

**LEARNING ENVIRONMENT, ADMINISTRATIVE LEADERSHIP, AND  
PEDAGOGICAL SELF-EFFICACY: A MULTILEVEL ANALYSIS OF  
TEACHER MORALE AND PROFESSIONAL PERSISTENCE**

Prof. Oye Gureje  
University of Ibadan (UI), Ibadan

<https://doi.org/10.5281/zenodo.18108094>

---

**Abstract:** Throughout his life, Kalidas Bhattacharyya (KB) has written extensively on both Indian and Western philosophy. In some of his writings, such as *The Presuppositions of Science and Philosophy and Other Essays* and a couple of chapters in *Logic, Language and Philosophy*, KB has defended traditional metaphysics, by offering both positive arguments as well as critiquing some objections raised against it. In this article, we critically discuss his attempt to defend traditional metaphysics by analyzing the presuppositions of science and metaphysics. In his *The Presuppositions of Science and Philosophy and Other Essays*, he not only enumerates and classifies presuppositions, he also uses them to clarify the relation between science, metaphysics and epistemology. Despite its significance, KB's work remains largely unknown to contemporary philosophers, perhaps due to his highly technical and rigorous writing style. This article is an attempt to introduce and discuss his defense of traditional metaphysics so that it can be taken up for further research.

---

Received date: 15-03-2026

Date of acceptance: 15-04-2026

---

## I. INTRODUCTION

In a number of articles, KB sought to clarify the nature of metaphysics and its relation with science and epistemology. Given his professed commitment to Indian philosophy<sup>1</sup>, his motivation for engaging in such a project is not hard to understand. Metaphysics has a foundational significance in Indian philosophy. And yet, in modern times, western philosophers, particularly the empiricists, both old and modern, have mounted a fierce attack on the very possibility of traditional metaphysics as a systematic philosophical enterprise. In the same breath, they have demonstrated their faith in science and epistemology.

Against this backdrop, KB attempts to defend traditional metaphysics and argues for its deep, inseparable relation with epistemology and science. He argues that at least some metaphysical entities are indistinguishably fused with ordinary, perceptible objects. They can be known only through reflection and we are ontologically committed to these entities. He also claims that there is a hierarchy of presuppositions of traditional science, metaphysics and epistemology.

This article critically explicates his attempt at unpacking traditional metaphysics and its relation to science and epistemology, in a way that justifies the ontological commitment metaphysicians have, to basic notions such as space, time, substance, causality, self, matter, life etc.

KB takes two separate routes to unpack traditional metaphysics: (1) analyzing its presuppositions and (2) clarifying the nature of reflection in metaphysics. This article describes the first approach.

## II. PRESUPPOSITIONS IN DIFFERENT DISCIPLINES

Presuppositions are of different types. Axioms are self-evident, true in all possible worlds. They cannot be questioned, either from within the discipline or from outside. Thus, we are ontologically committed to axioms. Postulates can only be questioned from the outside, not from inside the discipline; and their status is exhausted in their use as a presupposition. Thus, they have only instrumental significance for the concerned discipline; we are not ontologically committed to postulates. Contrary to axioms and postulates, an empirical factual presupposition can be questioned both from the inside and outside; A fourth type is the heuristic principle. Although accepted, it is theoretically questionable, at least from the outside. However, it is not even theoretically verifiable for it is a presupposition regarding the world as a whole, which can never be presented to observation.

---

<sup>1</sup> For example, in his response (1985, p-156) to the various articles written in his honor, he writes:

An Indian by birth and temperament, whatever I have developed in my writings is some Indian view or other, only formulated in philosophical idioms that are Western...".

Coming to the presuppositions of science, all scientific studies supplement each other in the sense that the studies of individual disciplines add up to one unified, continuous picture of reality we call nature. Even though they deal with different subjects due to a 'division of labor', practitioners of one discipline can, in principle, study its own presuppositions instead of merely using them to obtain results. Thus, for example, an engineer can reflect on the laws of physics instead of merely using them to build bridges.

