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Front Pages

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Gregory T. Papanikos
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The Transition from 'Mythos' to 'Logos': The Case of Heraclitus

By Dagnachew Desta[*]

In its origin and early formation, philosophy was closely related with mythical disclosure of the world and the transcendent. During this early period of Greek history (sixth century B.C.) poets and sages filled the shoes of the theologians. With the arrival of the new thinkers, the poets lost their monopoly in all areas. Thus, their poetic narration about the gods and their teachings about conventional values were placed under heavy pressure and criticism. As a result, mythical meaning, with its revered symbols and rituals gradually began to lose its validity as an authentic cultural force. To be sure, despite their differences, one should not overlook the fact that the boundaries between the poets and philosopher were not clearly differentiated. In this paper, I shall first show the continuity and discontinuity between the old and the new traditions and will point out how philosophy originated against the background of mythic culture. Second, I shall try to show Heraclitus's role in the process of this transition. Third, I shall explore Heraclitus's doctrine of the logos and demonstrate that his teachings constitute both a critique and an appropriation of mythical culture. I am convinced that his work is best approached if studied in the context of the struggle between the old and the new "scientific" tradition. In this connection, I shall advance the thesis that Heraclitus was one of the chief architects of the new school and yet, at the same time its strongest critic. Thus, we find in his work, mythic/ scientific "ways" sometimes clash and at times form unity. Heraclitus resembles Jean-Jacques Rousseau in one respect: on the one hand, he was one of the leading champions of the new age; and on the other hand, he was pretty much a child of the old culture. Thus, some of his teachings evolved from and were directed against both the old and new traditions. Heraclitus advocated rationalism and was the first one to warn against it.

Keywords: *Logos, I – It, I -- Thou, transcendent, immanent, flux, the one, ordained, identity of opposites*

Introduction

The main object of this article is to illustrate Heraclitus's role in the triumph of philosophical speculation over the old mythopoeic traditions. To be sure, the speculative and rational enterprise was not confined to the work of one or two thinkers since the mythical elements could not be overthrown all at once. In this respect, the challenge is to show how the various Greek philosophers relate to the mythical tradition and demonstrate their specific contribution in overcoming that tradition.

The central account of this paper is divided into two parts. In the first part, I deal with the phenomenon of myth in its connection with early philosophy. Here,

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my analysis is informed with the contention that the relationship between myth and philosophy is far simpler, and myth should not be characterized as merely "irrational" and devoid of "reason" and "logic".

In the second part, I move directly to Heraclitus and deal with his work under the following interconnected headings: A) The obscure B) The logos C) Political and ethical teachings. In this connection, I advance the following interrelated claims by relying mainly on his available fragments.

First, Heraclitus was an important element in the new movement. He was chief among the pre-Socratics who protested Homeric and Hesiodic theology. Following Xenophanes, he replaced the Olympian gods with a more powerful one. Second, Heraclitus was hesitant to follow the implications of the doctrines of the new school to the end. Two examples can be cited in this respect: a) he refused to accept the nomos/physis distinction that later gained acceptance in the scientific tradition. B), unlike his contemporaries (e.g., Hecataeus), who showed great interest in research (history) that involved the assimilation of large quantities of data, Heraclitus dismissed such efforts by declaring that: "A lot of learning does not teach (a person the possession of) understanding; (could it do so,) it would have so taught Hesiod and Pythagoras, or for that matter(?) Xenophanes and Heraclitus". (Frag. 40).

Third, some of the teachings of the Milesians have served Heraclitus as a basis for his philosophy. His work can be understood as a response to the worldview of the Milesians viz. the coming-to-be and passing away of the physical world, the notion of first principle, and the cyclical movement of nature. But this does not make him a physicist and his doctrine that sees fire as the origin of all things should not be confused with the arche of the Milesians.

(I)

The literature on 'myth' is vast and hence, there is no way of handling the issue in a few pages. What I've chosen to do instead is select three outstanding scholars who have written seminal works on Greek mythology in connection with the rise and development of philosophy. They are respectively H and H. A Frankfurt (Before philosophy) and Lawrence J. Hatab (Myth and philosophy).

The Mythical World as a 'Thou'

In order to understand the 'mythopoeic' world, we need to open our minds to the way in which ancient man perceive and experience its surroundings without imposing our perspective and habit of looking at things. This obviously means that there is a stage in the development of human taught that is qualitatively different from our modern perception and comprehension of reality. For sure, we do not find concepts like 'philosophy', 'science', 'universal law' etc. in the structure of mythopoeic thought. Contrary to the conceptual accounts of modern man, 'imagination', 'storytelling', 'fantasy', 'speculation', 'concrete experience', 'revelation of a thou' and the like are tools that are closely associated with mythic disclosure.

For instance, when we pursue further and make a comparative analysis behind the following 'pairs' i.e., 'speculation and science', 'personal and impersonal forces' and 'I and thou' revelation we shall see clearly the distinction between modern abstract presentation from the experience of mythical taught.

Speculation and Science

Ancient teaching is engulfed with imagination, fantasy and above all filled with speculative yearnings. Speculation "is an intuitive, an almost visionary, mode of apprehension" (Frankfort et al. 1972, p. 11). We need to be cautious here in the sense that speculation is not a mere flight from reality. It's a mental activity that creates a distance from what it seeks to comprehend in order to establish "order, coherence, and meaning" out of the "chaos of experience" (Frankfort et al. 1972, p. 11). With the advent of modern science, speculative thought is not only restricted but shunned as an appropriate tool for interpreting the world of experience. Science with its well-established method and modicum of objectivity have received a wide range of epistemic acclaim in our days.

When we turn to ancient man, we discover that its approach to nature is quite different from us. To begin with, in the mythical world, we do not find a distinction between 'man' and nature. They are perceived to be identical. The two entities were not seen in opposition to each other and hence there was no need to forge a means or (instrument) to understand nature.

'I' and 'Thou' Relations

The concept of I and Thou relations was first introduced by the Judaic theologian Martin Buber. In his groundbreaking work, (I and Thou) he advanced the thesis that human beings relate to each other in one or two fundamental ways: 'I – It' and 'I – Thou relationship.' The I – It – relation is closely associated with the phenomenon of objectification. In this modality, the 'I' perceives the other as an 'object' and consequently, the 'I' is active whereas the 'It' is passive. The 'I' refuses to give recognition of the other's subjectivity. Thus, the 'I' – 'it' is a relationship of domination whereas the 'I' manipulates the 'it' to promote its own end in much the same way we manipulate things.

On the other hand, In the I-Thou moment, we find a relation of 'subject' to 'subject' where two encountering 'entities' confer each other with mutual recognition and reciprocity. The 'I' and 'Thou' relations is highly important for many reasons. To begin with, all genuine transcendence and human authenticity is attained in the 'Thou' relations. It is so because we realize our deep humanity always in the mutual engagement and productive encounter with the other. To be sure, there is no self-fulfillment without the enriching presence of the other.

Taking their cue from Martin Buber, Henrie and A. Frankfurt divided early and modern men taught in the following important categories of apprehension. They claim that "the fundamental difference between the attitude of modern and ancient man as regards the surrounding world is for modern scientific man the

phenomenal word is primarily an 'It' for ancient - it is a 'Thou' (Frankfort et al. 1972, p. 12).

The modern perspective hinges on the division between subject and object. Let us for example take science which is representative of our modern view. 'Science' as we know it is based on the division between subject and object. The correlation between the two is virtually important. When scientific practice unfolds the scientist as a subject is active whereas the object, he/she studies is passive. Thus, for scientists, objects are manipulated and used. In addition, for scientists, objects are externally related to one another and hence, it is possible to predict the kind of behavior they display in advance.

> "A myth is a narrative which discloses a scary world" (Hatab 1990, p. 19).

Myth as a form of Disclosure

Myth is an important and integral part of the world of culture which is closely associated with the existential life of a given society. Above all, myth underlies the origin of most cultural norms and pattern of life of the human world. As the etymology of the term implies, "culture" is derived from 'cult', in Latin Cultus means adoration of worship and comes from the verb – colere to cultivate" (Hatab 1990, p. 21). So, myth is not only about stories and narratives but involves communal activity and ritual practice as well. To begin with, any attempt at comprehending "myth" should strive at understanding "what it means to live a myth". Other than the existential revelation of mythical disclosure myth involves narratives, stories, songs that particularly focus on gods, heroes, and a whole host or imaginary entities as well.

To be sure, there is a distinction between living a myth from interpreting myth. We need not, as some claim, that we should live a myth in order to understand it. To be sure, living a myth is not the only venue that would lead us to the understanding of myth. I submit that in order to come to a proper understanding of myth, we need to follow two procedural methods, i.e., destructive and constructive aspect:

Destructive Aspect

The destructive aspect involves a critical examination of the conventional approach to the study of myth hitherto offered by some scholars in the field. This is done to attain a proper ground in understanding "mythology".

Error One

We should avoid construing myth "to be primitive form of science" (Hatab 1990, p. 29) that could be evaluated by the standard of scientific objectivity. We should on the contrary realize that myth is not a phenomenon that could be described in an objective manner. Myth by its very nature is not a subject of objectivity. It is rather a "narrative which discloses a sacred world" (Hatab 1990, p. 19). The other related and highly prevalent mistake involves the view that considers myth as something 'irrational' or 'non-reasonable.' Myth can't be judged by the standard of

"scientific rationality" since it has its own peculiar ontological reality that resists modern epistemic evaluations.

Error Two

The second difficulty we encounter in understanding myth is centered around the problem of Reductionism. This usually occurs in identifying the source and function of myth to a single factor. Indeed, when we do that, we would fall into the pitfalls of reductionism by identifying the source of myth to a single determinative factor.

Error Three

We should avoid imposing our categories and interpretation on the phenomenon of myth. If we want to understand myths, we need to orient ourselves to the way in which it is lived. Thus, the proper and correct interpretation would be to comprehend myth "on its own terms".

Constructive Aspect

To begin with, we must come up with a hermeneutical approach that would enable us consrue that myth evolves sincere beliefs and commitments. Indeed, we must follow a 'method' that would disclose or open the way in which myth shapes and influences human culture. In addition, a phenomenological approach is also needed that would give us access to the being of myth. Myth is inextricably connected with the lived world and hence it is quite difficult to make an 'objective' or 'detached theoretical presentation about it. It is so because myth is developed within the spirit of speculative thought and action.

Finally, myth is also a religious expression which is closely associated with different and differing ritual practices. Here, the categorical division between 'sacred and profane' is important in understanding the transcendent aspect of myth. As far as the issue of 'sacred' goes, terms like 'spiritual', 'transcendent', 'sublime' etc. are associated closely with it. When it comes to the term profane, it is closely connected with the categories of ordinary and the common. Here, we should be careful not to draw a radical distinction between the two since the profane has the potential to attain the status of the sacred.

Conclusion

We want to sum up this section by drawing the identity and difference between the two traditions. **A. Similarity:** To begin with, we find in early man's speculative adventure a quest for the origin and telos of being. Second, like early philosophy the mythopoeic world accepted the existence of some sort of power that provides justice in the universe. Third, we find in 'myth' just like ancient philosophy an attempt to connect 'the visible with the invisible' that led much later to the notion of cause and effect. Like the poet, the philosopher shares that there is a powerful force hidden beyond the realms of ordinary human experience but discernable through a special faculty. Both traditions see the appearance of being in some

beginning or 'origin' of things: thus, the search for origins "is not a new trend of thought; what was really new was their definition of the very term beginning" (Cassirer 1946, p. 54).

B. Difference: Unlike the mythopoeic tradition, Greek philosophy made two great discoveries i.e., the discovery of man and the discovery of nature and its laws. Early man saw man and nature to be identical. Their perception of nature was markedly different from the mythical understanding of natural phenomena. It is then in this respect that we could say that Greek philosophy created new 'physiology' and that the new thinkers were also scientists in the sense that they showed obvious propensity for observation and research. Thus, their zeal for inquiry and adoption of a new model (Geometry) put them in stark contrast to the mythic culture. Another decisive break we find between the mythopoeic tradition and philosophy rests on the rejection of the idea that God is found in nature. Both Hebrew religion and Ancient Greek philosophy advanced the claim that God is transcendent not immanent in nature.

The Greeks went further and claim that "universal law' not 'gods' govern the diverse nature of the cosmos. In sum, as far as the difference between the two traditions goes, I fully share Lawrence J. Hatatb's judgment that myth is "retrogressive" whereas philosophy is 'introgressive'. This means myth shows a propensity to go back and practice the habit of "recollecting" and "repetitive telling'. Philosophy on the other hand, employs inquiry, and interrogation to discover principles behind appearances.

(II) - The Obscure

> "What he understood of it was excellent and what he did not understand he believed to be as good, but it requires a vigorous swimmer to make his way through it" (Guthrie 1980, p. 9).

> "The obscurity of this philosophizing, however, chiefly consists in there being profound speculative thought contained in it" (Hegel 1974, p. 281).

Compared to other literature of his period, Heraclitus's Fragments are unique in terms of style, strength and mode of speech. He is known "for his obscure style, as will become evident when we get down to an analysis of his fragments, which are studded with paradox, aphorism, metaphor and symbolism" (Wilbur and Allen, 1979, p. 61). Indeed, not only are his metaphors, images, and figurations difficult to understand but his philosophical statements are covered with 'oracular and hierographic garb' and for this reason, he was known, even in ancient times, as "Heraclitus the Dark."

Many reasons are given for his obscurity, of which the main ones are: (a) he wanted to hide the truth from the multitude for whom he had nothing but scorn; (b) that the Greek language failed him – "the nobility of his thought exceeded that of his contemporaries, as well as that of the language at his disposal" (Wilbur and Allen 1979, p. 62). (c) He took himself to be a sort of preacher or prophet.

I submit that two of the above reasons stand out in explaining his obscure language and the impenetrability of many of his fragments. First, he sounds as if

he is consciously adopting the Delphic mode of speech in that, like the Oracles, he speaks in a prophetic and oracular manner. Recall here what he says about Sibyl and Apollo: "(The) Sibyl, (according to Heraclitus,) uttering with raving mouth words mirthless, (unadorned, and again: unperturbed, reaches (us with her voice up to a thousand years later, thanks to the gods)" (Heraclitus, Frag. 92). and "The Lord whose is in oracle in Delphi neither indicates clearly nor conceal but gives a sign" (Heraclitus, Frag. 93).

Heraclitus here refers to the Delphic tradition which counsels those who seek advice in "indirect form" by hint, sign, riddle, and ambiguity. The Delphic Apollo is always ambiguous in its utterances. It neither reveals clearly nor conceals forever—it simply offers an indication of the truth, which is expressed in signs.

As indicated above, I am convinced that in his reference to the Delphic tradition, Heraclitus is also alluding to his own enigmatic and oracular style. As in the Oracles, he covers his philosophical (utterances) in ambiguities and riddles. To the question, "Why would he want to do that?" i.e., make his messages difficult to understand, the obvious answer is that he wants to provoke his readers to think. Just as the words of Oracles demand an 'interpretation', Heraclitus advises us that his utterances could have multiple meanings.

Second, he believes that nature is complex and on top of that "has a tendency to conceal itself". Thus, Heraclitus warns his readers to prepare for the hard task. He argues that the logos (truth) is accessible only to those who have made the necessary preparations: "Those who seek gold dig up a great deal of earth and find little" (Heraclitus, Frag. 22). According to Heraclitus, "men who are lovers of wisdom ought very much to be enquirers into many things" (Heraclitus, Frag. 35).

For Heraclitus, the degree of our insight into the logos distinguishes the serious from the superficial student. He feels that we should draw the distinction between those who love the truth from those who simply "conjecture at random." "Let us not make random conjectures about the most important matters" (Heraclitus, Frag. 47). "A lot of learning does not teach (a person the possession of) understanding (could it do so) it would have so taught Hesiod and Pythagoras, or for that matter (?) Xenophanes and Hecataeus" (Heraclitus, Frag. 40).

