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A COMPARATIVE ANALYSIS OF

WITTGENSTEIN'S 'TRACTATUS' AND ŚAMKARA'S ADVAITA VEDĀNTA WITH AN INTRODUCTION TO THE LOGIC OF COMPARATIVE METHODOLOGY

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAII IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN PHILOSOPHY

MAY 1977

by

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Abstract

It is argued that the philosophy of the *Tractatus* is essentially non-dualistic in character. The fundamental notion of Śamkara's Non-Dualism, namely *sublation* or cancellation, is expressed in the fact that the fundamental symbol of the *Tractatus*, namely the logical constant, is a non-homomorphism: 'Neti, neti' corresponds in form and function to the Sheffer stroke.

A detailed logical analysis, based on the anti-psychologism of the *Grundgedanke* or fundamental illumining insight (4.0312) of the *Tractatus*, shows that Wittgenstein's theory of logical syntax intimately underlies his ethics and mysticism. Among the critical issues resolvable under our analysis of Wittgenstein's theory of syntactic description are: the contradictory identification of the logical constant with the general propositional form, the paradox of the negative dialectic, and the obscurity concerning the nature of the point of contact of logic with its application.

This work will be of interest to one who thinks that East and West have anything philosophically valuable to say to each other, to one who wants a mathematical handle on certain metaphysical concepts, or to one who believes that understanding either the *Tractatus* or Advaita Vedānta or the logic of the process of intersystemic analysis is important.

CONTENTS

Acknowle	dgeme	ents	3	iii
Abstract		•••		iv
Preface,			Introduction to the Logic of Comparative ogy	vii
CHAPTER	I.	LO	GIC AND BRAHMAN	
		1.	Logic as the Methodological Basis of Meta- physics in the <i>Tractatus</i>	1
		2.	Fundamentals of the Tractatus and of Advaita	2
		3.	Nirguna Brahman as the Corresponding Meta- physical Counterpart of Logic and the Corres- ponding Coordinate of What is Higher	5
		4.	The Distinction Between Logic and the Logic of Depiction	10
		5.	Saguna Brahman as the Corresponding Counterpart of the Logic of Depiction and the Corresponding Coordinate of God	14
		6.	Objections and Replies	20
CHAPTER	II.	TH	E NEGATIVE DIALECTIC	
		1.	The Theory of Signification of the <i>Tractatus</i>	36
		2.	The Limits of Empiricism According to Advaita and the <i>Tractatus</i>	48
		3.	The Nonsensical	53
		4.	The Advaitic Lineaments of the Theory of Signification	58
		5.	Philosophy as Negative Dialectic in Advaita and the <i>Tractatus</i>	60
		6.	The Alleged Paradox of the Negative Dialectic	70

CHAPTER III.	SUBLATION			
	1. Sublation in Advaita and the Tractatus	89		
	2. Sublation and the Central Problem of the Tractatus	103		
	3. Jñāna as the Corresponding Epistemic Counterpart of Logic as Syntactic Description	111		
	4. Sublation and Syntactic Description	126		
CHAPTER IV.	THE LIMIT			
	1. The Limit: Logical Analysis	165		
	2. The Limit: Metaphysical Analysis	172		
	3. The Limit: Logico-Metaphysical Analysis	182		
	4. The Limit: Its Mystical Incommunicability	190		
Footnotes				
Bibliography				