Logic, Mathematics and Metaphysics are of a different kind. They are meta studies of various presuppositions of the empirical sciences. Classical science and common life use many concepts which are not studied by common life and till recently, were not studied by scientists either. Such concepts include space, time, matter, substance, energy, existence etc. Metaphysics treats these basic concepts as presuppositions of science and studies them. But these are neither axioms nor postulates of science because scientists nowadays do question and study these presuppositions, just as philosophers used to. Some of the basic concepts which were regarded as presuppositions of classical science have now been revised/rejected by modern scientists. In their place, modern science has discovered newer postulates.

Metaphysics however, treats those old basic concepts of classical science as its presuppositions and studies them. But metaphysics is not a meta-study of science in the usual sense of meta. In the usual sense, meta-X enumerates the axioms and postulates of X, analyzes and combines them, deduces further propositions which could also pass off as derived axioms and postulates. Meta-X also shows how X uses these presuppositions and to what extent X is justified in using them. Even though a metaphysical study involves all the above activities, its subject matter, i.e. basic concepts of classical science, as discussed above, are not truly the axioms and postulates of science. Thus, KB insists (1985, p-221), metaphysics is not a meta study of science in the conventional sense of meta. But it is still a meta study in KB's sense, because it deals with a higher order of reality.

### **III. THE EMPIRICIST'S OBJECTIONS TO TRADITIONAL METAPHYSICS**

Not everybody agrees with KB and he does engage with the objections of the empiricists. According to the old empiricists, only those entities which are presentable to the senses or reducible to such presentations are real; everything else of these presuppositions or the presuppositions themselves are a subjective construction. For them, subjective just meant psychological. Thus, subjective construction is not a cognitive exercise. Rather, it is merely associational expectation or implicit thinking. The modern empiricists too take the presuppositions as constructions, but as logical or linguistic construction, not psychological. But for them too, the claim that the presuppositions are facts is an error, committed due to the illegitimate use of language.

According to KB, the modern empiricists in particular, were aware that the metaphysicians considered the presuppositions real in a sense different from the way ordinary objects are real. But they chose to dismiss the metaphysical claim of trans-natural reality as a product of logical misbehavior of language. KB attempts to weaken the modern empiricists' disregard of the metaphysician's theoretical convictions by questioning their own theoretical basis. He thinks that the notion of logical use of language, distinct from its psychological use, is unintelligible or at least ambiguous. Thus, he argues, if the modern empiricist thinks that the notion of trans-natural reality, which metaphysicians vouch for, is unintelligible, their own view about the logical behavior of language, different from its psychological use, is unintelligible by no less measure.

Elsewhere in the same article, KB argues that the present-day linguistic philosophers' criterion for proper (standard) use of language is untenable. KB alleges that they confuse propriety with empirical generalization. They arrive at their notion of proper use through generalization of actual uses in narrower fields such as physics. But why all proper uses should be restricted to use in a particular field of study? The insistence of the linguistic philosophers on proper use of language is therefore not theoretically innocent. KB's point is that the empiricists' objection to traditional metaphysics is not well-grounded.

### **IV. THE TRANSCENDENCE OF METAPHYSICS**

KB also positively argues for the meta status of metaphysics. An explanation of a meta study can be found in his reply to his critics (1985). Here, KB likens the distinction between a study and its meta study to the relation between "a form distinguished and the total homogeneous complex from out of which that form came to be livingly abstracted. Forms are living abstractions: when abstracted they demand an original status of their own, a sort of autonomy, and can be, and are as a matter of fact, studied on their own account. At a lower level, on the other hand, from where they came to be distinguished they stood as homogeneously fused with contents... This is what is meant when it is said that forms transcend the given whole that is Nature. Since content as such has no pinpointable status one can never use the formula 'form + content' = reality', because there is no distinct content for the form to foist upon, nor a form for a distinct content to run up to and embrace. This is what I mean by 'meta-study'." (1985, pp 277-278)

The notion of fusion, mentioned in the above passage, becomes clear in the following passage:

“That from out of which M or N comes to be distinguished—the given situation where they remain as indistinguishably fused—is a real of the first(lower) order, and that which is distinguished from out of it is one of the second(higher) order.” (1972, p-18)

The above gets clarified once we refer to his article *The nature of reflection in Metaphysics* in his (1965). Therein, he clarifies that by fusion, he means a situation where objectively, the items stand mixed up with each other undistinguishably. We realize the distinctness of the fused objects either through intellectual analysis and reasoning or through reflection disciplined in other ways.