Heraclitus believes that his discovery on wisdom did not come about through research and investigation but through a combination of sudden flash of inspiration and reflection. His philosophy is intensely individual and personal in its features and, as Charles Kahn rightly observed, that Heraclitus had not learned from any of his contemporaries or his predecessors. For example, he was neither a historian nor a polymath (historia is most often associated with the name of Hecataeus and Herodotus). This practice involves traveling to far places and collecting all sorts of data, questioning, or in short, the study of the external world. The latter simply means learning from the poets.

Inquiring into the Logos

The idea of the logos is central to Heraclitus's philosophy. What does he mean by the logos? And how does it relate to his thought? We know, for example, that

this term was used to describe a variety of subjects by the ancient Greeks. According to Kahn, "Heraclitus's logos is from one point of view the usual lonian prose 'report.'" But "it is also something quite different" (Kahn 1983, p. 97) in that he used the term in a non-conventional sense.

Heraclitus's begins with the following statement about the logos:

> "But of this account, which holds forever, people forever prove uncomprehending, both before they have heard it and when once they have heard it. For, although all things happen in accordance with this account, they are like people without experience when they experience words and deeds such as I set forth distinguishing <as I do> each thing according to <its> real constitution, i.e., pointing out how it is. The rest of mankind, however, fail to be aware of what they do after they wake up just as they forget what they do while asleep." (Heraclitus, Frag. 1).

From the above passage, we find at least three important statements about the logos. First, in the opening lines, Heraclitus draws a distinction between himself and the logos. The sentence "Hearing not to me but to the logos . . . men even fail to comprehend both, before hearing it and once they have heard it . . ." demonstrates that he saw the logos as something different from his narrative. What he is saying in essence is, it is not actually me that you should listen to but to the logos which are speaking through me. That is why I am pleading with you to pay more attention to the logos rather than to me.

From this point of view, he is also suggesting to them that they have already encountered the logos before they have heard his speech. In addition, since his speech and the logos are not identical, we could further surmise that it is accessible to us in ways other than by spoken or written word. It is on these grounds that we can understand his complaint against his readers for not understanding the logos before they have heard it from him.

The second crucial statement in Fragment 1 says: "For although all things happen in accordance with this account, they are like people without experience." Heraclitus here advances the view that the logos regulates everything "that comes to pass." It is an autonomous entity independent of our discourse. According to Kahn, "the tension between the two aspects for the logos - the actual words of Heraclitus and their everlasting content - is stretched still further" (Kahn 1983, pp. 98-99). Indeed, the gap between human speech (such as I set forth) and the logos (universal case) is presented in stark contrast.

The third and final statement that I want to deal with her concerns his observation that the rest of mankind fails to be aware of what they do after they wake up, just as they forget what they do while asleep." In this passage, Heraclitus again complains that men act as if they are asleep - they are like sleepwalkers. "We must not act and speak like men asleep." Guthrie has correctly suggested that there is a connection between this criticism and his advice to "follow the common." Here the link could be established from the following fragment:

> [Heraclitus says that] "for those who are aware there is a single, common universe, whereas in sleep each person tucks away into (his) own, private <universe>." (Heraclitus, Frag. 89).

What Heraclitus means, in brief, is that in sleep we are in a private world, our dreams are not shared by anyone as in our waking experience. In the same vein, we live as if we have a 'private universe' that leads us to falsehood. Thus, we should never forget that "sleep takes us away from the 'public universe' by suppressing our rational elements. In view of this, we should transcend our private experience and participate in the universal experience of logos.

This point is emphasized again by Heraclitus: "That is why one must follow that which is (common) [i.e., universal, for 'Common' means 'universal']. Though the account is common, many live, however, as though they had a private understanding" (Heraclitus, Frag. 2). He complains against the multitude that fail to grasp that which is common and instead clings to a truth peculiar to themselves. Here we should ask how he can reconcile the conviction that he alone has grasped the common logos while others fail to do so (Guthrie). 1 believe Heraclitus would probably confirm that the issue has nothing to do with individual merit or demerit but is instead a question of recognizing what is out there for everyone to see. As he put it, "they are separated from that with which they are in most continuous contact." (Heraclitus, Frag. 72).

In the end, we should understand that even though his advice is to follow the common, we should not take it that it is readily available without any effort on our part. Obviously, it requires intelligence and insight to come to grips with it. That one needs to seek and probe deeply into the nature of things. For he says, "(things?) (worlds?) real constitution (according to Heraclitus) tends to conceal itself" (Heraclitus, Frag. 123).

How can we resolve this dilemma? How can we reach the summit of Heraclitus's truth-the logos which are supposedly around us and yet not easily accessible to us? It is, I believe, in the hope of tackling such questions that Heraclitus reviewed and criticized the power of the senses to apprehend and/ experience the logos.

To begin with, for Heraclitus the senses are necessary in our search for knowledge - it is through the senses that we first encounter the logos. But we must be skeptical about the ability of the senses to even achieve that since they do not give us more than simple impressions of the being of the logos. In this connection, in one of his fragments he says: "poor witnesses for people are eyes and ears, if they possess uncomprehending (literally, 'barbarian') souls." (Heraclitus, Frag. 107). Indeed, we should try to go beyond what our senses present to us. We need to investigate and research but should also know how to reach the right conclusion. In a sense, intellectual apprehension of the logos presupposes intuition and insight. In sum, even though Heraclitus finds the senses 'untrustworthy' in general, he does not reject sense perception as Parmenides does: "Whatsoever things <are> objects of sight, hearing, <and> experience these things I hold in higher esteem" (Heraclitus, Frag. 55). For sure, the senses are "bad witnesses" for those who lack the necessary insight and understanding such as those with barbarian souls.

Positive Content of the Logos

Heraclitus's concept of the logos runs the gamut from cosmology to theology (the two were inseparable at that period), from ethics/politics to the human soul or what we now call philosophical anthropology. Perhaps it would be advisable to follow the Stoics in this respect and divide his teaching into different (three) subjects. Given the scope and purpose of this paper, I will limit my analysis to two general topics, i.e., to his cosmological/ theological doctrine and his ethical (political) doctrine.

Cosmology and Theology

The logos, for Heraclitus, are part material and part spiritual. He did not draw a distinction between material and spiritual entities (principles). Unlike the pre-Socratics, he believed that the primal substance is endowed not only with life but with some sort of divine principle. We know that the physical attribute that embodies the logos is fire but before we develop this important Heraclitan insight, let us begin with some of his essential teachings that lead up to it. "Not after listening to me, but after listening to the account, one does wisely in agreeing that all things are <in future?> one <thing>. (Says Heraclitus) (Heraclitus, Frag. 50).

We have seen the message of the first part of this fragment—that one should focus one's attention on the logos rather than on him. The real challenge comes in understanding the second passage that counsels us that it would be wise to agree that "all things are one." In other words, what exactly does Heraclitus mean when he says everything is one?

It is my contention that Heraclitus specifically refers to the two cardinal teachings of the logo. First, against all levels of representation, he advances the claim viz, the fundamental identity of opposites. We can select three fragments that demonstrate this thesis:

> "They do not understand how, while differing from (or: being at variance), <it> agrees with itself. <There is> a back - turning connection, like <that> of a bow or lye." (Heraclitus 2003, p. 37).
> "A road up <and> down <is> one and the same <road> (Heraclitus 2003, p. 41).
> For very many people Hesiod is <their> teacher. They are certain he knew a great number of things—he who continually failed to recognize <even> day and night <for what they are>! For they are one." (Heraclitus 2003, p. 39).

What appears to be disconnected and at variance with each other is deeply connected and in harmony with each other, i.e., all opposites are dialectically connected in the sense that one is the definition of the other. For instance, the concept of 'day' implies 'night', and the notion of 'hot' and 'cold' are mutually implicative concepts. Thus, the interchangeability of opposites shows that they are one manifestation of Being. Hegel credits Heraclitus with being the first philosopher to discover the unity of opposites and "to have understood how all things are in flux" and that truth is becoming.

Second, the connection with his doctrine of identity of opposites, his belief in the universality of change is one of his cardinal ontological teachings. For Heraclitus, everything is in constant flux—change is pervasive in that "nothing, not even the most stable-seeming and solid substance, is really at rest" (Freeman 1966, p. 115). Here, we should note that there is a connection between Heraclitus's conflict of opposites and his doctrine of change. It is the constant clash of opposites that explains why things change as well. This river statement attests to this fact: "As they step into the same rivers, different and <still> different waters flow upon them" (Heraclitus, Frag. 12).

> "We step and do not step into the same rivers; we are and are not." (Heraclitus, Frag. 49a).

As it stands, while individual change (comes into being and perishes) takes place in a spontaneous and less orderly fashion, change on a universal or cosmic scale is more orderly and cyclical. Here, a few words about Heraclitus's perception about order and the logos is in order—the key text is found in the following fragment:

> "<The ordered?> world, the same for all, no god or manmade, but it always was, is, and will be, an ever-living fire, being kindled in measures and being put out in measures." (Heraclitus, Frag. 30).

Two cosmological views are advanced in this fragment (30). First, as the term cosmos connotes, we have an ordered world, it is (not created) and will always be (eternal). Heraclitus describes this ordered world as 'everlasting fire' or composed of fire. Second, while it is described as 'everlasting fire', it is also said to be "kindled" and put out in "measures." How do we reconcile these inconsistencies? Put another way, can we employ two contradictory concepts such as "ever-living" and "extinguished" to describe the same phenomenon? Is it not true that if it is perishable, we cannot claim that it is also everlasting or that "it always is"?

I believe that Heraclitus is talking about 'change', i.e., proposing the idea that everything evolves into something. For instance, fire is transformed into many things: "fire's turnings: first, sea, and of sea half <is> earth, and half 'burner'" (Heraclitus, Frag. 319). Thus, the first sense of Fragment 30, where he uses the two antithetical terms "ever-living" and "put out," adumbrates the fact that the elements are always consuming and being consumed by one another. Heraclitus here refers to the ancient doctrine of a final conflagration. But he does not stop here, he also contends that this transformation takes place in an orderly fashion, "extinguished in due measure": "The sun <God> will not overstep <his> measures. Otherwise <the> avenging Furies, ministers of justice, will find him out" (Heraclitus, Frag. 94).

This fragment underscores the fact that the world is an ordered entity, influenced by the logos, according to measure. According to Wilbur and Allen, Fragment 94 suggests that "Fire is not only a transcendent principle; it is imminent in all earthly processes. It exercises its control over them as a medium of exchange by regular measures" (Wilbur and Allen 1979, p. 69).

We shall see that the same principle applies to mankind as well. But before that, I want to say a few words about Heraclitus's theology which is inseparable from his cosmological views. We have said earlier that the logos is not only a material principle but a divine thou: "[He says that] the wise <thing> is a single <thing> (or, differently punctuated: one thing, the wise thing, <is> - knowing the plan + which steers+ all things through all things" (Heraclitus, Frag. 41).

> "One thing, the only wise thing, is unwilling and willing to be called by the name Zeus." (Heraclitus, Frag. 32a).

> "And thunderbolt steers the totality of things." (Heraclitus, Frag. 64).

The first of the three fragments allude to the fact that God is one, identical with the logos. The second statement refers to the fact that he wants to be called Zeus—and does not have the old anthropomorphic characteristics. The last text points to the view that the logos (the one) directs and dictates all cosmic events.

Summing up

In his celebrated Gifford lectures, James Adam summed up the positive content of the logos in the following words (points): 1. The logos does not have a beginning nor an end but is instead eternal and everlasting. 2. All beings in the cosmos live and thrive in accordance with the logos. Thus, the logos governs the cosmic as well as the human world. 3. Even though man has a duty to abide by the one universal logos, he/she tends to act as if they have a private (individual logos).

The logos permeate everything. Jaspers says that logos "is the encompassing undefined and endlessly definable terms of philosophy" (like all the great and basic terms of philosophy) (Jaspers 1966, p. 11). The meaning or the logos are not derived from sheer conceptual thinking. The logos embodies "action and speech" which make it difficult to grasp and apprehend in theory alone.

The logos are not accessible to ordinary observation. We need to put a lot of effort into coming up with an understanding of its essential features. It is so because, "Nature loves to hide". It is quite difficult to grasp her secrets unless we concentrate hard and open our eyes. Heraclitus takes it upon himself to awaken humanity from sleep.

> [Heraclitus says that] "for those who are awake there is a single common universe, whereas in sleep each person turns away into (his) own, private (universe)." (Heraclitus, Frag. 89, p. 55)

On the positive side, *Heraclitus* suggests that we could attain a high degree of knowledge if we begin to contemplate the being of our inner world i.e., our soul.

> "One would never discover the limits of soul, should one traverse every road – so deep a measure does it possess)" (Heraclitus, Frag. 45, p. 33).

1. *Heraclitus* underscores the depth of the soul and the logos. What is suggested here is that understanding of the soul leads to the understanding of the logos.
2. *Heraclitus* detects a tension between the universality of the logos and "private intelligence". He warns that it is imperative to accept that there is only "one wisdom by which all things are steered".

> [He says that] "the wise (thing) is a single (thing) (or, differently punctuated: one thing, the wise thing, (is) knowing the plan which *steers* all things through all things." (Heraclitus, Frag. 41).

If we shorten Heraclitus's teaching into one sentence, he tried to explain the universe by invoking one universal principle: the principle of the logos.

Political/Ethical Teachings

One of Heraclitus's most ethical doctrines rests on the assumption that the ordering of the human 'universe' is closely connected with the ordering of the universal logos. As part of the rational life of the logos, man's law is also related with the natural law. Thus, the wisdom of the logos gives us insight and guidance to our social and practical life. According to Werner Jaeger, Heraclitus is "the first philosopher to introduce/ connect knowledge of being with insight into human values and conduct and made the former include the latter" (Jaeger 1948, p. 180).

The initial insight that we derive from the "knowledge of being" is that we should follow the universal law, that our ethical and practical behavior should follow the dictate of the universal spirit of the logos:

> "Those who <would> speak with insight must base themselves firmly in that which is common to all, as a city does upon <its> law—and much more firmly: For all human laws are nourished by one <law>, the divine <law>. For it holds sway to the extent that it wishes, and suffices for all, and is still left over." (Heraclitus, Frag. 114).

The logos are common -it is universal. We should obey and try to live in harmony with the universal (logos). Human law is not only subordinate to the divine law, but it is also nourished by it. Thus, with all its imperfections, human law "drew their life from the one divine law" (Freeman 1966, p. 127). For this reason, Heraclitus holds the law in high esteem. He says then: "[For he said,] the people should fight on behalf of the law as<they would> for <their> city-wall" (Heraclitus, Frag. 144). What he is saying here is that, as the wall protects the city from external enemies, the law, which is common to all, protects the citizens from itself, i.e., without the rule of law, internal conflict and social strife will plunge the city (community) into chaos and anarchy.

I want to add here that we should also remember that this universal law always operates according to measure. We have already seen how "fire" in the natural world is kindled and extinguished according to measure. So, for Heraclitus, the same principle follows in human affairs as well. In one of his memorable

fragments this connection is drawn: "[He used to say that] there is a greater need to extinguish hubris than there is a blazing fire" (Heraclitus, Frag. 43). The advice here is for moderation and law abidance whereas hubris is condemned as a violator of measure.

Following his criticism of those who act and behave in defiance of that which is common, he repeatedly calls upon his listeners to heed to the "counsel of the one": "<It is> law (custom) also to obey (respect) counsel of <a single> one" (Heraclitus, Frag. 33). This fragment is consistent with Heraclitus's teachings about the wisdom of 'agreeing that everything is one.' The relevant fragment that corresponds with his advice to follow the counsel of the one is: "[He says that] the wise <thing> is a <single> <thing> (or, differently punctuated: one thing, the wise thing, <is>—knowing the plan+ which steers+ all things through all things (Heraclitus, Frag. 41).