PREFACE

[1] Although most Wittgenstein scholars now reject early interpretations of the Tractatus, in favor of views not entailing that the ethical and mystical conclusions of the work constitute a series of mere obiter dicta, only rather limited attempts to specify the precise nature of Wittgenstein's conception of the mystical have been made, and no one has yet demonstrated the centrality of the mystical solely on the basis of the text of the Tractatus by showing in detail how its logical position underlies and culminates in its ethical and mystical conclusions. Instead, the view that the ethico-mystical conclusions comprise the central, guiding and culminating thoughts of the Tractatus, a view we will refer to as the thesis of mysticism, has been argued largely on the basis of secondary sources, such as the Engelmann material, containing reflections on the Tractatus by Engelmann and various letters by Wittgenstein, on the basis of Wittgenstein's documented interest in Schopenhauer, Tolstoy and Kierkegaard, on the basis of Wittgenstein's "Lecture on Ethics" or on the basis of the admittedly circumstantial clues of sociologico-historical reconstruction. Even Wittgenstein's Notebooks, though helpful in understanding the Tractatus, must be counted as secondary material towards an interpretation, for they are only a rough draft of the final product and as such should only be cited in support of an interpretation that can be independently and thoroughly developed in the Tractatus itself. The attempt to fathom the Tractatus through secondary sources and methods resembles the attempt to appreciate Bach's

music through a study of his life and times without carefully listening to his compositions. Studies such as these can at best only supplement direct study of the work in question, be it musical or philosophical. Thus, in spite of the success of all such programs in establishing grounds for the view that mysticism dominates the Tractatus, there yet remains the difficulty of understanding how the thesis of mysticism guides, complements and emerges out of the strictly technical and logical portions of the work. The problem yet remains of unravelling the Tractatus in its own terms, in propria persona, as it were, independently of the strong, but entirely general clues provided by secondary sources and indirect methods of analysis.

The first point that strikes one about the unusual claim that the Tractatus is not understandable in its own terms, that is, that it can only be understood through the circumstantial evidence of cultural reconstruction, is that if it is correct, the philosophical value of the Tractatus drops sharply; the second is that the argument which Janik and Toulmin marshal in its support is mistaken. Their argument that circumstantial evidence for an interpretation of the Tractatus is the best available states that the Tractatus, according to its own tenets, must be silent about its aims, in terms of which alone it is understandable. The prematurity of this view's pessimistic surrender to obscurity is evident in the fact that Wittgenstein thought he could indicate his aims; in the preface of the Tractatus he states that his aim is to set a limit to the expression of thoughts; in 4114⁵ and 4115 he sets forth the aim and method of philosophy; elsewhere (55563) he indicates that his aim is to formulate the truth in its entirety. In the loose sense of saying, the sense of intended saying (vide infra, II, 3), Wittgenstein

is allowed by his theory to make a variety of statements that from the point of view of what is higher are nonsensical (unsinnia). that from the point of view of one who by understanding the Tractatus sees that its propositions are nonsensical (654) the aims of the Tractatus cannot be said does not prevent the reader from approaching the Tractatus except in terms of circumstantial clues of cultural reconstruction, for the notion that aims cannot be expressed beyond a certain point itself expresses the basic transcendental aim or preoccupation of the Tractatus. The fact that no questions (concerning aims) are possible is itself the answer (652). Wittgenstein's theory allows him not only to attempt to say what cannot strictly be said, in the heuristically necessary but logically dispensable process (cf. 6126 & 61261, infra, III, 3, p. 114) of climbing the ladder (654) of his elucidations, but also to show what cannot be said. That Wittgenstein did indeed attempt to say what cannot be said is evident in his statement that the propositions of the Tractatus, properly understood, are seen to be nonsensical (654). while that he intended to show what cannot be said is evident in his philosophical strategy of signifying what cannot be said by presenting clearly what can be said (4115). Understanding the Tractatus is admittedly difficult, but it is not impossible. There is thus no need to view it either through an opaque mesh of philosophical presuppositions, such as those of logical positivism, or as an hypothetical response to a particular cultural milieux, whether that of Vienna or Cambridge.

Our aims then, with respect to the *Tractatus* are threefold: first, to present a new and, it is hoped, a more adequate analysis of the technical portions of the *Tractatus*; second, to establish the thesis of mys-

ticism on the basis primarily of the text itself; and third, to explain the precise nature of *das Mystische* by showing in systematic detail the manner in which Wittgenstein's system of logical syntax underlies the metaphysics of what is higher.

