenomena. To discover all phenomena are empty of their substantial core is to realize the universal, lawlike, reciprocal relativity of co-dependent consecutive actual entities. The ongoing display is one of *creative advance*, with entities entering each other's togetherness. Conceptual reason does not discover the absolute nature of phenomena. Still, it reveals all relative events' arising, abiding, and ceasing nature. For Nāgārjuna, science is an exceptionally efficient and valid conventional truth but also liable to delusion.

Kant, too, points to the danger of turning ideas of reason into substances 'out there.' Specific subjective rules are mistaken for objective determinations of the things in themselves (cf. his 'transcendental illusion'). It cannot be taken away, only revealed through critical inquiry. Like all conventional knowledge, science tends to superimpose inherent, substantial existence upon process-based, nonsubstantial entities. It tries to fixate the fluid and transient. We cannot help seeing the world *as if* inherently possessing specific determinations. Concerning our conventional experience, it always remains the case *as if* (*als ob*) subjective rules are an intrinsic feature of the world ...

Conventional knowledge is valid but always mistaken. Indeed, suppose the observer partakes in the network of relations producing conventional knowledge. In that case, things appear to him or her as if

well-defined non-relational determinations (inherent properties) arise from any measuring interaction. Relative to the observer, distinct features appear as something substantial. However, this reification is an illusion, for it makes things appear as something different than what they are. They appear while they are processes, as substances!

'Your position is that when one perceives
Emptiness as the fact of relativity,
Emptiness of relativity does not preclude
The viability of activity.
Whereas when one perceives the opposite,
Action is impossible in emptiness,
Emptiness is lost during activity;
One falls into anxiety's abyss.'
Tsongkhapa: The Short Essence of True Eloquence.

Criticism seeks a higher-order solution to the tensions between science, critical metaphysics, and a non-dogmatic soteriology, like the one proposed in the Buddhadharma. Transcendental philosophy and the Middle Way provide many arguments backing the empty, dependent, impermanent, and nonsubstantial nature of what is. While transcendental philosophy identifies the detailed reification mechanism, the Middle Way wants to dispel them once and for all. To link critical thought with this intent is to open reason for the meta-rationality of cognition, which is precisely the aim of critical metaphysics.

It should be remarked that Kant sought a transcendental philosophy as 'solid' as Newton's physics. The latter portrayed absolute properties and substantial material objects existing from their own side. This is no longer the case in the most cherished Copenhagen interpretation of quantum mechanics, quite on the contrary. The historical continuity with classical physics has been broken. A holistic definition of phenomena is at hand. The object can no longer be dissociated from the contribution of the irreversible functioning of the measuring apparatus. The Hilbert space structure used in quantum mechanics conveys the relational nature of our knowledge about the physical while involving no description of the two *relata*.

Moreover, the extensive use of differential calculus (even in classical physics) shows only (infinitesimal) relations are accessible. No substantial, monadic ground of these is implied. There are no absolutized *relata*. Indeed, quantum mechanics points to our knowledge as 'relational,' with neither *prius* nor *posterius* between object and subject.

Like the 'hidden variable' hypothesis, other interpretations are desperate attempts at restoring substantialism in physics.

As Nāgārjuna remarks: neither connection, connected, nor connector inherently exists. The existence of relations to the detriment of the *relata* would imply using an opposition (*relation/relata*) and reifying one of its terms, while the two terms *arise in dependence*. Object and subject are on the same footing. There is a non-polar conception of relations between them, so reification of any is avoided. Relations are determined by individual connections of things. This depends on the way an observer takes cognizance of the observed system.

This metaphysics of process accepts the tenets of critical philosophy. Immanence stays 'near' science and acts as a heuristic, developing a totalizing picture of the world and its ground. It does not step outside de world to ground it in a *self*-sufficient stratum. Still, neither does it refuse to posit a series of pre-existent conditions or possibilities enabling the world to emerge. This ground is a multiverse, allowing (a) an infinite number of worlds to emerge out of it and (b) inter-cosmic evolution. This multiverse itself is a virtual dependent arising, not a substantial author creating the world 'ex nihilo' but rather the set of propensities regarding primordial energy, natural laws, and the harmonizing 'logos' of a universal architect.

Transcendent metaphysics is not rejected but deemed post-conceptual. Its object (absolute truth) is no longer captivated by a conceptualizing reason. This absence of transcendent rationality does not preclude the possibility of prehension, the direct, nondual, gnostic experience of reality as it truly exists. It merely rejects the possibility of pouring the infinite into finite categories.

'We are like sailors who have to rebuild their ship on the open sea, without ever being able to dismount it in dry-dock and reconstruct it from the best components.'

Neurath, O.: Wissenschaftliche Weltauffasung, Sozialismus und Logischer Empirismus, 1979, pp.41-42.