When it comes to the affairs of the polis, he defends the Aristocratic view (the wise are few) against the prevailing philosophy of his day that practiced a strange democracy - banish individuals (Hermodorus) for being better than them. Like a true aristocrat, he does not have confidence in the ability of many to run their own affairs. Many are not virtuous; they lack the necessary insight to be given the position of leadership. For him, "one man <is> <the equivalent of> ten thousand, provided he be very good (excellent)" (Heraclitus, Frag. 49).

One of the last points I want to examine here before ending this paper is Heraclitus's provocative statement in Fragment 80, which reads: "One must realize that war is common, and justice strife, and that all things come to be through and are <so> + ordained +" (Heraclitus, Frag. 80). The question is: How does Heraclitus reconcile this passage (justice is strife) with his proposal to obey the law? Now, the first phrase "war is common" is taken by most commentators (Kahn, Robinson) as a reference to Homer's statement that "Enyalios (i.e., Ares) is common (xynos), and the killer gets killed" (Kahn 1983, p. 205). Charles Kahn suggested that Heraclitus expounds this notion further and 'takes xynos 'common' in his own sense of 'universal,' all-pervading, 'unifying,' and thus gives the words of the poets a deeper meaning" (Kahn 1983, p. 205).

The second statement: 'justice is strife' sums up the essence of Heraclitus's philosophy. I think Hegel is right in stating that "In Heraclitus the moment of negativity is imminent" (Hegel 1974, p. 284). He is the first philosopher to have understood the truth of contradiction and opposition that underlies the dialectic of human existence.

Conclusion

> "This work of which, one hundred and thirty fragments have come down to us, consists of incisively, powerfully formulated maxims. They did not form a systematic edifice, but there is a unity in their mode of thought. …. Their succinctness invites the reader to interpret endlessly." (Karl Jaspers from The Great philosopher's volume II., p. 11).

Heraclitus is a subtle and complex philosopher whose thought cannot be comprehended in a single narrative. His message is quite difficult to grasp easily because of his oracular style and partly because of the difficulty of his thought. On the other hand, one of the most important critical editors of Heraclitus fragments (Diels) is supposed to have said that "he who once hears the sayings of Heraclitus never forgets them for the rest of his life" (Adam 1965, p. 214).

Heraclitus was not only an instigator into the being of nature like the new generation of thinkers (The Milesians). He was also at the same time an initiator (instigator) who tirelessly summoned his fellow countrymen to follow the one and only correct path.

Heraclitus belongs to a generation of thinkers who tried to move away from the old mythopoeic tradition to a new perception of the universe. In his work we find two formidable points against the prevailing attitude of the old mythopoeic tradition: A) He rejected the notion that nature is governed by the gods and instead advanced the claim that the world is ruled by one cosmic law, i.e., the logos. B) Against mythical plurality he introduced the notion of one unifying principle that governs all 'occurrences'. For Heraclitus, this principle is endowed with intelligence and thought. As he puts it: "the thunderbolt steers the totality of things" (Heraclitus, Frag. 64). He calls this entity 'Fire'. For Heraclitus, 'Fire' is not the ordinary element like water, air etc. but something different involving life and soul.

We could sum up Heraclitus concepts of the logos in the following preliminary statements. (i) All things he says come to pass in accordance with the logos. (ii) The struggle and unity of opposites. (iii) The logos are the source of law and cosmic order. (iv) The logo is the being of the world and the soul. (v). Fire is the material side of the logos. (vi). Everything is in a state of flux.

His teaching about the logos the dialectic of opposites, and along with his belief that philosophical understanding should be able to offer guidance to human conduct remained highly influential in this day.

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Kant on Quantitative and Qualitative Judgments

By Dipanwita Chakrabarti[*]

Kant, while speaking on his 'Table of Judgments' in his Critique of Pure Reason, is concerned with classifying only the forms of judgment and not judgments. Kant says that if we attend only to the forms of judgment without considering their contents, we find that forms can be classified under the four heads of quantity, quality, relation and modality, each with three subdivisions. In this paper our primary objective is to explain Kant's quantitative and qualitative judgments and examine some related objections put forward by his critics. We also intend to provide an answer to the question as to why Kant has departed from the formal logic of his period while classifying judgments, in the context of objections raised by H.W. Cassirer and P.F. Strawson.

Keywords: *judgments, form, content, quantitative, qualitative*

Introduction

Although Immanuel Kant speaks of his 'Table of Judgments' in his *Critique of Pure Reason*, he is concerned with classifying, not judgments, but forms of judgment. He says: "If we abstract from all content of a judgment, and consider only the mere form of understanding, we find that the function of thought in judgment can be brought under four heads, each of which contains three moments" (Kant 1978, A_{70}/B_{95}). Kant's assertion here suggests that he is concerned with classifying the forms of judgment without regard to the content, i.e., the particular nature of the objects judged. Kant says that if we attend only to the forms without considering the content of judgments, we find that the forms can be classified under four heads, each with three subdivisions. This classification is presented in his Table of Judgments (Kant 1978, A_{70}/B_{95}, Kant 1950, p. 50). The prime objective of this paper is to (i) explain Kant's quantitative and qualitative judgments and (ii) examine some objections raised by his critics regarding these judgments.

Understanding Kant's quantitative and qualitative judgments necessitates an interpretation of what, according to him, is the difference between judgment and judgment form. We have presented a brief discussion of this topic in the first section under *Kant's distinction between judgments and forms of Judgment*. Kant's quantitative and qualitative judgments have been discussed in this work under separate sections.

Kant's classification scheme regarding quantity and quality has been the subject of criticism from several philosophers in subsequent eras. They include AO Lovejoy (1873-1962), RM Eaton (born 1940), HW Cassirer (1903-1979) and PF Strawson (1919-2006). An attempt has been made in the present work to provide an understanding of the objections raised by these philosophers regarding Kant's quantitative and qualitative judgments and study the validity of these

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objections in the light of Kant's own observations in his philosophical works. These are discussed at some length in the sections on Critique of objections to Kant's quantitative and qualitative judgments.

Kant's Distinction between Judgments and Forms of Judgment

In order to understand what, according to Kant, is a judgment and a judgment form, we have to consider Kant's opinion regarding this issue. According to Kant, human knowledge springs from a combination of two distinct faculties of the mind, namely, sensibility and understanding. Sensibility is the passive faculty of receiving intuitions while understanding is the active power of knowing an object through these representations (intuitions). *These two powers or capacities cannot exchange their functions. The understanding can intuit nothing, the senses can think nothing* (Kant 1978, A_{51}/B_{75}). We do not possess intuitive understanding or intellectual intuition. We receive intuitions passively through the senses. So, our intuitions are called sensible, and are said to be grounded on receptivity. But this is not true of a self-sufficient primordial being that possesses intuitive understanding. For such a being, the object is produced in the very act of cognition itself. Since our intuitions are given to sensibility only, our understanding cannot know by intuition. Kant believed that it is only through concepts and intuitions that we can cognize objects; there is no third possibility. So, we have to admit that our understanding is that faculty of knowledge which operates through concepts. Understanding makes concepts by its own activity. In so far as knowledge yielded by human understanding is conceptual, it is necessarily discursive. According to Kant, to know by means of concepts is to judge. Kant admits an intimate relation between concepts and judgments. They are essentially connected with each other. Kant points out that to judge is to unite our representations (intuitions and concepts). He expresses this opinion by saying that ". . . all judgments are functions of unity among our representations" (Kant 1978, A_{69}/B_{94}).

Now we will attempt to explain Kant's general nature of judgment. He is concerned here only with such judgments that have subject-concepts and predicate-concepts. The predicate concept of a judgment refers to the object mediately, i.e., by means of the subject-concept, which refers immediately to the object. Hence, we find a double mediation in a judgment. A judgment is the mediate knowledge of an object, i.e., the representation of representation of an object. It is said that the subject-concept refers immediately to the object. This immediacy, however, is only relative. Paton argues here in this context *This immediacy is of course only relative* (see footnote in Paton 1936, p. 253). The subject-concept, in so far as it is a concept, can refer to the object only by means of intuition. No concept is ever related to an object immediately. The subject-concept refers directly to the intuition, while the predicate-concept is referred to the intuition indirectly. Hence in judgment, we refer the concept to an object by means of an intuition or a concept. Judgment, therefore, since it employs concepts, is a discursive or mediate, and not an intuitive, cognition.

Precisely speaking, one can say that when we entertain a judgment, we unify representations. In the judgment, namely, 'All bodies are divisible' the predicate-concept 'divisibility' is applied to the concept of body, and the concept of body is referred to some intuitions which we have received passively. Hence, the predicate-concept, which is a higher idea in the sense that it has a wider denotation, comprises under it the subject-concept and others, i.e., the intuitions of divisible objects which fall under the concept of body. In this way many possible cognitions are gathered into one. This unifying function is not only present in the above judgment but is present in all judgments without exception.

The example of the judgment which Kant has given is a particular kind of judgment, in which the predicate-concept is considered to be higher than the subject-concept; but this is not always the case. For example, in the judgment 'All men are rational animals', the predicate concept, which comprises the subject-concept, cannot be regarded as higher than the subject-concept. Paton says, in defence of Kant: "It must, however, be remembered that Kant is not writing a treatise on formal logic, and his theory may be sound even if his example is inadequate and is described in a way which does not fit the general case" (Paton 1936, p. 254). Kant's main point is that all judgments, in so far as they are made in the knowledge situation, unify our representations - intuitions and concepts. This is true not only of categorical, but also of other kinds of judgments. Kant uses categorical judgment for an example only for the sake of simplicity. It must also be emphasised that in uniting intuitions and concepts in judgments, we are not merely playing with ideas; we also unite different individual objects to which intuitions immediately relate.

We have seen that a judgment essentially is an act of uniting our representations. According to Kant, the different ways in which judgments unite our representations, independently of their special nature, are the different forms of judgment. Different judgments, however, unite our representations differently. These different ways of judging are called, by Kant, the functions of unity in judgments and are nothing but forms of judgment. These different ways of uniting our representations are determined partly by their special nature involved and partly by the special nature of the understanding itself. The ways in which ideas are united in judgments, in so far as these ways are determined by the nature of the understanding, are the forms of judgment.

The distinction between the form and the content of a judgment is vital to Kant's argument; and yet he does not take the trouble of explaining and analysing the distinction in the *Critique of Pure Reason*. The passage (Kant 1978, A_{70}/B_{95}) cited at the beginning of this text suggests that he regards the distinction as absolute. As far as lack of any explanation from Kant is concerned, we are inclined to say that this is a mere assumption on his part that there is an absolute distinction between the form and the content of a judgment.

A relevant and important question in this context is whether we can conceive of human beings in whose language judgments are expressed in forms other than, or more or fewer than, those recognised in Kant's Table. We may, however, make two comments here. First, the question here is, at least in one respect, as to what we can conceive. But then the forms in which we do the job of conceiving are

exactly the forms with which Kant is concerned. Secondly, even if there be human beings who possibly think or judge in forms apparently peculiar to themselves, the question that arises next is whether their thoughts or judgments are translatable into our language. If not translatable, we shall not be able to hold intelligible discourses with them, and then a serious doubt will arise as to whether they are to be called human beings at all. If, however, their thoughts and judgments be translatable into our language or languages, then the forms of our judgments must also be valid for them.

Kant's Quantitative Judgments

Kant recognises, with some modification from the formal logic of his time, the division of the forms of judgments according to quantity, quality, relation and modality. Judgments under each of these heads are further sub-divided into three classes. Under the head quantity, judgments are sub-divided into Universal, Particular and Singular; under quality, the divisions are Affirmative, Negative and Infinite; under relation the judgments are divided into Categorical, Hypothetical, and Disjunctive; and under the head modality, judgments are divided into Problematic, Assertoric and Apodeictic. In this paper our contention is to explain Kant's quantitative and qualitative judgments and examine some related objections from his contemporaries.

Three kinds of quantitative judgments, as already noted are universal, particular, and singular; examples of these are 'All S is P' (All men are mortal')', 'Some S is P' ('Some men are mortal'), and 'This S is P' or 'a is P' ('Socrates is mortal'), respectively.

Kant here explicitly departs from the classification of formal logic. Besides universal and particular judgments, formal logicians recognised no other kind of quantitative judgment. In formal logic, singular and universal judgments are equated. In syllogistic employments, singular judgments are treated like universal ones. For example, consider the syllogism-

All men are mortal
Socrates is a man
Therefore, Socrates is mortal

- here both the premises are treated as 'A' propositions[1]. Since the subject-concept of a singular judgment includes a single object, the predicate cannot relate to part only of that object which is referred to by the subject-concept and be excluded from the rest. The single object which is referred to by the subject concept of singular judgment is taken in its entirety. So, the predicate is valid of the entire

[1]The four standard forms of categorical propositions are universal affirmative, universal negative, particular affirmative and particular negative, represented by the letters A, E, I and O respectively. A universal affirmative proposition is schematically written as 'All S is P' where S and P represent the subject and the predicate term, respectively. The proposition affirms that all members of S are said to be members of P also.

subject-concept having an extension to the whole to which the predicate is applied. But Kant considers singular judgments to be coordinate class (a class that is equal in status but different in nature) and offers a reason for this special treatment. Thus, he says: "If, on the other hand, we compare a singular with a universal judgment, merely as knowledge, in respect of quantity, the singular stands to the universal as unity to infinity, and is therefore in itself essentially different from the universal" (Kant 1978, A_{71}/B_{96}). Some critics like Lovejoy here find fault with Kant. Kant distinguishes a singular from a universal judgment by considering the quantity of knowledge conveyed by them. He points out that the quantity of knowledge conveyed by a universal judgment cannot be the same as that conveyed by a singular judgment, the former holding good of a whole class, the latter only of an individual. Now, the distinction in respect of quantity of knowledge seems to be a distinction in respect of the content of knowledge afforded by intuition. If it be true that the distinction between a singular and a universal judgment has been drawn by considering the material content of judgments, then, of course, Kant's assertion here comes into conflict with his demand that forms of judgment alone must be taken in to account.

A little examination, however, shows that the contradiction is apparent, not real. The distinction between a singular and a universal judgment has been drawn by Kant entirely on the formal level. While distinguishing the singular from the universal judgment with respect to the amount of knowledge conveyed by them, he does not refer to any concrete instances of the subject-concepts concerned. According to him, the forms of judgment are enough to reveal the distinction. It can be said that by considering the symbolic expressions of these judgments, which suggest merely the forms, the distinction can be brought out clearly. Let us take the following symbolic expressions-

All S is P, and
a is p

to represent a universal and a singular judgment, respectively. The symbolic expression of the universal judgment itself suggests that the universally qualified 'S' which stands for the subject-concept represents a general term. And it is obvious that this general term does not stand for a definite individual, but rather for all of a class. Form this it follows that the judgment is not about a definite individual, but about a class. On the other hand, from the symbolic expression of the singular judgment it is evident that the symbol 'a' which stands for the subject-concept is used here as a singular term. This shows that the judgment is about an individual. Hence the distinction between the two judgments is evident from the mere symbolic expressions. This suggests that the difference in only the forms of judgment will indicate the difference in judgments. To convey this difference, reference to the material content is not necessary.

Kant's Qualitative Judgment

The kinds of qualitative judgments on the Kantian list are affirmative, negative, and infinite: e.g., 'S is P,' 'S is not P' and 'S is non-P'.

Kant perhaps is the first to recognise infinite judgments as a distinct class and classifies them along with affirmative and negative judgments under the same criterion of quality. Formal logicians, however, adhere to the familiar affirmative – negative dichotomy. For they are concerned only with the nature of the copula and not with that of the predicate.