With respect to Samkara's Advaita Vedanta the dissertation makes a contribution to the mathematization of non-dualistic metaphysics, as given in our algebraic analysis of the *Tractatus*. Advaita's expressive vocabulary and philosophical frame of reference are thereby expanded not only through the set of correspondences between the philosophical terminologies of Advaita and the *Tractatus* but also through the set of correspondences between Advaitic and algebraic vocabularies.

Hence, even if the accuracy of our 'interpretation' of the Tractatus should be questioned, the dissertation is nonetheless valuable for having opened a new philosophical route between the traditions of the West to which the Tractatus speaks and the traditions of the East to which Advaita speaks, a route on which philosophical goods may be exchanged in either direction by the comparative philosopher with a discerning eye. To the studies that have already been done in Eastern logic this dissertation may be viewed as adding an attempt to show that a modern Western philosophy of logic coincides with a powerful Eastern metaphysic. Furthermore, if our 'interpretation' of the Tractatus is not in fact when Wittgenstein meant, we nevertheless claim it is what he ought to have meant. Thus, whether or not we have modelled Advaita by means of the correct understanding of the Tractatus, we have nonetheless contributed to the channels of East-West dialogue by modelling Advaita and by modelling it on the basis of what we claim are the logical implications of the Tractatus carried out to their natural conclusions.

Moreover, our 'interpretation' can hardly be more fundamentally mistaken than Wittgenstein said Frege's and Russell's were, since we have attempted to avoid the errors of psychologism and representationalism which Wittgenstein viewed as their basic mistakes, by basing our entire analysis of the *Tractatus* on its anti-psychologism or non-representationalism as enunciated in the *Grundedanke* or fundamental illumining insight of proposition 40312.

The word interpretation in the above paragraphs has been enclosed in scare quotes to indicate that the correct 'interpretation' of the *Tractatus* cannot according to the *Tractatus* be an interpretation at all. It is precisely what an uninterpreted formal system shows that Wittgenstein attempted to intimate in his early work. The psychological and arbitrary connotations of the notion of an interpretation cloud the message of Non-Dualism, be it Śamkara's or Wittgenstein's.

On the mathematical side we believe we have succeeded in expressing the uniqueness both of Advaita and of the *Tractatus* in algebraic terms; this seems to be a first. The philosophical significance of the contrast between homomorphism and non-homomorphism might be questioned, but an attempt is definitely made to join the hand of mathematics with the hand of metaphysics in a new way, on the basis of a set of algebraic manipulations or concepts, with regard to which we claim strict mathematical correctness.

[2] With respect to the comparative analysis undertaken in this work, every attempt has been made not to depart from the original lines of Wittgenstein's thought. However, the line between absolutely uncolored interpretation and constructive development relative to a work as diffi-

cult and controversial as the *Tractatus* is perhaps too fine to argue and the exegetical question, though interesting, is less important than the live intellectual possibilities that emerge from a study of Wittgenstein's early thought as an episode in the evolving, dynamic process of philosophy. The reader therefore, is at liberty to decide for himself whether the mysticism of the *Tractatus* only intimates, suggests, entails or actually enunciates the thesis of Non-Dualism propounded by Advaita Vedānta.

It is less important to decide whether Wittgenstein's early philosophy is implicitly or explicitly non-dualistic than to observe that Non-Dualism is a fruitful avenue for interpreting or developing the intriguing ideas which exercised his philosophical genius. Of primary significance is that a variety of critical problems in the Tractatus seem to be insoluble except under a non-dualistic understanding of its basic tenets. For example, the Advaitic thesis enables us to dispel the alleged paradox of the negative dialectic (vide infra, II, 6), 6 the problem (hitherto unnoticed) of the contradictory identification of the general propositional form with the logical constant (vide infra, III, 2), the obscurity concerning the nature of the point of contact of logic with its application (vide infra, I, 6), the question of the precise meaning of the notion of philosophy as metaphysics based on logic capable of setting the limits of language and the world through a purely descriptive process (vide infra, III, IV) and the general problem of the connection between the 'logical' and 'metaphysical' portions of the Tractatus (vide infra, IV). Our approach is thus problem-oriented with due respect for exegetical accuracy, rather than historical. At the same time we would reject any imputation that our purpose is to propound

Advaita Vedānta either as a philosophical panacea or as a quasi-Hegelian vantage-point from which to survey and assess the shortcomings of all other schools of thought.