To appreciate the notion of different levels of study, consider the analogy of games. Different games have different postulates (rules). Players use those rules while playing; using the rules is a constituent, necessary condition for playing the game. But they do not (and cannot) study rules of the game or study games in general while playing the game. A systematic study of rules of a game or what is common to all games can only take place at a different level. Particular instances of a game is a fused reality consisting of voluntary actions by the players and the guiding principles or rules of their behavior. A study of those rules cannot take place in a study which evaluates particular games. Both are of different categories.

Logic and mathematics are different from metaphysics in that the former two study presuppositions of one kind and metaphysics studies presuppositions of another kind. KB notes that disciplines like logic and mathematics do not presuppose anything further, neither any axiom, nor any postulate nor any heuristic principle which could be the subject matter of yet another meta study of logic or mathematics as the case may be. This is because these disciplines themselves study axioms and postulates. Anything that can be potentially marked as a presupposition in logic or mathematics has in fact been studied within the discipline and “exactly in the same spirit”. KB gives the example of the question: ‘What is Mathematics?’ He writes that this question would be meta-mathematical if mathematics were a study of facts. Since the mathematicians have taken up the above question in the same spirit as they study other problems in mathematics, KB concludes that the question does not belong to any meta discipline of mathematics. Similarly, a heuristic principle such as the principle of deduction is not merely used by logicians, it is itself a part of the subject matter of logic. Thus, a study of the principle of deduction takes place within the discipline of logic. There is no meta of logic. On the contrary, metaphysics has presuppositions which are not studied within it.

To give another example, KB refers to Euclidean geometry and Aristotelian logic. They do presuppose a 3-dimensional space and propositions in the subject-predicate form respectively. But, KB observes, the disciplines which study these presuppositions are just a “more systematic and more generalized form” of the same discipline, namely geometry and logic respectively, not another discipline at a higher level. If we insist that these disciplines too have presuppositions of a different order, which can be studied only at a meta-level, there would be nothing to stop a regress because in the systematic study of the body of these presuppositions, some propositions would be deduced from others. The only way to stop this regress is to accept that all the propositions studied in these disciplines is just the self-unfoldment of some other propositions studied within it. The study of their presuppositions is not another-level study not do they amount to simple supplementations of the old studies by the new.

Metaphysics is different; it studies facts but of the trans-natural kind. Ordinary facts are particular, concrete and temporal, trans-natural facts are universal, abstract and non-temporal. KC’s position is that – if a presupposition involves an ontological commitment and it is experientially fused with the experience of concrete, individual and temporal things, you simply cannot abstract it from the fusion and study it in isolation unless your approach to the study transcends the level of reality at which the fused entity is studied. No such compulsion or restriction is there if the entity studied carries no ontological commitment. In that case, pure analysis alone can reveal intertwined or fused entities, since all intertwined entities are at the same level; there is no category mistake involved. Put differently, disciplines such as logic, mathematics, semantics etc. do not require any meta study since they do not study facts. The contents of these disciplines are the manifestation of those very heuristic principles we think are the presupposition of these disciplines. So, the method of deduction, for example, is not simply used in logic to study specific inferences. The method itself is the subject of its study.

## **V. EPISTEMOLOGY: THE META OF METAPHYSICS**

Since metaphysics studies trans-natural facts, it has various presuppositions which can only be studied by a third-level discipline, epistemology. By epistemology, KB here means the Kantian theory of knowledge which studies the conditions of knowability or factuality; These conditions are themselves no facts. Some examples of the presuppositions of metaphysics which KB gives, are : (a) the possibility of trans-natural facts unamenable to observational verification; (b) their knowability through some other method or methods; (c) the possibility of their being related in such and such manner to observable facts of experience, etc. (1972, p-23)

Two features of these presuppositions are noteworthy: (1) they are not facts; they are mere possibilities of experience, (2) they are relevant only to metaphysics and nothing else. If they appear relevant to religion, morality etc., it is only as metaphysics translated into practice.