Unlike transcendental logic, general formal logic "abstracts from all content of the predicate (even though it be negative); it enquires only whether the predicate is ascribed to the subject or opposed to it" (Kant 1978, A_{72}/B_{97}). The judgment of the form 'S is P' is treated in formal logic as affirmative, and the judgment of the form 'S is not P' as negative. This logic does not consider judgments of the form 'S is non-P' as a distinct class. It regards them as affirmative.

Kant holds that a judgment expressed by a sentence with an affirmative copula and a negative predicate involves a different kind of mental act from one expressed by either an affirmative or a negative copula and a positive predicate. He calls such judgment, e.g. 'The soul is non-mortal', infinite. An infinite judgment, so far as the logical form is concerned, is affirmative. It 'is one which is negative in force but affirmative in form', (Bennet 1966, p. 80) as Jonathan Bennett puts it. It is not, however, both affirmative and negative. It is a distinct kind of judgment, in that it affirms by denying, and so far, limits. We affirm something by saying that the soul is non-mortal. We place the soul in the unlimited sphere of immortal beings. The judgment implies the division of all subjects of discourse into two classes, mortal and non- mortal, and asserts that the soul is one of the infinite number of beings which remain when we take away from the sphere of possible beings 'all that is mortal'. The exclusion of all that is mortal from the infinite sphere of possible beings makes that sphere limited. The soul is placed in the remaining part of the original extent of all that is possible. Hence the judgment is, with respect to its content, neither affirmative nor negative, but limitative only. Kant, therefore, contends that infinite judgments must be added to the transcendental Table of Judgments. He further says that, notwithstanding the mentioned exclusion, the extension still remains infinite, and more and more parts may be taken away from the whole sphere without the concept of the soul, being thereby, in the least augmented, or determined in an affirmative way. As the content of the predicate of this judgment includes an infinite number of things that are non-mortal, the judgment is infinite.

Critique of Objections to Kant's Classification of Judgments

We would now consider some of the critique of objections to Kant's classification of judgments. Let us first consider the objections to Kant's classification of judgments with regard to quantity.

a) Critique of Objections to Quantitative Judgments

Eaton's Objection

RM Eaton objects that Kant has failed to notice that universal judgments, which he recognised as a species of quantitative judgments, are really hypothetical (Dryer 1966, pp. 132–133). To every universal judgment there corresponds a hypothetical judgment to which it is equivalent. The universal judgment of the form 'Every A is B' is equivalent to a hypothetical judgment of the form 'For every x, if x is A then x is B'. The implication of this criticism is that as universal judgments are equivalent to hypothetical judgments, Kant has no right to regard universal judgments as constituting a separate class under the head of quantitative judgments.

Reply to the Objection

Dryer here attempts to defend Kant (Dryer 1966, pp. 132–133). He claims that from the fact that a universal categorical judgment is equivalent to a hypothetical judgment, it does not follow that there is no difference between the two. In case of every affirmative judgment of the form 'Every A is B' we obtain by obversion the equivalent negative judgment of the form 'No A is non-B'. Yet this does not indicate that there is no difference between affirmative and negative judgments. What is expressed by the affirmative judgment is completely different from that expressed by the negative judgment. Similarly, the equivalence between universal and hypothetical judgments does not eliminate the difference between the two. By a universal categorical predicative judgment, a predicate is ascribed to the totality of the subject, whereas in a hypothetical judgment what is thought by one judgment is considered to be a consequence of another. Alternatively, we can also say that in the categorical judgement there is a subsumption of one concept under another irrespective of whether anything happens to be an A. In the hypothetical judgement, if the hypothesis is not true, nothing is said: that is, if nothing is A, then the condition is not fulfilled and therefore nothing follows, i.e., we know nothing if that is the case. So, the first is purely conceptual knowledge irrespective of what exists while the second is knowledge about existing things under a certain assumption.

Lovejoy's Objection

Lovejoy has objected that if we adhere to the Kantian sense of quantity, we find that his tripartite division of quantitative judgment is arbitrary (Lovejoy 1967, pp. 273–275). Kant's notion of quantity is completely different from that of formal logic. In formal logic the quantity of a proposition is determined with reference to the specific relation of subject and predicate. A judgment in which the predicate is affirmed or denied of the whole denotation indicated by the subject is called universal, e.g., 'All men are mortal'. Again, a judgment in which the predicate is affirmed or denied of an indefinite part of the subject is called particular, e.g.,

'Some men are wise'. So, in formal logic there can only be the usual twofold classification. Kant, however, by quantity signifies the amount of knowledge conveyed by the judgment. For Kant, judgments with regard to quantity are to be distinguished according to how many things they tell us about. This shows that Kant has passed over from the logical to the strictly mathematical sense of quantity. Lovejoy claims that Kant provides a triple classification without realising this transition. Further Lovejoy suggests that taking this sense of 'quantity' we cannot justify Kant's tripartite classification of quantitative judgments. In other words, no decisive reason can be put forward for justifying the fact that there are only three kinds of quantitative judgments, neither more or less. A twofold classification here, in Lovejoy's view, might very well be accepted as judgments referring to one, and judgments referring to more than one object.

Besides the singular and universal judgments, Kant has admitted a separate class of judgments, namely, particular judgments. For a particular judgment of the from 'Some S is P' tells us something about a number of objects more than one, and less than the indefinite whole number of objects constituting the extension of the class Lovejoy claims that "there is no assignable reason for stopping with the mention of any particular number of degrees of plurality" (Lovejoy 1967, p. 274). So, we can accept another distinct class of judgment of the form 'Most S's are P's' which tells us something about a number of objects more than one, and more than half of the indefinite whole number of objects included within the class S, as belonging to the class P. Similarly, we may recognise a distinct class for judgments of the type 'Two thirds of S is P'. Hence, Kant's tripartite division of quantitative judgments is, in his view, arbitrary. He remarks that Kant arbitrarily adheres to the triple division "partly because he is wedded to the triad, and partly because he has already before his mind the purely mathematical categories (which have no bearing upon the logical quantity of propositions) of unity, plurality, and totality)" (Lovejoy 1967, p. 274).

Reply to the Objection

Lovejoy's criticism that Kant's subdivision of quantitative judgments is based not on logical, but on mathematical consideration of quantity, is not justified. In the following passage cited from Kant's Logic, we find that he has furnished logical considerations for the subdivision:

> "As to quantity, judgments are either universal, particular, or singular, according as the subject in the judgment is either completely included in or completely excluded from the predicate concept, or is only partly included in or partly excluded from it. In the universal judgment the sphere of one concept is completely enclosed within the sphere of the other; in the particular judgment part of the former is enclosed in the sphere of another; in the singular judgment, finally, a concept that has no sphere at all is enclosed, merely as a part, in the sphere of another" (Kant 1974, p. 107).

That Kant is not influenced by extra-logical considerations in his subdivision in question is evidenced from the fact that he does not recognise in his Table the distinction between 'comparatively general propositions' and 'universal

propositions'- a distinction that rests on a ground which, he says, 'does not concern logic' (Kant 1974, p. 108).

Accordingly, Lovejoy's claim that if we accept Kant's sense of quantity, judgments of the form 'Most S's are P's' must constitute a separate class of judgment is untenable. There is no need to suppose a distinct class of judgments corresponding to every number in the series from one to infinity. Judgments of the form 'Most S's are P's' and the judgment containing any numerical concept can be grouped under the particular judgment. The judgement 'Most S's are P's' or 'Two thirds of S is P' is equivalent to 'Some S is P.'

b) Critique of an Objection to Qualitative Judgments

The objections to Kant's classification of judgments under quality are mainly concentrated upon what Kant calls 'infinite judgment'.

Lovejoy's Objection

Lovejoy has argued in detail that Kant has failed to distinguish infinite judgments from affirmative and negative ones according to a consistent principle. Lovejoy draws our attention to the reason why Kant calls a judgment such as 'The soul is non-mortal' infinite (Lovejoy 1961, p. 276). Kant says*:*

> "…[In] the proposition, 'The soul is non-mortal', . . . I locate the soul in the unlimited sphere of non-mortal being. Since the mortal constitutes one part of the whole extension of possible beings, and the non-mortal the other, nothing more is said by my proposition than the soul is one of the infinite number of things which remain over when I take away all that is mortal. The infinite sphere of all that is possible is thereby only so far limited that the mortal is excluded from it, and that the soul is located in the remaining part of its extension. But, even allowing for such exclusion, this extension still remains infinite, and several more parts of it may be taken away without the concept of the soul being thereby in the least increased, or determined in an affirmative manner" (Kant 1978, $A_{72\text{-}73}/B_{97\text{-}98}$).

Now, Lovejoy contends that this reason does not adequately set off infinite judgments from affirmative and negative ones. If the predicate of an infinite judgment does not limit the subject class even after the predicate is added, then the same might be said of affirmative and negative judgments also. The subject class of these latter kinds of judgments remain infinite even after the predicates are added.

Reply to the Objection

Lovejoy, however, fails to see that Kant's main point with regard to what he calls 'infinite judgments' is not that they are infinite, but that they are limitative. This is clear not only from the fact that Kant derives the category of limitation from such judgments, but also from his following words:

> "These judgments, though infinite in respect of their logical extension, are. . ., in respect of the content of their knowledge, limitative only and cannot therefore be passed over in a transcendental table of all moments of thought in judgments, since the function of the understanding thereby expressed may perhaps be of importance in the field of its pure a-priori knowledge" (Kant 1978, A_{73-98}).

The reason why Kant might have chosen the title 'infinite' for the kind of judgments in question may be sought in tradition. The traditional reason is that the predicate term of such a judgment is an 'infinite term', where 'infinity' means indeterminacy. Joseph says: "the technical term in Latin is nomen infinitum, whence the English phrase 'infinite term' is derived: but infinite means in this context indeterminate; . . ." (Joseph 1967, p. 42).

As soon as we realise that in saying 'The soul is non- mortal', nothing determinate is said either affirmatively or negatively, it becomes clear that the kind of judgment in question is neither affirmative nor negative.

Some General Objections to Kant's Classification of Judgments

There are some serious general objections to Kant's classification of judgments of which account must be taken. By examining these objections Kant's purpose for the classification of judgments in question will become clear.

Cassirer's and Strawson's Objections

It is often supposed that Kant has, in his classification in question, taken for granted the finality of the formal logic prevalent in his time, and that the subsequent developments in formal logic go to show that his claims as regards his own Table are exaggerated. H. W. Cassirer says: ". . . the formal logic on which Kant takes his stand is now everywhere discredited, so that no philosopher today could accept the list of judgment forms he puts forward as anything like complete; . . .." (Cassirer 1978, p. 58). P.F. Strawson urges the following objection against Kant: "Given a certain indispensable minimum equipment of notions, the logician can, if he chooses, distinguish indefinitely many forms of proposition, all belonging to formal logic" (Strawson 1966, p. 79).

Reply to the Objections

Kant does not uncritically take over the classification of judgments offered by the formal logicians of his time. Nor does he assume the completeness of the then current classification. For, as we have seen, he has himself added some new forms of judgments to the traditional list, e.g., singular judgments and infinite judgments. The question arises: why and how does he make the new additions?

The reason for his new incorporations into his Table of Judgments can be found in his concern with transcendental logic. He has time and again said that the new judgment-forms recognised by him have distinctive contribution to knowledge. Dryer picks up this point as a crucial one and opines that Kant has

classified judgments (i.e., judgment-forms) not so much from the point of view of formal logic as from that of transcendental logic (Dryer 1966, p. 134).

These two kinds of logic are guided by different purposes in the classifications of judgments. It is argued that formal logic is concerned with distinguishing only those formal differences among judgments which affect the valid relations of one judgment to another. However, transcendental logic is concerned with the relation of judgments to objects, with how objects must be conceived in order to be capable of being known, and therefore with what distinctive contribution to knowledge is made by each sort of judgment.

Various judgment-forms, or even various alternative systems of judgment-forms may serve the purposes of formal logic. But owing to his commitment to transcendental logic,

> "Kant classifies judgments for a specific purpose. He does so for a purpose which formal logic does not have. He does not claim that the classification which he gives is that which formal logic should adopt. He does not maintain that there is only one correct way in which formal logic should classify judgments. Kant classifies judgments in accord with the distinctive contribution to knowledge which is made by each, whatever its subject or predicate. He undertakes this classification in order to find all the basic concepts which enable knowledge to be obtained by each sort of judgment" (Dryer 1966, pp. 134–135).

Conclusion

The present paper concerns Kant's classification of judgments with regard to quantity and quality as presented in his work *Critique of Pure Reason*. Kant reckoned that judgments can be classified under four heads, each with three subdivisions, by attending only to their forms, without considering the content. He has distinguished between a judgment and a judgment form. According to him a judgment is a mediate knowledge of an object i.e., the representation of representation of an object. He is concerned here with such judgments that have a subject-concept and a predicate-concept. The predicate-concept of a judgment refers to the object mediately i.e., by means of the subject-concept which refers immediately to object by means of intuition. Hence, we find double mediation in a judgment. A judgment, since it employs concepts, is discursive or mediate and not intuitive cognition.

Kant says that when we entertain a judgment, we unify ideas. He points out that the different ways in which judgments unite our ideas, independently of the special nature of ideas, are the different forms of judgment. He recognises with some modification from the formal logic of his time, the division of the forms of the judgments according to quantity, quality, relation and modality. Judgments under each head are further subdivided into three classes.

Kant's classification regarding quantitative and qualitative judgments is explained in this work. The views of his critics regarding these judgments are examined in some detail. In the case of quantitative judgments, Kant departs explicitly from the classification admitted by formal logic and recognises singular

judgment as a coordinate class. Eaton and Lovejoy have raised objections against Kant's observations regarding quantitative judgment. While Eaton has said that Kant has no right to regard universal judgments as constituting a separate class under quantitative judgments, Lovejoy has referred to Kant's tripartite division of quantitative judgments as arbitrary since his subdivision is based only on mathematical consideration of quantity and not on logical considerations. However, the criticisms do not appear to be well-founded. Dryer has defended Kant against Eaton's criticism by noting that the equivalence of the universal categorical judgment and a hypothetical judgment does not suggest a lack of a difference between the two. As for the criticism made by Lovejoy, we find that Kant himself has furnished logical considerations for the subdivision in one of the passages in *Logic*.

Kant's tripartite division of judgment with regard to quality are affirmative, negative and infinite. He again departs from formal logicians who admitted only affirmative and negative judgments as they are concerned only with the nature of the copula and not with that of the predicate. Kant perhaps is the first philosopher to recognise the infinite judgment as a distinct class. He points out that a judgment expressed by a sentence with an affirmative copula and a negative predicate involves a different kind of mental act from one expressed by either an affirmative or a negative copula and a positive predicate. Objections with regard to Kant's tripartite division of qualitative judgments are mainly concentrated upon what he calls 'infinite judgment'. Lovejoy has objected to Kant's argument for accepting infinite judgment as a coordinate class. He argued that Kant failed to distinguish infinite judgments from affirmative and negative ones following a consistent principle. It nevertheless appears to us that Lovejoy failed to see that Kant's main point with regard to what he calls 'infinite judgments' is not that they are infinite, but that they are limitative. The reason behind Kant's choice of the title 'infinite' may be sought in tradition which is that the predicate term of such a judgment is an 'infinite term', where 'infinity' means indeterminacy.

The present work also attempts to provide an understanding of why Kant does not accept the classification of judgments offered by the formal logicians of his time in the context of the objections raised by Cassirer and Strawson.

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The Oparin Hypothesis is a Falling Star

By Tonći Kokić[*]

The Oparin hypothesis from 1936 was a milestone in the origin of life research, making a model that was at least in part empirically testable, and changing the course of life studies from a long tradition of metaphysics to a scientific domain of investigation. His hypothesis is based on the idea of the prebiotic synthesis of macromolecules as a fundamental step on the road to first life. Although the Oparin hypothesis brought fresh ideas and concepts, in its description of the steps in the hypothesized transition from the inorganic to the organic world in detail, today some premises are considered unconfirmed, uncertain, or even rejected. With high respect to its metatheoretical reach and scientific impact on prebiotic chemistry, pushing the origin of first life research into an empirical context, from a contemporary viewpoint, its contribution is highly limited in the area of history of science and history of philosophy (of science).