[3] The comparative method as employed in this work, far from obliterating important differences between the systems under comparison, namely between Advaita and the *Tractatus*, presupposes them. For only if significant differences exist between the compared philosophical systems can a progressive or original intellectual progeny arise. Such differences cannot however, be entirely fundamental, for any constructive hybridization of the systems would then be precluded; they must rather be differences of form of expression, methodology and completeness. Compared systems must be complementary in fundamental respects, not contradictory, in order to allow of synthesis in a system or form of expression possessing the prized characteristics of each while progressing beyond the limitations of each.

The fact that Wittgenstein's and Śamkara's philosophies differ in certain respects is thus essential to our purpose. The point can be expressed in terms of Hertz's theory of dynamical models, models, employed by Wittgenstein as the basis of his picture theory (vide 212, 401, 404, 6361). If it is granted that two philosophical systems can model one another roughly in Hertz's sense of the term 'model', then it may also be granted that they differ pronouncedly in certain respects.

A system is not completely determined by the fact that it is a model of a given system. An infinite number of systems, quite different physically, can be models of one and the same system. Any given system is a model of an infinite number of totally different systems.

For the coordinates of the masses of the two

systems which are models of one another can be quite different in number and can be totally different functions of the corresponding coordinates.⁸

'Totally different' in Hertz's statement means difference in physical properties and obviously not in dynamical arrangement or formal properties. Similarly, great diversity may obtain between the philosophical idioms, points of reference and methodologies of systems with equivalent or closely corresponding content. Precisely such diversified materials provide comparative philosophy with the broadest range of creative possibilities.

The point in question may be illustrated with reference to Samkara's and Wittgenstein's philosophical methodologies. Wittgenstein approached metaphysics through the medium of language and logic, attempting to analyze reality by presenting the logical essence of propositions, while Śamkara took a traditional ontological approach, attempting to reach the truth by analyzing the nature of things. This difference is responsible for some of the chief differences between the two systems and indeed makes them worthy of comparison. Ultimately however, what emerges as a result of the logical analysis of language in one system bears a close correspondence to the result of the ontological analysis of things in the other. Thus, what is ultimately real for Samkara, namely Brahman, finds its corresponding counterpart in the final truth of logic in the philosophy of Wittgenstein. Difference in method need not necessarily dictate difference in truth claims, as Spinoza expressed in saying that he did not claim to have the best philosophy but only to understand the true one. Samkara's manner and method of expression are largely determined by his acceptance of the traditional Indian appeal to scriptural authority--the Vedas, Upanisads and their commentaries--while Wittgenstein's idiom and technique are conditioned by his interest in logicolinguistic issues current around the turn of the Twentieth Century.

Certainly however, it would be unacceptable to argue a priori, on the basis of this difference of philosophical tradition alone, that the differences between their philosophies outweigh the similarities. The argument that methodology overshadows and determines meaning is clearly not a priori indisputable. In our view it is unsurprising that Wittgenstein's and Samkara's responses to their respective philosophical milieux were far more substantially in accord than otherwise, for there is ample evidence to show that they both started from the same point, namely the recognition of the limits of psycho-physical life in light of what is higher (vide infra, pp. 173, 180).