Due to the above reasons, KB argues, meta-metaphysical propositions are non-assertive, non-informative and analytic postulates.

No study of postulates, in any field, presupposes any other postulate for a higher-level study, unless the postulates are taken as historical events (i.e. how our thought actually moved when we had the study). When thought reveals itself as moving self-consciously in the context of definite particular objects, or groups of such objects (i.e. events), it is a meta study of science (i.e. metaphysics). On the contrary, the subject matter of meta-metaphysics (i.e. epistemology) are not historical events unless it is considered a part of psychology. Here, in a study of presuppositions of metaphysics in epistemology, thought reveals itself apart from any reference to such objects, or their groups. Therefore, epistemology, as meta-metaphysics does not have any presuppositions which can only be studied at a still higher level. That is, like logic and mathematics, epistemology does not have a meta-study; There is no meta-epistemology.

It may appear that the presuppositions of metaphysics, because they are postulates, are without any ontological significance, just like the subject matter of logic, mathematics, syntax etc. which too study postulates. This position is taken in several prominent philosophies. For example, Kantian theory of knowledge studies the conditions of knowability; These conditions are themselves no facts<sup>2</sup>. Similarly, in phenomenology, Husserl talks of essence. But this essence is not simply a static feature or property of an object, but the foundational structure of the phenomenon as it appears in consciousness. Thus, here, no claim is made about the ontological status of essence<sup>3</sup>.

But KB has a different take on this. He observes that metaphysical presuppositions appear as constitutionally immutable to us. That is, unlike other postulates, postulates of metaphysics do not exhaust their status or significance in their use as presuppositions of the study under consideration (i.e. metaphysics). In other words, they do not just have instrumental significance. We, in epistemological study, cannot avoid feeling unconditionally ontologically committed to them. KB takes this feature to be indicative of their possession of being. Obviously, the sort of being they have is unlike we have encountered so far since epistemology is a third-level study. A question then naturally arises: what sort of being do the presuppositions of metaphysics have?

## **VI. THE NATURE OF BEING IN EPISTEMOLOGY**

According to KB, a study of these postulates can be understood as “pure thought moving self-consciously.” (1972, p-41) What does KB mean by self-conscious movement of pure thought? Although KB doesn't explicitly state any definition, one can get an idea of its meaning from his explanation of the relation between science, metaphysics and epistemology in the first chapter of his *Presuppositions*: Any self-conscious movement of thought, he says, has two aspects: its intrinsic transcendence, often called its autonomy; and its intention, which is figuratively, thought moving out of itself.

As we move from science to epistemology, the content of study becomes more and more abstract. Science deals with particular events or facts, metaphysics deals with facts which transcend empirical world, epistemology deals with the conditions of apprehending facts. This shift in content of the study can also be understood as the withdrawal of thought from outside to itself. When thought moves self-consciously in an epistemic study, it is not directed at something else. It studies its own movement, which implies that it is at the same time, above/transcendent to the study (autonomy) and also immanent to it as something to which the thought is directed (intention). Is this autonomous state a type of being? KB answers in the affirmative. Although this being is different from all others we have discussed so far, the commonality with other types of beings is that we inevitably feel ontologically committed to it. What makes us ontologically committed to the autonomous state of thought, KB argues, is its pure subjective nature. He explains: I may be aware of myself in two different ways:

- (a) I may speak of myself, i.e. consider myself as a natural thing. This awareness is quite like I come to be aware of so many things in the world. This is the intentional aspect of thought.
- (b) In speaking of other things, and therefore also speaking of myself, I am aware of myself as self-conscious speaking. In this just speaking, I am inevitably aware of myself, though not as spoken-of. This is the autonomous aspect of thought. As one ascends in thought from science to epistemology, it is this aspect that gradually dominates, culminating in epistemology where the study is a manifestation of pure subjectivity whose being we cannot deny.