Keywords: *biology, history of science, Oparin, origin of life, philosophy of science*

Introduction

Investigation into the origin of life has been based on purely metaphysical schemata up to the 18th century, including experiments regarding spontaneous generation. After numerous predecessors, Pasteur experimentally denied the possibility of the spontaneous generation of microbes, but he did not give an explanation as to how first life emerged on Earth. At the beginning of 20th century, Russian biochemist Alexander Ivanovich Oparin hypothesized the heterotrophic origin of life in the reduced atmosphere, pre-biological chemical evolution, and the concept of coacervate droplets as a bridge between inorganic and organic worlds. For the first time an empirically testable model was presented, followed by experiments with varying degrees of success. This article considers the impact of revealing that some of Oparin's premises are uncertain, or even rejected. But even the most serious objection is that his premises restrict the scope of research to the very narrow area of the prebiotic synthesis of the macromolecules we find in living systems. It seems that the Oparin hypothesis failed to decrease the gap between the most complicated organic substances and the most primitive living organisms, which is set as the ultimate and final goal of research into the origin of life. This article puts aside a connection with Haldane's hypothesis as well as an objection to any possible ideological influence as having no fundamental relevance to this consideration.

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Prelude

Scientists, as well as others, are faced with the dilemma of whether life always existed or if it originated in historical time. If we incline to the option that life arose sometime in the deep past, we need a scientific explanation of its origin. As opposed to a metatheoretical proposition, a scientific theory or hypothesis is inseparably connected to observation and/or empirical tests which could show the resemblance or divergence of a proposed theoretical explanation with nature. Ideally, an observation or empirical test could prove a theory or hypothesis true or false, but frequently an interpretation is needed. The origin of first life research stepped out early from the purely metatheoretical domain forward into the scientific territory, with the excitement of 18th-century discussions concerning the spontaneous generation of a living organism from nonliving matter. The spontaneous generation hypothesis assumed the possibility of the simple generation of living organisms from nonliving matter, previously including flies and higher animals as mice, but later reduced to infusoria. Jean-Baptiste de Lamarck, author of the first monograph, from 1809, entirely devoted to biological evolution, was strictly convinced that "spontaneous generation is the mechanism that led to the emergence of life" (Lazcano 2010, p. 6). In a turbulent back-and-forth, the pros and cons of different experiments alternated with varying degrees of credibility. In 1748 John Tuberville Needham proved that after removing mutton from fire, immersing it in water, heating it to boiling, and then closing the pot tightly – a process occurred in which in a few days resulted in a large number of different types of microorganisms in the closed pot. Afterward, the famous biologist Comte de Buffon repeatedly confirmed Needham's experiments, making them, with his authority, publicly known and scientifically legitimate. It was assumed that the hypothesized process was a regular, widespread, and common event. On the other hand, some authors, even from the 17th century (Jan Swammerdam, Marcello Malpighi, Lazzaro Spallanzani, and Francesco Redi), firmly believed and claimed the impossibility of the spontaneous generation of living beings. In any case, up to the middle of the 19th century, spontaneous generation was considered possible and even proved until the controversy was empirically resolved in 1859 by Louis Pasteur's experiment which demonstrated that microbes cannot spontaneously arise in properly sterilized media under contemporary conditions. His success today may seem trivial because Pasteur simply closed the laboratory containers well. The reason why Pasteur's predecessors are not highlighted as pioneers of the denial of spontaneous generation, in particular Francesco Redi with his experimental proof of the impossibility of the spontaneous generation of insects, is because he believed in divine creation and because his experiments primarily served as a support of preexistence theory (Fry 2000, p. 27). Also, he generally believed in the idea of spontaneous generation from living tissues and plants which contained the "principle of life" (Fry 2000, p. 27) as a sort of vitalism. Redi did not receive a coronet of honor for scientific excellence, but Pasteur undoubtedly was awarded 2,500 francs in 1862 from the French Academy of Sciences for finally removing the idea of spontaneous generation from the list of serious scientific problems. His experiment, together

with Darwin's *The Origin of Species*, marked the end of an era of only philosophical and religious interest in the subject matter (Kamminga 1988, p. 1). Pasteur given his award in 1862, but he resolved the 'controversy' even earlier with his famous swan-neck flask experiment, in the same year that Darwin published his *The Origin of Species*. Another coincidence is that in 1862, the French translations of *The Origin of Species* appeared on the scientific stage. Darwin himself firmly believed in the lack of evidence regarding the possibility of spontaneous generation, but also firmly stayed away from any categorical claim on the origin of life. His opinion varies from the last sentence in *The Origin of Species*: "There is grandeur in this view of life, with its several powers, having been originally breathed into a few forms or into one…" (Darwin 1979, pp. 459–460), to a rejection of any speculation on the origin of life, from 1863: "It is mere rubbish, thinking at present of the origin of life; one might as well think of the origin of matter" (Mayr 1982, p. 582), as well as the famous letter from 1871 that Darwin wrote to his friend Hooker regarding a "warm little pond" as a possible source of the chemically formed protein compounds needed to build first organism. However, "Darwin took for granted a natural origin of life" and believed it would be possibly to prove that living beings originated "from inorganic … matter in accordance with the law of continuity" (Peretó et al. 2009, p. 404). In addition to his giant scientific achievement, Pasteur doubted that the idea of a creator could contribute anything to the scientific explanation of the life phenomenon and its origin (Farley 1986, p. 39). On the other hand, Pasteur was a supporter of antimaterialism, "a true believer in God ... claiming that matter cannot organize itself to form life" (Fry 2000, pp. 49–50).[2] His extended effort in looking for a "cosmic asymmetric force" as the origin of the source of life was barren. Although Pasteur successfully and empirically denied the possibility of spontaneous generation, the ultimate scientific explanation of life was not grasped by his experiment. This empty space was filled with a number of hypotheses, from Eduard Pflüger, Svante Arrhenius, Leonard Troland, Alfonso Herrera, José Rodríguez Carracido, and Rodney B. Harvey, to Hermann J. Muller. While they offered scientifically based explanations, they were "largely devoid of direct supporting evidence" and because of that they remain just "incomplete speculative schemes" (Miller and Lazcano 2002, p. 82). Around the twenties of the 20th century there appeared a new player in the area, Russian biochemist Alexander Ivanovich Oparin. Oparin's hypothesis on the origin of life, based on biochemistry, was a theoretical inspiration for modern theories and a signpost for the key experiments that marked the independent field of origin of life science in its beginnings (Kamminga 1988, p. 1). Oparin's hypothesis is usually merged with Haldane's into the Oparin-Haldane hypothesis, based on their common view that the origin of life on Earth necessary required the plentiful synthesis of organic compounds in primordial Earth's conditions. Differences between the two hypotheses could be reduced to the primacy of the metabolic system and colloidal coacervates as an intermediate stage between inorganic and organic worlds in

[2]Pasteur made an effort conducting unsuccessful experiments trying to prove the existence of "a cosmic asymmetric force ... responsible for the formation of active organic compounds and hence life" (Fry 2000, p. 50). Also, Pasteur discovered the phenomenon of molecular asymmetry (chirality).

Oparin's view, and the primacy of reproduction and viruses as an intermediate stage between inorganic and organic worlds in Haldane's opinion.

A Rising Star

Alexander Ivanovich Oparin's booklet from 1924,[3] titled *Proiskhozhdenie zhizni* (*The Origin of Life*), is often mentioned as a game-changer in the area of research into the origin of life. In fact, this short book was only a pamphlet – a book from 1936 *Vozniknovenie zhizni na zemle* (*The Emergence of Life on the Earth*), introduced significant novelties and became a cornerstone of future theoretical considerations and empirical tests. The differences between the two texts are multiple and important:

> The paper from 1924: (1) did not take into account an anoxic primitive atmosphere, without oxygen-O_2, (2) the drop of organic molecules was supposed to be the last step on the way to cell life, (3) the origin of life was seen as a result of an improbable chance mechanical event, declaring no real difference between inorganic and organic nature, (4) the transformation from inorganic to organic life by first gel came out of a colloidal solution, quite in accord with the contemporary biocolloidal theory, and (5) biochemical processes were interpreted as crucial for the explanation of the living system;
>
> The book from 1936 assumed: (1) that the atmosphere was reduced, with no free CO_2 and no O_2, (2) the concept of the coacervate (based on Bungenberg de Jong's work) was introduced as an intermediate stage between the inorganic world and the living world, (3) the origin of life was seen as a highly probable result of the general laws of nature by universal evolution in which living systems have unique features, (4) the transformation from the inorganic to the organic had happened through complex interactions, and life appears as a complex interaction of chemical processes, and (5) Oparin pointed out the protein-first molecule scenario in the origin of life chronology, where the metabolic aspect of cell functions happened first (first cells, enzymes, and then heredity material – he could not know at that time about the DNA model).

In the early 20th century, the prevailing theory of the origin of life definitely was anchored in a firm belief "that the first forms of life had been autotrophic microbes" (Lazcano 2010, p. 10), which was seen as a 'natural' proposed source of organic material needed for later heterotrophic living beings. Because of the high complexity of the autotrophic metabolic system, Oparin assumed a much simpler heterotrophic[4] anaerobe bacteria as the first form of life. These bacteria simply used already existing organic compounds. The next step is obvious: it is necessary to find a way that organic material could be formed outside of living beings. Oparin was not a proponent of the well-known theory of the exogenous

[3]In fact, this short book was published in November, 1923.
[4]The heterotrophic origin first hypothesis already existed in a less developmed form in Lipman and Harvey (Lazcano 2010, p. 10).

synthesis of organic materials, where these materials are formed in outer space and brought to Earth by meteorites (lithopanspermia) or cosmic dust under the pressure of radiation (radiopanspermia), which contained organic materials because "it is in direct contradiction to the objective facts of contemporary science" (Oparin 1957, p. 57). Contemporary science does not resolve this problem and it still does not have a convincing answer to "the origin of the biomolecules from which the first living systems on the primeval earth developed" (Rauchfuss 2008, p. 87).

Oparin's hypothesis relied on Mendeleev's (the famous inventor of the periodic classification of chemical elements) argument that hydrocarbons could be formed on Earth and outside of a living being through the action of water on carbides[5] as it "is completely justified by both earlier and later studies" (Oparin 1957, p. 128). The idea of the primary synthesis of organic compounds from carbides has its origin in calcium-carbide technology, in the naive belief that "nature uses human technology" for that purpose (Raos 2017, pp. 58–59). In his booklet from 1924, Oparin already assumed the origin of carbohydrates and proteins (Oparin 1994, p. 63) followed by "rapidly formed droplets of gel-like material ancestral to the first cell" (Lazcano 2010, p. 10). The organic material was formed outside of a living being in the primordial organic soup, as a stage in a continuous path from the inorganic to the organic world. The next step along this path is "the transformation of organic compounds into an organic body" (Oparin 1994, p. 65). The answer to when this happened is not without doubts, as well as its form: autotrophic or heterotrophic. Almost from the beginning of the Earth's initial formation in the Hadean, "the weight of evidence does suggest that Earth has supported microbial life" (Zahnle et al. 2010, p. 49). According to contemporary prevailing consensus, the emergence of life on Earth was extremely fast, stromatolites found in Apex chert deposits (the Warawoona group in Australia) suggests 2.3-3.5 billion years old traces of life, and the Greenland Isua Greenstone Belt rock formation contains samples that indicate the origin of life as 4 or even 4.2 billion years old (Griesemer 2008, p. 271). The fossils discoveries contain imprints resembling the bodies of modern cyanobacteria or blue-green algae – and the conclusion was drawn that the fossils are the remains of highly developed cells with possible photosynthesis capacity (Schopf 1993, Fry 2000). This evidence could be interpreted as a denial of a heterotrophic first life form. It is necessary to mention objections to the authenticity of these findings: carbon isotope ratios used as evidence of the presence of organic material is not reliable because it could be "due to non-biological causes" (Fry 2000, p. 125), the purported microfossil-like structure could be interpreted as "secondary artifacts formed from amorphous graphite ... there is no support for primary biological morphology" (Brasier et al. 2002, p. 76), claims that "the Apex filaments exhibit no biological morphology ... available evidence indicates that the microstructures exfoliation of potassium mica flakes ..." (Wacey et al. 2016, p. 296), and "we cannot yet be absolutely certain whether the enigmatic Apex chert structures are artifacts or evidence of the first life" (Deamer 2011, p. 49). However, new geological evidence are highly compatible with the hypotheses of the chemoautotrophic origin of life (Wächtershäuser 2006,

[5]Mendeleev's (Mendeleyev in Russian) argument is well known as the abiogenetic hypothesis of the origin of crude oil and natural gas.

p. 1789) and the early Earth environment suggest that the first ecosystem was anaerobic (Canfield et al. 2006, p. 1819).

Regardless of the age of the first life controversy, all soup theories rest on the first life dependence on a food source from their environment, together with "a common assumption that emerging life was heterotrophic" (Fry 2000, p. 163). Oparin claimed that a necessary step on the way from the inorganic to the organic world includes the abundant synthesis of organic compounds on primitive Earth (and its atmosphere). The most important step on this path was the transition from the inorganic to the organic compounds of carbon (Oparin 1957, p. 109). Oparin proposed a specific hypothesis regarding the composition and constituents of the early atmosphere that made a possible synthesis of the organic compounds needed for the (chemical) assembly of the first life. His proposal assumed a two-phase model: "after the production of organic compounds of fairly high molecular weight, a phase separation occurred, resulting in formation of microscopic organic droplets" (Oró 2002, p. 16). Oparin called these droplets coacervates and describe them as a stage in "the evolution of organic substances" and "a powerful means of concentrating compounds of high molecular weight, in particular protein-like substances, dissolved in the hydrosphere" (Oparin 1957, p. 303). Coacervates "are small liquid droplets of two immiscible liquid phases, often caused by the encounter of macromolecules with opposite charges or sometimes from the association of hydrophobic proteins" (Astoricchio et al. 2020, p. 706). Coacervates could emerge by different organic and inorganic hydrophilic and hydrophobic colloids, with the possibility of enzymic protein incorporation (Oparin 1957, pp. 303, 310). The core of the Oparin hypothesis is a kind of pre-biological chemical evolution: from prebiotic organic synthesis to coacervate formation, then to coacervate heterotrophic 'metabolism' and further by selection pressure to autotrophic metabolism, including photosynthesis, etc. (Kamminga 1988, p. 8). In his first text from 1924, the emergence of life was not more than an exceedingly difficult mechanical problem, but in the second book it became a difficult chemical problem. It is worth mentioning that Oparin and many other Soviet life scientists were under the strong influence of Ernst Haeckel, "who was convinced that in Monera the gel-like protoplasm was the organ of both inheritance and nutrition" (Lazcano and Peretó 2017, p. 82).

> Haeckel wrote in 1866 "insofar as we are able to regard the plasma chiefly as the nutritive component of the cell and, on the other hand as the reproductive component […], we are justified in regarding the nucleus as the principal organ of inheritance and the [proto]plasma as the principal organ of adaptation. In the case of the cytode [i.e., Monera], where nucleus and plasma are not differentiated, we will have to regard the entire plasma as the common organ having both functions" (Lazcano and Peretó 2017, p. 82).

Haeckel and Huxley believed that simple life forms easily originated from inorganic materials. Based on Haeckel's hypothesis, Huxley examined the muddy soil of the North Sea in 1868, finding a gelatinous substance, believing it to be the remnants of the primitive Monera protoplasm. Huxley named one such creation *Bathybius haeckelii* in honor of Haeckel.