Against initial outrage at the 'mere idea' of juxtaposing Advaita and the *Tractatus* (even in jest) it may further be argued that philosophical license to do so is granted by the fact that Wittgenstein read and deeply admired Schopenhauer's philosophy, of which no less eminent a scholar than max Müller said:

The nearest approach to what Samkara means by subject and object is found, I believe, in Schopenhauer's *Wille* and *Vorstellung*, his *Will* corresponding to Brahman, or the subject of the world, the only true reality, his *Vorstellung* to the phenomenal world, as seen by us objectively, and to be recognized as unreal, changeable and perishable. 10

In light of a weighty concensus of opinion that the influence of Schopenhauer on Wittgenstein was considerable, 11 it may reasonably be gathered that Wittgenstein was familiar with the concept of $m\bar{a}y\bar{a}$, mentioned no less than eighteen times in Schopenhauer's World as Will and Representation, and with the notion of the illusoriness of the world so characteristic of the Advaitic stance.

Geach wrote that the influence of Schopenhauer on Wittgenstein

...can be asserted with absolute certainty; it is clear in the Notebooks, and Wittgenstein himself stated in conversation that when he was young he believed Schopenhauer to have been fundamentally right ...the Tractatus is full of Schopenhauerian theses and ideas: the account of what is right and wrong about solipsism (5.62-5.641); the distinction between the psychological phenomenon of will, which is a matter for science, and the ethical will, which rewards and punishes itself in its very action (6.422); the worthlessness of the world (6.41); the timelessness or eternity of the present moment of life and the consequent folly of fearing death (6.4311); and the power of the will to change the world as a whole without changing any facts (6.43). The silence with which Wittgenstein ends recalls how Schopenhauer refused to give any appearance of positive description to that which is chosen when the Will turns round on its tracks; for us who are full of will, it is nothing; but, for those who chose it, "this so real world of ours, with all its suns and galaxies--is nothing." 12

The words in quotation marks of the above passage (italics mine) which comprise the final line of the first volume of Schopenhauer's *The World* as *Will and Representation* express a central Advaitic theme. Schopenhauer quotes Samkara several times, refers repeatedly to the *mahāvākya* or 'Great Utterance' "*Tat tvam asi*" (That thou art), which summarizes Advaita, and eulogizes the Upaniṣads in the following words:

...if he has shared in the benefits of the *Vedas*, access to which, opened to us by the *Upanishads*, is in my view the greatest advantage which this still young century has to show over previous centuries, since I surmise that the influence of Sanskrit literature will penetrate no less deeply than did the revival of Greek literature in the fifteenth century; if I say, the reader has also already received and assimilated the divine inspiration of ancient Indian wisdom, then he is best of all prepared to hear what I have to say to him....I might assert that each of the individual and disconnected utterances that make up the *Upanishads* could be derived as a consequence from the thought I am about to impart. 14

Our point in alluding to Wittgenstein's well-documented interest in

Schopenhauer's thought is not in any way to suggest that an understanding of the *Tractatus* can be derived through analogy with *The World as Will and Representation*, but simply to parry initial cries of indignation and bewilderment at the 'mere idea' that the thought of Wittgenstein, the high-priest by popular (though significantly not by his own personal) acclaim of two recent movements in philosophy, can be considered in any constructive relation to the thought of Śamkara. We thus beg the reader to suspend judgment on the philosophical sanity of the admittedly eccentric-sounding non-dualistic comparative study here presented until all the evidence has been marshalled.

[4] Some distinction, we believe, is to be drawn between the philosopher and the priest, so that our comparative study does not entail that Wittgenstein must have been a fully awakened sage. To quote R.B. Perry, "The Philosopher is a philosopher in the sense in which a chemist is a chemist, and not in the sense in which a Baptist is a Baptist." It is, of course, reasonable to suppose that anyone who seriously propounds a philosophy of mysticism and Non-Dualism has had some direct supra-sensible 'experience', and in fact Wittgenstein reported various 'experiences' which (in his "Lecture on Ethics") he described as absolute. We can thus agree that Wittgenstein had not attained 'Buddhahood' without admitting thereby that he lacked sufficiently profound, albeit temporary, mystical experience on which to base a non-dualistic philosophy.