---

<sup>2</sup>See for example Rohlf (2024), for an overview of Kant.

<sup>3</sup>See for example Zahavi (2025), for an overview of Husserl

In this way, KB attempts to lend credibility to traditional metaphysics by grounding its presuppositions in pure subjectivity.

### **VII. CONCLUDING REMARKS**

KB defends traditional metaphysics in his later works. In particular, he attempts to show that the ontological commitment metaphysicians have in metaphysical propositions is justified. They are about what is out there. Such propositions are neither constructions of the will, nor are they a product of the logical misbehavior of language.

In order to defend the above, he analyzes the nature and type of presuppositions and studies the relation between science, metaphysics and epistemology, in terms of their respective presuppositions. The analysis leads to the following conclusions:

- 1) Different sciences, all of which deal with the empirical world, have various presuppositions. Supplementary presuppositions (such as empirical laws) can be studied within the discipline. Their studies add up to one unitary reality we call nature.
- 2) Logic and mathematics are meta studies of the empirical sciences because they study axioms and postulates which cannot be studied or questioned within the respective discipline.
- 3) Metaphysics too is a meta study but unlike logic and mathematics, it studies facts though facts of another order. Ordinary facts are particular, concrete and temporal, trans-natural facts are universal, abstract and non-temporal. Thus, they cannot be confirmed or disconfirmed by empirical observation. They can be known only through reflection.
- 4) Metaphysics has presuppositions as well. But they are not facts; rather they are mere possibilities of experience. As postulates, they cannot be studied within metaphysics. Thus, we have meta metaphysics, which is also known as epistemology.
- 5) Like logic and mathematics and unlike metaphysics, epistemology is an ontologically non-committal study because it studies postulates (of metaphysics), not facts. Therefore, logic, mathematics and epistemology have no further meta study. That is, there is no meta-meta-metaphysics.
- 6) Like metaphysics, epistemology is intuitive (reflective). However, unlike it, epistemology is not committed to any specific type of reality.
- 7) A study in epistemology is just a self-revelation of what studies (i.e. thought). In other words, it is pure thought as speaking itself out. It is I as speaking. It is pure subjectivity, pure autonomy. Thus, we are inevitably ontologically committed to the presuppositions of metaphysics. To deny being to them is to deny being to self.

Thus, the reality of metaphysical propositions can be traced back to pure subjectivity. The objections of the empiricists (both old and modern) do not lead to a rejection of traditional metaphysics because the latter belong to a higher order of reality which transcends the reality at which the objections hold, if they hold at all.

### **VIII. REFERENCES**

- [1]. Bhattacharyya, K. (1965). *Philosophy, Logic and Language*. Allied Publishers Pvt. Ltd. Kolkata.
- [2]. ..... (1972). *Presuppositions of Science and Philosophy and other essays*. Visva Bharati, Santiniketan.
- [3]. .....(1985). *My Reaction*. In Daya Krishna (Ed.), *The Philosophy of Kalidas Bhattacharyya* (pp. 149-239). I.P.Q. Publications India.
- [4]. Gupta, A. (1985). *Presuppositions of Science and Philosophy. A critical note on the notion of Metastudy in Kalidas Bhattacharyya's philosophy*. In Daya Krishna (Ed.), *The Philosophy of Kalidas Bhattacharyya* (pp. 70-80). I.P.Q. Publications India.
- [5]. Rohlf, M. (2024). Immanuel Kant, in Edward N. Zalta & Uri Nodelman (eds.), *The Stanford Encyclopedia of Philosophy*, URL = <<https://plato.stanford.edu/archives/fall2024/entries/kant/>>.
- [6]. Zahavi, D.(2025). Edmund Husserl. In Edward N. Zalta & Uri Nodelman (eds.) *The Stanford Encyclopedia of Philosophy*, URL = <<https://plato.stanford.edu/archives/win2025/entries/husserl/>>.