To resolve this impediment, as a convinced Darwinist, Oparin extrapolates the mechanism of Darwin's evolutionary processes from biology to the same hypothesized mechanism that operates on the chemical level, conceived earlier substantively with Pflüger (1875) and nominally with Moore (1913) as 'chemical evolution' or as a mechanism of natural selection on the chemical level. For him, "a biochemist who studies the processes underlying various vital phenomena can draw a picture of the successive stages in the evolution of matter which led up to the emergence of living beings" (Oparin 1957, p. 102). Twenty years later, at the First International Symposium on "The Origin of Life on the Earth" held in Moscow in 1957, Oparin declared that "An evolutionary approach to the study of our problem will, therefore, open up a wider vista of possibilities for its solution" (Oparin 1959a, p. 2). The evolutionary mechanism is responsible for the 'growth' of chemical material in the protometabolism of coacervates, being capable of the absorption and assimilation of organic material from the environment, and being capable of their transformation into its own growth and development. This is the "possible link between coacervate bodies and primitive living organisms" (Kamminga 1988, p. 8). Today the model of the coacervate is still considered valid, although the structure of Oparin's originally proposed coacervate model is no longer considered prebiotic (Kolb 2015). On the other hand, some experiments reconsider the validity of the Oparin coacervate model with more optimistic expectations. "Recent work on RNA compartmentalization and catalysis in liquid droplets provides additional support for Oparin's concept of primitive photocells in a primordial 'RNA world'" (Brangwyne and Hyman 2012, p. 525). Another experimental conclusion is similar: "Contemporary research on the early cell formation based on development of an artificial photocell system find compartmentalization in a prebiotic setting as an important aspect of such early cell formation" (Jia et al. 2014, p. 1). These authors believe that "… understanding how ATPSs (aqueous two-phase systems, AN) and coacervates interact and combine with fatty acid and phospholipid vesicles may lead to a greater understanding of the possibilities for the development of early cells in an RNA world" (Jia et al. 2014, p. 8). These experiments engender great optimism in the revitalization of the validity of the Oparin's hypothesis but additional support is needed for acceptance.

Oparin offered a possible scenario of chemical evolution, processes, and steps that may be responsible for the synthesis of more complex organic substances in the primordial soup – as the organic chemical pool which was the hypothesized source for the way toward the first life form. But even more important, this was at least partially testable in the case of minutely detailed descriptions of the prebiotic synthesis of organic compounds needed for the formation of living systems. This means that Oparin's set of assumptions relating to the conditions on primordial Earth could be reproduced in controlled laboratory conditions and tested to see if achieved results are in concordance with assumptions. Although Oparin made a testable hypothesis, he never executed experiments by himself to prove or reject it – except for coacervates. In examining the biochemical processes of the simplest structures in his laboratory, Oparin made noticed important differences between artificially obtained coacervates and drops which were, probably, naturally grown

through evolutionary processes (Oparin 1959b, p. 428). Apart from these experiments, it seems that Oparin privileged theoretical concepts over experimental work for several reasons:

> First, it may have been a matter of style... Second, Oparin's expertise was not in chemistry, so even having an experienced chemist do experiments under his direction would have been unlikely to prove successful. A third reason is that the methods of analytical chemistry developed rapidly in the period 1935–1953, well after Oparin's initial work (Miller et al. 1997, p. 351).

The best-known experiment that tested the Oparin (Oparin-Haldane) hypothesis was the Miller-Urey experiment at the University of Chicago in 1953, which successfully synthesized biomolecules from selected inorganic components under assumed prebiotic conditions. In his 1953 paper with the experiment's results, "A Production of Amino Acids Under Possible Primitive Earth Conditions," Miller (1953, p. 529) made only three references, and one was to Oparin's book from 1936. Miller simulated a reduced atmosphere with a mixture of methane, ammonia, hydrogen, and water (vapor). This chemical mixture was exposed to electrical discharges of 60,000 volts and a heat of 350 to 920 K, imitating a lightning storm in early Earth's atmospheric conditions. The results were promising: formaldehyde and cyanide were formed, and after that, the synthesis of amino acids occurred spontaneously (Benner at al. 2010, p. 74). These chemical reactions were already known as the Strecker synthesis from Albert Strecker's 1850 experiment. The most abundant relevant substances produced by the Miller-Urey experiment were formic acid (4%), glycine (2.1%), lactic acid (1.6%), and alanine (1.7%). As we know, amino acids are the fundamental building blocks of proteins, which are the building blocks of living beings – so it seems the circle is closed. But, the experiment failed to synthesize the most important macromolecules purine and pyrimidine, which remains one of the major problems "for an understanding of the origin of life" (Miller and Urey 1959, p. 150). The experiments of Joan Oró from 1961, and of many others later, were conducted with more success in regard to the synthesis of the purine base adenine (a key component of nucleic acids), from a solution of urea, and the purine base guanine (Bada and Lazcano 2009, p. 56). Both bases, purine adenine and guanine, result from the condensation of HCN with urea as a byproduct.

Still, it is possible to say that "all of the most impressive prebiotic syntheses produce garbage by the standards of synthetic organic chemistry ... with a percent or two of the desired nucleotide base" (Orgel 2002, p. 140). Together with these objections, the Miller-Urey experiment is questioned in many other of its points, and complaints were targeting on its wrong assumption about the composition of the atmosphere: it seems that the amount of methane (and ammonia) on early Earth was much smaller, and carbon was probably present largely as carbon dioxide and nitrogen. It seems that the "nonbiological synthesis of biomolecules under these conditions has been sought" (Benner et al. 2010, p. 74). A repeated experiment in 1983 with the correct combination of gases produced "nitrites which destroyed amino acids as quickly as they form," but later experiments with added iron and carbonate minerals produced plenty of amino acids (Fox 2007, p. 2). The

chemical composition of the primordial atmosphere is a crucial point in the debate on the formation of life, but all models on the primordial atmosphere on Earth are only hypothetical (Rauchfuss 2008, p. 31). So, up to now "There is no geological evidence for the existence of Oparin's prebiotic soup" (Miller et al. 1997, p. 352). Of course, absence of evidence is not evidence of absence: the wide array of organic compounds of biochemical significance found in the old carbonaceous chondritic meteorites which are coeval with the time of formation of the Earth could strengthen the hypothesis that similar compounds may have existed in the terrestrial environment. This hypothesis is logically possible but not proved.

Because of the long-term uncertainty in establishing the facts on this topic, the "Miller-Urey experiments of 1953 are of only historic interest today" (Rauchfuss 2008, p. 88). But even if experiments are conducted under the unconfirmed premises of the composition of the primordial atmosphere and other conditions of early Earth, and despite the debate regarding the relevance of produced chemical compounds, its results prove the logical possibility of the in vitro synthesis of the macromolecules important in building a life outside of living beings. This means the Miller-Urey experiment gains success in proving the logical possibility of natural processes in producing the chemical building blocks of life. In the same way, the Miller-Urey experiment proves the fundamental theoretical premises of the Oparin hypothesis of the possibility of the prebiotic synthesis of organic molecules. Any expected optimism spurred by the Miller-Urey experiment has waned over the years because the forthcoming understanding of how life began was not realized. The peak of this experiment is exhausted by evidence of the in vitro prebiotic synthesis of the important macromolecules – but the final goal set by Oparin has not been achieved "The most important, as well as the least studied, stage of the evolutionary process under consideration would seem to be the transition from the most complicated organic substances to the most primitive living organisms. This is the most serious gap in our knowledge" (Oparin 1957, p. 101). The verdict on the importance and impact of the Miller-Urey experiment on the scientific value of the Oparin hypothesis could not be decisive: the relevance of any scientific experiment is only one side of the coin. On the other side of the coin, it is necessary to compare the fundamental theoretical premises of Oparin's theory, and then test the demand coming from the philosophy of science considering its testability and predictability (through empirical observation and experiment).

Verdict

Basic apparatus in the evaluation of the Oparin hypothesis could be assembled through three mechanisms: to determine whether the premises of the Oparin hypothesis are in accordance with the facts, if these facts confirmed or opposed by the experiment, and whether these two previous mechanisms obey the demand of the philosophy of science toolkit.

The premises of the Oparin hypothesis were comprehensively reconsidered on the sixtieth anniversary of the first Russian printing of the *Vozniknovenie zhizni na zemle* (*Origin of Life on Earth*), in a short article by three authorities in the area

of the scientific research of the origin of life, Miller, Schopf, and Lazcano. The first of them, Stanley Miller, conducted the famous Miller-Urey experiment. From their article it is possible to extract contemporary scientific facts that do not support the premises of the Oparin hypothesis: there is no geological evidence for the existence of Oparin's postulated prebiotic soup, there is no proof that abiotic synthesis took place on primitive Earth, the proposed glucose fermentation as the first source of metabolic free energy is no longer considered valid, the long periods of time needed for the emergence of life has been superseded, and the coacervate model as a first organism model is no longer held to be plausible (Miller et al. 1997, p. 352). Alongside this, his hypothesis completely dismissed the possibility of replication as well as the role of DNA in the explanation of the origin of first life (as it was not known in that time, but even later Oparin did not include a genetic component of life as important for the explanation of first life origin). Although he was originally inclined to pre-Mendelian genetics he later learned about the role of nucleic acids in heredity. It seems that Oparin for so many years did not admit the importance of genetic nucleic acids in heredity and their role in the origin of life not because of pure scientific reasons:

> Oparin's refusal to assume that nucleic acids had played a unique role in the origin of life resulted not only from his unwillingness to assume that life can be reduced to a single compound such as the "living DNA molecule" … but also within the framework of Cold War politics, his complex relationship with Lysenko, and his long association with the Soviet establishment (Lazcano 2010, p. 10).

Under the strong influence of Soviet agronomist Trofim Lysenko, who was supported by the Communist Party, and who believed that acquired traits are inherited (Lamarckism, AN) and denied the existence of genes (Borinskaya et al. 2019, p. 1), Oparin strictly followed these ideas.

He "eventually acknowledged the role of nucleic acids in the origin of life" and assumed that "protein synthesis was the evolutionary outcome of the interaction of primordial polypeptides and polynucleotides within the boundaries of precellular systems" (Lazcano 2010, p. 10).

All these facts regarding basic premises are derived from the scientific effort in the comprehension of the origin of life as well as from Miler-Urey and all the other subsequent experiments of the same kind. These experiments prove the logical possibility of the Oparin general scenario and could be used as strong evidence that the macromolecules that are important for life systems can emerge in abiotic milieu under controlled laboratory conditions. This was a huge step toward understanding the possible pathways on the road to the transition from the inorganic to the organic world. But, up to now there has been no experiment which could undoubtedly confirm or reject the premises set by the Oparin hypothesis. Also, the most important gap between the most complex inorganic compounds and the simplest living systems was not narrowed by the Oparin hypothesis in a way that could be recognized as a scientific explanation. The peak of testing the Oparin hypothesis is a trap by proof of the logical possibility of the in vitro prebiotic synthesis of the important macromolecules. The difference between the logically possible and the logically necessary is clear, and this

difference cannot be ignored nor neglected. Because of this, from the logical point of view, Oparin hypothesis, even at the time of its origin, could be only contingently true.

Regarding the demand coming from philosophy of science, it is necessary to repeat that scientific theories are subject to change: this means that sometimes a theory does not represent the best current knowledge about a specific phenomenon anymore and has to be abandoned, sometimes a theory loses parts of its scope and relevance, or its elements need improvements according to new scientific insight and can be repaired. The example of the first is superseded Stahl's phlogiston theory, the second is classical causal classic physics, powerless in regard to the explanation of quantum phenomena limited to submicroscopic phenomena and probabilistic predictions, and the numerous models of atoms could be seen as an example of the third kind of the destiny scientific theory. A rejected or revised theory is not true because an appropriate entity or fact to which it has to correspond does not exist or does not exist in a way theory predicted or explains. A rejected theory is at fault because its propositions do not correspond to facts and/or is not very well supported by other scientific theories or when there is no expected resemblance between the theoretical and empirical realm. In the two other cases, theories continue their existence. Where would the Oparin hypothesis be located within these possibilities? Does it have to be abandoned, is it not relevant anymore, or could it be repaired and improved? The importance and impact of Oparin's hypothesis is tremendous as a conceptual breakthrough because it transformed "the origin of life study into a broad-based workable research program" (Miller et al. 1997, p. 352). Oparin's hypothesis, to be sure, is creditable for setting the "methodological standards for all future work in the field ... and continue to stand as an exemplar" (Kamminga 1998, p. 9), and even for establishing a firm (meta)theoretical and methodological framework for further scientific research. But, if we evaluate the Oparin hypothesis as a specific scientific theory, then we have to admit that some of its premises are not known or definite (prebiotic soup, glucose fermentation, the long period of times needed for the emergence of life), and some of them are even rejected (the coacervate). But the most serious objection to the Oparin hypothesis is that its scope is restricted to the very narrow area of the possible prebiotic synthesis of the macromolecules we find in living systems. Even if it could be successful in explaining prebiotic synthesis, the Oparin hypothesis did not decrease the most important gap between the most complicated organic substances and the most primitive living organisms. The explanation of this transition is the ultimate and final goal of origin of life research.

Conclusion

The Oparin hypothesis changed the course of the origin of first life research from purely metaphysical speculation to empirical investigation. His hypothesis created a new (meta)theoretical framework, was a conceptual insight, and developed detailed steps in the hypothesized process on the path to the origin of

first life. By this Oparin made his hypothesis to be at least partially empirically testable, which was carried out several times. On the other hand, the Oparin hypothesis was founded on unconfirmed or indefinite premises which are not plausible according to the contemporary knowledge of our best scientific theory. His hypothesis has a high metatheoretical value, but as a specific scientific hypothesis, its contribution is highly limited to the area of the history of science and the history of philosophy (of science).

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Wittgenstein's Notion of 'Higher': A Reading from Sankara's Conception of Jnana

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This paper aims to revisit Wittgenstein's notion of 'higher' from the understanding of Sankara's conception of Jnana. According to Wittgenstein, values cannot be captured within the network of facts about living things or dead matters in the world; they are not the case in the world and are not relational, they are higher. That is why, we cannot call values natural in any sense of the expression. This compels Wittgenstein to appeal to the transcendental origin of the values. In this way, the world is bereft of the values and subsequently the knowledge about the values can be attained when the self is to be seen not in the world, rather be experienced with the world. The knowledge that Wittgenstein speaks about is not the ordinary knowledge of the world which logic and science provide, but is the knowledge of the divine state where one can grasp the oneness of the life and world. Such knowledge of moral interaction between the self and world seems to be closer to Sankara's conception of Jnana which gives the knowledge of the identity of Jiva and Brahman. According to Sankara, it is a paramarthika experience of the atman which can attain the knowledge of absolute value or Brahman while remaining engaged in the worldly pursuits. The knowledge of absolute value for him, is a form of realization or anubhava of the self or atman which is distinct from knowledge of an intellectual or logical kind.

Keywords: *Wittgenstein, Sankara, world, self, higher, Brahman*

Introduction

This paper aims to revisit Wittgenstein's notion of 'higher' from the understanding of Sankara's conception of Jnana. According to Wittgenstein, the world is nothing more than the concatenation of contingent facts. Hence, no values exist in the world as values are supernatural in nature. Values cannot be captured within the network of facts about living things or dead matters in the world; they are not the case in the world and are not relational, they are higher. That is why, we cannot call values natural in any sense of the expression. This compels Wittgenstein to appeal to the transcendental origin of the values. Values originate from a transcendental vision of reality. They do not change along with the changes in the facts or events of the world. They are good in themselves and thereby, they are valuable for their own sake. They are intrinsically valuable and hence, are eternal, and unconditional. In this way, the world is bereft of the values and subsequently the knowledge about the values can be attained when the self is to be seen not *in* the world, rather be experienced *with* the world. The knowledge that Wittgenstein speaks about is not the ordinary knowledge of the world which logic

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and science provide, but is the knowledge of the divine state where one can grasp the oneness of the life and world. Such knowledge of moral interaction between the self and world seems to be closer to Sankara's conception of Jnana which gives the knowledge of the identity of *Jiva* and *Brahman.* According to Sankara, it is a paramarthika experience of the atman which can attain the knowledge of absolute value or Brahman while remaining engaged in the worldly pursuits. The knowledge of absolute value for him, is a form of realization or *anubhava* of the self or atman which is distinct from knowledge of an intellectual or logical kind. This paper also analyses and relates the distinction that Wittgenstein has made between the world (relational) and value (absolute) with the distinction between vyavaharika satta (relational) and parmarthika satta (absolute) in Sankara's philosophy.

Ethical Values and the Limits of Language

According to Wittgenstein, no value exists in the world, and 'if it did exist, it would have no value' (Wittgenstein 1961b, #6.41). If there is anything that does have value, it must lie outside 'what happens and is the case'. For all that happens and is the case in the world is entirely accidental and contingent in nature. What makes values non-accidental cannot lie *within* the world, since if it did it would itself be accidental (Wittgenstein 1961b, #6.41). But values– the ethical, aesthetic, and religious, are non-accidental, unconditional and are devoid of empirical content. They are seen as higher. In this sense, Wittgenstein is right in claiming that the world is bereft of the ethical values as it contains nothing more than the facts. For him, values are viewed as supernatural in nature and cannot be ascribed anything natural. So, ethical values such as 'good', 'bad', 'evil', etc., can never be properties of anything whose subject is factual in nature.

> What is Good is Divine also. That, strangely enough, sums up my ethics. Only something Supernatural can express the Supernatural. You cannot lead people to the good; you can only lead them to some place or other; the good lies outside the space of facts (Wittgenstein 1980, p. 3).

Good is not like an object, state of affairs, or place in the world which can be described in terms of facts. Proclaiming good as supernatural locates it outside the domain of language. Since all meaningful propositions are necessarily descriptive in nature as they fulfill the bipolar condition. That is why, propositions can express nothing that is higher (Wittgenstein 1961b, #6.42). In other words, there are no propositions which, in any absolute sense, are sublime, important, or trivial. This makes Wittgenstein's contention very clear that all judgments of relative value can only be shown as statements of facts, but no statement of facts can imply a judgment of absolute value (Wittgenstein 1965, p. 7). Hence, the expression 'value-fact' would be a contradiction.

Judgments of absolute value being beyond the facts cannot be captured by the natural language; they convey something higher. Words in natural language are like vessels capable only of containing and conveying meaning and sense. They

cannot be used meaningfully to express something which is supernatural or higher. "Ethics, if it is anything, is supernatural and our words will only express facts; as a teacup will only hold a teacup full of water and if I were to pour out a gallon over it" (Wittgenstein 1965, p. 7). Ethics in this sense, being higher, cannot find place in a book on natural science, the subject matter of which could never be intrinsically sublime and above all other subject matters. Wittgenstein puts it powerfully by using a metaphor of a book on Ethics if written, this book, with an explosion, would destroy all the other books in the world (Wittgenstein 1965, p. 8). That is, the subject matter of such book being above all other would cease the possibility of having books on any other subject matter. In *Lecture on Ethics*, Wittgenstein mentions three absolute values namely: (1) the experience of wonder at the existence of the world; (2) the feeling of being absolutely safe; and (3) the experience of feeling guilty (Wittgenstein 1965, p. 10). These experiences are mystical feeling in the sense that they are not a part of our everyday life. Absurdity arises when we are inclined to ascribe absolute values in expressing our everyday experiences. This is a complete misuse of language when we express these experiences of absolute values. These expressions of absolute values are failed to fulfil the minimal condition of the meaningful propositions as they belong to the truly higher life. Wittgenstein's idea of keeping ethical values outside the world does not mean that Wittgenstein has ruled out the significance of the world. Rather he wants to go beyond the world and make move for the transcendental ethics which pertains to the higher knowledge of life and the world. Wittgenstein is right in claiming that the sense of the world cannot be captured within the network of facts in the world; it must lie outside the world (Wittgenstein 1961b, #6.41).

Transcendental Ethics

Ethics is broadly an enquiry into 'what is most valuable and important in life' (Wittgenstein 1965, p. 5); it does not delve into the empirical world. Wittgenstein believes that what is valuable and meaningful in life falls outside the realm of science. It is not included in the subject matter of scientific enquiry. By its very nature ethics deals with the core issues of human life. Wittgenstein believes that the significant issues of human life must be distinguished from the scientific issues. "We feel that even when all *possible* scientific questions have been answered, the problems of life remain completely untouched. Of course there are then no questions left, and this itself is the answer" (Wittgenstein 1961b, #6.52). This remark clearly states that the problems of human life cannot be captured within the scientific enquiry. In order to understand the meaning of life and world, it is required to understand the transcendental vision of reality rather than empirical vision alone.

For Wittgenstein, the metaphysical significance of the problems of life would be revealed when they are brought to relate with the problems of ethics. He claims that what gives meaning to life or what makes life happy or unhappy, does not lie within the world. Since the problems of life are not questions for scientific enquiry their solutions cannot be located within the boundaries of natural sciences.

Solution to the problems of human life are to be found in life itself, in the very fact of unfolding of how one lives in the world. In other words, the problems of life are pertaining to the very sense of life. It depends on subject's attitude how she/he looks at the world and relates with it. It has to do with the attitude of the subject to see the facts in the world and be in agreement with it – 'seeing the world aright' (Wittgenstein 1961b, #6.54). The notion of subject or willing subject comes at the center to establish the primacy of 'the higher.' The subject is considered as willing subject when it is located only at transcendental level. Metaphysical self, for Wittgenstein, is the willing subject which serves the purpose of human existence and its meaning in life. This purpose can be realised when the willing subject is viewed as the limit of the world. Things in the world would acquire "significance" only through their relation with my will (Wittgenstein 1961a, p. 84).The notion of willing subject becomes very crucial in Wittgenstein's philosophy as it brings moral significance into the world. Wittgenstein's notion of ethics gives a broader perspective to life in its relation with the world. Ethics thus concerns to the higher knowledge of life and the world and aims at bringing about the aspiration of realizing the ultimate meaning of life.

Wittgenstein is very cautious in acknowledging the relationship between ethics and the world when he says, ethics does not treat of the world; ethics must be a condition of the world (Wittgenstein 1961a, p. 77). Ethics being transcendental provides the possible conditions under which an ethically meaningful world is made possible. This relation between the two is established by the subject or 'I' which does not belong to the world but is its limit (see Mallick and Sirola 2012). The change in the attitude of the subject conditions the way of seeing the world. The subject morally interacts with the world at metaphysical level making the world ethically meaningful. Such interaction is comprehensible only if the transcendental subject is acknowledged as the bearer of the ethical values. This makes Wittgenstein to say that "Good and evil only enter through the *subject*... It would be possible to say (a la Schopenhauer): it is not the world of Idea that is either good or evil; but the willing subject" Wittgenstein 1961a, p. 79). To say, what is good and evil is essentially the I, not the world of living being or thing (Wittgenstein 1961a, p. 80) is to claim that no ethics would be possible without the subject or 'I'. In other words, ethics is possible even if there is only myself or the 'I' and nothing else. Self being beyond the world cannot bring any changes in the world; it cannot interfere with what happens in the world. The self remains only as a transcendental spectator of what happens in the world. The relation between the self and *the world* is neither logical nor causal. Wittgenstein's effort is to develop an understanding how the self is metaphysically related with *the world*. As he writes, "The world is given to *me*, i.e., my will enters into the world completely from outside as into something that is already there" (Wittgenstein 1961a, p. 74). Now a question cane be posed here, how moral values enter into the world when the subject is said not be part of the world. Wittgenstein's response to the question is that the moral will is related to the world from the outside rather than inside as a metaphysical subject. The world is given to us and everybody interacts with others in the world through 'their own worlds.' The self can change the meaning of the world with the change in the attitude but not the facts in the world. My will

penetrates the world and that will is seen as good and evil (Wittgenstein 1961a, p. 73). The subject is not directly associated with the world but it makes its appearance into the world through, what Wittgenstein calls, world's being *my* world. The willing subject and the world are independent but they interact morally when the willing subject enters into the world through 'the world being *my world*.'

Happy and Unhappy Life: A Transcendental Outlook

Wittgensteinian solipsistic 'I' makes its appearance in philosophy through the world's being *my* world (Wittgenstein 1961a, p. 80). It is a metaphysical subject that makes the world as 'my world'. The metaphysical subject is a limit of the world. Each metaphysical subject has their own limits of the world and hence, there are many 'my worlds' as there are many metaphysical subjects. I or self is not only transcending the hard world but also other's world. His solipsistic position makes a claim for the existence of the hard world which is commonly available for every self to create its own world. Wittgenstein's notion of the willing subject identifies with the metaphysical 'I' which is not situated anywhere in world rather it is the limits of the world. The self, as conceived by Wittgenstein, is causally inefficacious over the events in the world. The self is metaphysically related with the world and manifests itself by seeing the world as *my world*. The world i.e., my world gets metaphysical status only within the framework set by the self. When the world is seen as a limited whole, as *my world*, the willing subject finds a transcendental moral sphere to interact with the world. In this sense, for Wittgenstein, transcendental moral sphere can be created only when the self is seen not *in* the world but *with* the world.

The willing subject determines the ethical status which provides meaning to the world. The facts that constitute the world remain the same but the limits of the world get changed. Depending on the attitude of wiling subject the same world may appear good or bad. Subsequently, good or bad will result in making it happy or unhappy. The attitude of the willing subject manifests itself in its happiness or unhappiness. It is morally active and maintains moral influence on the world. The world which is given to us has no value, but the way of seeing it makes it happy or unhappy. It is the attitude of the self which makes one happy or unhappy. In one sense, of course the happy man and the unhappy man do not live in two different worlds, for the world in which they reside is materially or factually the same world. In other sense, one may even say that they both live in two different worlds. To speak plainly, while a good man makes the world good, a bad man makes the same world a hell…The world remains morally neutral (Pradhan 2008). The same world may appear different to each of us depending on the way of seeing or the attitude towards it. "The willing subject would have to be happy or unhappy, and happiness and unhappiness could not be part of the world" (Wittgenstein 1961a, p. 79). It is 'I' who is either happy or unhappy (Wittgenstein 1961a, p. 74). Though ontologically there is no difference but the world of the happy man is a different one from that of the unhappy man (Wittgenstein 1961b, #6.43). Their incommensurability

is only in terms of seeing the world differently from a transcendental point of view.

The only life that is happy is the life that can renounce the amenities of the world (Wittgenstein 1961a, p. 81). It implies that man's happiness is not accidental or contingent on man's life of amenities which are temporal and accidental. Happiness is unconditional and absolute which remains indifferent to the facts in the world. Like 'good', happiness is treated in absolute sense of being independent of the spatio-temporal world. Renunciation does not mean giving up the facts in the world rather to see them all together and accept them with equanimity at any moment. Will is good when it maintains the harmony between the subject and the happenings of the world. And the will is bad when it fails to maintain this harmony between the subject and the facts in the world. A man is happy;

> Who remains indifferent to the on-going in the world because he knows that they cannot be eliminated and also because he realizes that he cannot eliminate them. Wittgenstein's ideas of the good man is comparable to Bhagavadgita's idea of a sthitaprajna or the man of steadfast wisdom who remains unaffected by the happenings of the world (Wittgenstein 1961a, p. 73).

It may be asked here, how can a man renounce the happening of the world he lives in? In other words, how can a man be happy at all when he had to suffer all the misery of this world? Wittgenstein responds to it by saying that the self can renounce any influence of the happenings of the world through the life of knowledge. For Wittgenstein, the life of knowledge is the life that is happy in spite of the misery of the world (Wittgenstein 1961a, p. 81). That would be possible only when the self is represented as the transcendental self.

The life of knowledge is possible while someone lives in the present. Only a man who lives not in time but in the present is happy (Wittgenstein 1961a, p. 74). Living in the present makes one indifferent towards worldly miseries, sorrows, fear and death, etc., as the willing subject is beyond the spatio-temporal world. Only in this sense one can appreciate when Wittgenstein says: "A happy man must have no fear. Not even in the face of death (Wittgenstein 1961a, p. 74). "Fear in that face of death is the best sign of a false i.e., a bad life" (Wittgenstein 1961a, p. 75). It is in psycho-physical life where the empirical ego has relation with the material world. An unhappy man lives in time and therefore, would face the fear of death and would be affected worldly miseries. Wittgenstein further says, In order to live happily I must be in agreement with the world. And that is what 'being happy' means (Wittgenstein 1961a, p. 75). To be happy, one needs to accept with equanimity, whatever is the case in the world. Man's happiness is not dependent on life of amenities and comfort which are temporal and accidental. Happiness is unconditional and absolute and remains indifferent to the facts in the world. Wittgenstein indicates clearly that the good conscience is the happiness that the life of knowledge preserves (Wittgenstein 1961a, p. 81). Conscience is the voice of God (Wittgenstein 1961a, p. 75). So, a man who is happy must be lived as per direction of God. Here, Wittgenstein becomes somewhat prophetic in suggesting that the happy life is the only right life (Wittgenstein 1961a, p. 78). Act according to your conscience whatever it may be. A happy life is to live in accordance with

one's conscience, where conscience is identified with voice of God. God manifests itself in the world seen as whole. In other words, to see God is to see the facts in the world not individually, but together as whole. God does not reveal himself in the form of any individual being or particular thing of the world such as a stone, man, tree, etc. in the world (Wittgenstein 1961b, #6.4321). It is not any particular fact or facts in the world which has any significance in this sense. When one sees the facts together in the right way, one sees them as the manifestation of the divine will or good will. "God cannot be seen as revealed more in any one fact or set of facts than another. It is the world as a whole, rather than any set of facts in it, which manifests God." Doing the will of God is to see the life and the world as one. The self maintains harmony between the life and the world. But when the self is not in agreement with the world, the conscience upset this equilibrium. Life is meaningful when this equilibrium is maintained; I act according to my conscience. Meaningful life is all about attaining a *harmony* between the life and the world. To believe in a God means to understand the question about the meaning of life. To believe in a God means to see that life has a meaning (Wittgenstein 1961a, p. 74). This leads to the realization of the higher order of the world and the life. It is the knowledge of higher order of the self and its relation to the world.

> The knowledge that Wittgenstein speaks about is not the ordinary knowledge of the world which science provides, but is the knowledge of the highest order, namely the philosophical or metaphysical knowledge that follows from contemplation on life and the world. By knowledge he meant the enlightenment that secures the release of the mind from the particular facts of the world; it leads the mind to the knowledge of the whole world *sub specie aeternitatis* (Wittgenstein 1961a, p. 74).

Morally willing subject's 'seeing the world aright' presupposes viewing the life and world *sub specie aeternitatis* (Wittgenstein 1961b, #6.45). Feeling the world as a whole – a limited whole, as *my world*, is to be conscious of another aspect of the same reality. It has metaphysical significance to conceive the life lived in the present where it becomes eternal. Temporal standpoint cannot yield the perception of the world and life shaped by absolute values. The ability to live one's life happily 'in agreement with' the facts of the world depends on an attitude of indifference to the way the world of facts impinge on us. Wittgenstein's remark: I can make myself independent of the world–and so in a certain sense master it–renouncing any influence on happenings (Wittgenstein 1961a, p. 73). The self which is bounded within the limits of its own solipsistic world has to step out from the individualistic way of seeing the world and recognize the facts of the world with equanimity whatever they may be. One could come into agreement with the facts of the world together by seeing them as a limited whole which Wittgenstein identifies with '*das Mystische*' (Wittgenstein 1961b, #6.45). It is the mystical feeling or experience where one can grasp the oneness of the life and world. It is the realization of the higher consciousness where there is no scope of identifying with the empirical contents of the world. Only in this sense, life becomes eternal and realizes its higher meaning – its value.

Interface with Sankara's Notion of Higher

The higher realm of absolute values in Wittgenstein's ethics seems to be closer to the realm of Sankara's conception of Brahman. The natural language has to be lost its meaning while dealing with the higher realm of values. The natural world is the subject matter of the natural sciences as the natural facts can be stated only in the natural language. Wittgenstein's argument against the supremacy of language in ethics reminds us of the Advaitic view that the Brahman transcends language and ordinary experiences (see Pradhan 2009). Sankara argues like Wittgenstein that Brahman is indefinable and indescribable as it is transcendental in nature and hence, nothing can be said about it. The point is that the absolute values like Brahman and Good, etc. are so sublime that speaking of them we may only make them less and less sublime (Pradhan 2009, p. 295). They are beyond the language. Sankara makes a distinction between the higher experience of Brahman and the experience of the world. The values of the world according to Sankara, are relative and describable by means of language from the vyavaharika point of view. The world is true for all practical purposes. However, from the parmarthika point of view, the values of the world are invariant and absolute in nature. It is the world of reality that is viewed as Brahman. It is higher and hence, indefinable (anirukta). To understand the higher experience one has to transcend language. Such higher experience *cannot be expressed meaningfully by language.* They make themselves manifest (Wittgenstein 1961b, #6.522). *Tractatus* further claims, "Whereof we cannot speak, thereof we must pass over in silence" (Wittgenstein 1961b, #7). In Vivekachudamani, Sankara too says that Atman and Brahman make themselves manifest, provided certain conditions are satisfied. He says: "This Atman which is an ever-present reality manifests itself as soon as the right means of knowledge are present, and does not depend upon either place, or time, or (ceremonial) purity" (*VC*: 531-32). In the case of all higher experiences, saying is replaced by showing. To the one who has realised them, the language used to describe, or explain such experience are nothing but nonsensical. For him, it is beyond language, ineffable and in nutshell, it is impossible to describe in words. They are mystic in nature and belong to the realm of transcendental. According to Sankara, Ataman is identified with Brahman and therefore, he claims, '*Brahman satyam jaganmithya jivo brahmaiva naparah*' (*BM*: 20). Brahman is the real and the world is false. The individual self is non-different from the Brahman. Brahaman is the only reality. It is absolute; there is nothing said to be real except Brahman.

According to Sankara, the world is considered as mithya or false; it is merely appearance of brahman. But when Sankara claims 'Brahman satya jagat mithya' he does not rule out the existence of the external world. In view of Sankara, mithya does not mean non-existent (asat). The mithya has existence but its existence is relative in nature. The world exists because it appears for a while but it is not real since it disappears later. The world is directly perceived in everyday life and is not denied by any other ordinary knowledge except the knowledge of Brahman. Therefore, Sankara claims, there is no ground to rule out the existence of the world completely. It is true that the world is viewed as mithya or false by Sankara. In this sense, the world is mithya by comparison with Brahman which is the only reality.

So, Brahman is regarded as 'sat' or absolute real. But this does not mean that Sankara regards the world as mere fiction. By 'asat' Sankara means that which is totally non-existent and is never experienced, e.g., like the sky flower which is never experienced. Accordingly, the world is neither 'sat', since it is vanished by the knowledge of Brahman; nor 'asat' (*AS*: 230), since it becomes the object of knowledge. The world is false because it is not established by the real knowledge.

Brahman is the cause of the world and that world is the appearance of the Brahman. This appearance the world is created by maya, inherent power of Brahman. When the Brahman is endowed with maya sakti and manifests itself as the cause of the world then it becomes Isvara or God. Brahman, the cause does not really produce or transform into the world, i.e., effect. There is no real change taken place in Brahman. It is changeless and formless. Maya is actually Power of Brahman. The unchanging material cause is known as vivarta-karana. Brahman is not really transformed into the world; it merely appears as the world through the illusory power of maya. Sankara claims that Brahman is the cause of the world, not by transformation or parinama but through vivarta or appearance. Brahman does not really change into world. If Brahman is to transform into the world discarding its nature, then Brahman will no longer remain eternal or nitya. Consequently, it is to be accepted that Brahman simply appears as the world due to maya without discarding its nature (*AS*: 936). The world is a mere appearance of the Brahman. When a substance falsely appears to be something different without discarding its real nature, it is called vivarta or appearance. It is an illusory modification of a substance. In the vivarta, nothing is really changed into existence as an effect. Rather the cause itself appears to be something different. For example, when a rope appears as a snake; the rope does not really change into the snake rather the rope simply appears as the snake. Here, the cause, rope is real, and the effect, snake is not real; it is mere appearance. They are the different aspects of reality. Actually no effect has been taken place. The effect does not exist apart from the cause, i.e., the effect is merely a false appearance of the cause. Similarly, Brahman does not change into the world, rather it appears as the world and just a rope as the snake (*BH*: 1). The world cannot be viewed as a transformation of its cause, Brahman, because Brahman, being partless and immutable, cannot undergo any changes (*SU*: 6.9). Brahaman is the only real; and the world is unreal. The world has no reality apart from the Brahman and just as, snake has not reality apart from rope. So the reality of the world comes into existence since the existence of the Brahman is acknowledged as an absolute true, apart from which the world has no reality; but it continue to exists as long as the Brahman is not realised. When Brahman is realized, the world ceases to exist.

The realization of Brahman can be attained through knowledge or Jnana. Such knowledge can be attained when someone possesses four kinds of qualifications (see Musalgaonkar 2014, p. 13). 1. Nitya-anitya- vastu-viveka (discrimination between eternal and non-eternal). 2. Iha-amutra-phala-bhoga-viraaga (renunciation from worldly affairs and heavenly affairs). 3. Samadi-satka-sampatti (the six-fold qualities- control of the *antahkaraṇa*, control of external sense organs, cessation of worldly actions, the tolerating of *tāpatraya* (suffering caused by internal factors-diseases and external forces-cyclone), the faith in Guru and Vedas, the concentrating

of the mind on God and Guru. 4. Mumuksutva (desire for moksa or liberation i.e., release from the cycle of births and deaths). So knowledge of Brahman can be attained while living *with* world but not *in* the world. Such knowledge leads to liberation because it is highest knowledge that man can attain regarding the self and the world. This metaphysical aspect of the world cannot be understood by applying the method of science and logic rather it is a realisation or *anubhava* of atman or self which is seen not *in* the world but *with* it. The identification of atman with Brahman, is the higher order knowledge. It is not the vyavaharika or everyday experience of the atman which is aparoksa or immediate; rather it is the paramarthika experience of the atman which is glorified as Paramatman or Brahaman after the removal of avidya. So the world of appearance is not absolutely real like Brahman since it disappears when the knowledge of Brahman is attained. Thus, Sankara argues that the world is identical with Brahman, just as jars, plates, etc, are identical with clay (*VC*: 229). In this context, Vivekacudamani says that this world is an expression of Brahman, it is brahma-maya because the existence of superimposed is not different from its substratum (*VC*: 231). So, it can be said that with the attainment of the knowledge of Brahman, the world does not vanish, it only revealed as identical with Brahman. So, the world has no separate existence apart from Brahman. This knowledge of Brahman is possible when the self transcends the world. In this sense, the self is seen as transcendental in character which remains indifferent to the happenings of the worldly facts. The intricacy of the transcendental character of the self is to be brought into discussion when knowledge of the Brahman arises. The notion of metaphysical subject comes at the center to establish the primacy of the higher knowledge of Brahman.

It is not correct to say that there are two distinct types of self or subject – thinking self and metaphysical self. It would be more appropriate to see them as two aspects of the self. Sankara makes it very clear by drawing a distinction between 'empirical self' and 'metaphysical self'. The empirical self is identified with psychophysical self as the combination of mind and body or soul. It remains at the centre of the world. But the willing subject is a metaphysical subject who is not *in* the world but *with* it as regarded by Wittgenstein. This conceptual duality between 'empirical self' and 'metaphysical self' is significant and is to be noticed in Sankara's philosophy. The metaphysical self is the real self. It is the higher self that cannot be captured within the network of the facts in the world. In this way, self cannot be reduced only to a thinking or empirical self in the domain of philosophy. Sankara emphasizes on metaphysical self or 'I' in order to understand the higher order of the world and life from parmarthika viewpoint.

Like Wittgenstein's usages of ordinary and philosophical 'I', Sankara also makes a distinction between the "Self-in-man and Self-of-man." (Pannerselvam 1993, p. 145). The self-in-man is not identical with the self-viewed as pure consciousness rather associates with body-sense-mind complex. This kind of self is identified with having name and form; it is embodied with qualities, so that, it is objectively perceivable. However, another dimension of the self is viewed as Self-of-the-world which is non-relational to worldly facts. Similarly Wittgenstein also uses the word 'I' or self in two different senses. In ordinary usages, the word 'I' refers to physical body (i.e., possessor or owner). When I utter the statement, 'I am

in Mumbai,' here, the word 'I' refers to my body. But in another usage, the word, 'I' cannot refer to the human body or soul but rather it is regarded as 'the metaphysical self'. It is the subject which is considered as a 'philosophical 'I'' can neither get influenced by success nor by failure because it is affected by the worldly affairs. The self is Brahman. It is the self-of-man. It is devoid of attributes. Being immutable, it has no changes like origination, destruction, etc. But in the case of "self-in-man", the self is caught in man's experience – waking, dreaming, etc. the self-in-man is not the real self. "Having name and form, it is endowed with attributes. It is finite and composite. It is subject to change." (Pannerselvam 1993, p. 145). The self-in-man is not the real self. The identification of the self with the body is due to the avidya or ignorance. However, for attainment of liberation, what is required is the knowledge of the real self.

> If ignorance causes bondage by bringing about false identification with the body and the things of the world, then it can be removed only by knowledge. If man can remain himself as the Self without any attachment to the body and the things of the world, i.e. if man can remain without the senses of the "I" and "mine" even though he is for all practical purposes, tenanting of the body, then he is free even while he is alive; he has no "of-relation" with anything. Such a person: is called the liberated-in life (Pannerselvam 1993, p. 145).

So man can attain liberation in life while remaining engaged in the worldly pursuits. This idea of man is more close to the *Bhagavadgita's* idea of the *Brahmic state* or the man of steadfast wisdom who remains unaffected by the happenings of the world. According to *Bhagvad Gita*,

> Once attachment for the objects of the senses is given a place in the mind, it will be disastrous, because attachment gives rise to desire, and desire breeds anger. The next step is delusion and the mind gets confused and understanding is lost. Destruction follows in its wake. So, the senses should be controlled, and the man into whom all desires enter as the waters enter the sea, attains peace. This is the Divine state and that is the bliss of the Brahmic state from where no man can ever fall again (*BG*: 2.62).

Bondage is caused by the ignorance of bringing the false identification of the self with the body and the worldly objects. It conceals (avarana) the true knowledge. For attaining liberation, knowledge of the uniqueness of the self is required. If a man can remain himself without identifying completely with mind-sense-body complex, i.e., 'ego' ('I', my, mine), then he is free even while he is alive; and he has no association with anything in spatio-temporal duration. Such a person is called the 'liberated-in-life' (Jivanmukta) (see Balasubramanian 1985, pp. 218–219). The Svetasvatara Upanisad says, "only by knowing him one passes over death; there is no other path for going there" (*SU*: 3.8). It means once a man realizes the true nature of the self then he himself transcends the psycho-psychical life where death is immaterial. It is very closely related to Wittgensteinian notion of eternal life where the self passes over the death and it stands in state of timelessness. This is called eternal life where death does not occur and hence, has

'no end in just the way in which our visual field has no limits' (Wittgenstein 1961b, #6.4311). "Death only takes away the world from us, at death we have transcended the world… We are a part of eternity, and this eternity is not something which we can acquire only *after* our death. For we can be a part of eternity, of eternal life, even in the *present*, i.e., before our death." (Chandra 2002, p. 26).

The self, according to Sankara, is placed in the domain of transcendental reality which cannot be objectively given in the world. All that is given as 'object' can be experienced but subject cannot be experienced. Therefore, "the subject is different from object." ((Pannerselvam 1993, p. 143). When someone says, 'I am in pain, he is simply superimposing the contingent property of body or mind to the domain of the subject. This gives an erroneous concept of the self for Sankara. The self would cease its metaphysical significance when it is perceived as an object in the phenomenal world. This is called *adhyasa* or illusion (*maya*) due to ignorance. Self or 'I', for Sankara, is viewed as absolute and hence, cannot be ascribed to the persons. 'I' cannot be anything like what we use 'I' as an individual person in our language. Self or 'I' being metaphysical, is not expressible in natural language. That is why, we cannot use 'self' phenomenal in any sense of the term. The self or 'I' is not the name of an individual person. Here the point is made "that 'I' never have to use criteria to identify who "I', is as I sometimes have to do with persons (Pannerselvam 1993, p. 140). This makes Sankara to appeal to the divine origin of the self or 'I'. It is non-different from Brahman. Sankara's main contention is that the self as the subject of experience is *ex hypothesi* distinction from everything that is objective and is of eternally self-same nature; but we in our ordinary experience perceive the body-sense-mind complex (which is both objective and variable) as the self. "This is *adhyasa*, or the natural erroeneous tendency to translocate the properties of one entity on another." (Pannerselvam 1993, p. 143). The *Chandogya Upanishad* says, 'self is one and non-dual i.e., *Ekam evadvitiyam'* and also claims 'this self is Brahman' and it is the self of man' (*CU*: 4, 2, 1). It seems that there are two aspects of the same self: one is the self-viewed as empirical ego by saying 'I am in pain' when it is covered by *maya* and other is the self, when it is conscious, viewed as transcendental ego by saying 'I am Brahman' (*Aham brahmasmi*) (*BU*: 1.4.10). In the conscious state, it is devoid of qualities and forms and is non-relational. Therefore, the *Katha Upanishad* says that "the nature of Brahman is such that it cannot be grasped by debates and discussion. It cannot be put into words. It can be learnt by experiences alone." (*KU*: 1.3.10). So we cannot grasp the nature of Brahman in our perceptions and descriptions of the world. No expression can express it, since to say of an experience that it is 'higher' or 'mystical' is to attempt to go beyond the limits of language. The walls of our cage set by the language do not permit to convey the sense of mystical. Wittgenstein calls it absolutely hopeless attempt to run against these walls (Wittgenstein 1965, p. 11).

Conclusion

From the above discussion, we conclude that the resemblance between Wittgenstein and Sankara on the issue of 'higher' is regarded as mystical. Both admit that a man can be liberated from the entanglement of the worldly things, once knowledge of absolute reality is attained. The attainment of knowledge is possible when the self is seen not *in* the world but *with* it. The self, according to them, is interpreted as the metaphysical self that realizes the higher knowledge of life and the world at the transcendental level. The transcendental, for them, is pertaining to the higher order knowledge of the self and its relation to the world. It is the mystical experience where one can grasp the oneness of the self and the world. In this sense, life becomes mystical and realizes its higher meaning which transcends the empirical contents and the language. So any attempt to explain the higher through language is simply nonsense. One of the outcomes of this paper is that there can be found an affinity between the notion of the higher realm of the life in Wittgenstein and the realm the Advaitic Brahman.

Abbreviations

NB: Notebooks 1914-1916
TLP: Tractatus-Logico-Philosophicus
CV: Culture and Value
LE: A Lecture on Ethics
BM: Brahmajnanavalimala
VC: Vivekachudamani
SU: Svetasvatara Upanisad
BU: Brihadaranyaka Upanishad
CU: Chāndogya Upanishad
KU: Katha Upanishad
BG: Bhagavad Gita
BH: Bhamati
AS: Advaita-Siddhi

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