Nor is it surprising that Wittgenstein's later philosophy differed so considerably from his earlier work, for fifteen years (between the *Tractatus* and the *Blue and Brown Books*) is ample time for lifestyle and intellectual habits to change radically. The *Philosophical Investiga*-

tions and their preliminary studies seem for the most part to ignore those issues of the *Tractatus* in which interest has waned, however, the *Investigations* contain an illuminating passage which supports the point of view here presented on the status of logic in the *Tractatus*:

97(1) ...logic presents an order, in fact the a priori order of the world...But this order, it seems, must be utterly simple. It is prior to all experience, must run through all experience; no empirical experience can be allowed to affect it--It must rather be of the purest crystal. But this crystal does not appear as an abstraction; but as something concrete, indeed, as the most concrete, as it were the hardest thing there is (Tractatus Logico-Philosophicus No. 5.5563. (some italicization mine)

According to this retrospective remark of the *Investigations*, logic in the *Tractatus* was not merely a regulative concept or noumenon in Kant's negative sense, but rather a metaphysical reality with *ontological* status, "the *hardest* thing there is."

In view of corroboration by the above passage and the reasonableness of the non-continuity of the early and later work after a fifteen
year gap, it is difficult to see how any objection can be brought against
the thesis of mysticism on the basis of the *Investigations*' silence or
disinterest in the matter. By the same token there ought to be no objection to the claim that the mysticism of the *Tractatus* is of a certain
type, namely Non-Dualism, on the basis alone of the *Investigations*' apparent disinterest in the mystical.

Also worth mentioning at this point is that we do not claim the technical parts (such as the later rejected picture theory) of the early philosophy of Wittgenstein to be a necessary condition of the mystical outlook, but only one among many sufficient conditions of the mystical perspective; so that Wittgenstein's later rejection of certain

parts of the earlier theory does not entail the rejection of the mysticism of the earlier work. Nor did he ever explicitly reject the mystical outlook of the *Tractatus*.

[5] The difficulty of explaining the methodology of comparative analysis is somewhat like the difficulty of explaining how to tie a shoe or walk in a straight line. Though people successfully perform these actions as a matter of routine, they would, if asked, be at a loss to provide even minimally adequate descriptions of the mechanics of their actions. It is interesting that the ability to provide such descriptions is neither a necessary nor a sufficient condition of the ability to perform these quasi-automatic, habitual actions. Comparing philosophical systems is not an habitual action like tying one's shoe, however the general principle that one need not be capable of verbalizing how to perform an action in order to be capable of performing it efficiently also applies in the field of intellectual activity. It is not necessary to judge the adequacy of a comparative analysis of philosophical systems in terms of the adequacy of a logical analysis of comparative methodology, though the development of the latter will certainly contribute to the development of the former. The relationship between the logic of comparative methodology and comparative analysis is somewhat like the relationship between the early stages of development of a branch of knowledge and the formalizing stages. For example, the fundamental concepts of calculus, namely 'real number', 'function', 'limit', 'integral' and 'derivative', were used because they worked long before they were formally understood, though there is no doubt that the formalization of these concepts promoted the development of calculus. It would, however,

be almost as misguided to require comparative analysis of philosophical systems to develop in a formalized way from the start as it would to expect a child to run before he can or needs to walk. We said that it is almost as misguided because it may be argued that philosophy is unique in being a field in which the development of the metalevel of the enquiry is an integral part of the development of the base level. Nevertheless, the development of the logic of a branch of enquiry is more a matter of formal organization than is the development of a metalevel of philosophical enquiry in general, and since the development of the logic of comparative methodology is the point at issue here, it follows as claimed above that at this stage in the development of comparative philosophy the adequacy of a comparative analysis of philosophical systems need not be based on the adequacy of a logical analysis of comparative methodology. With this in view the following considerations are presented as prolegomena to the logic of comparative methodology.

The term 'counterpart', as in 'metaphysical counterpart', 'syntactic counterpart', 'epistemic counterpart', and so forth, signifies a relation of cross-categorical synonymy between terms, and is neutral with respect to *inter* or *intra*-systemic reference. For example, higher knowledge (parāvidyā) in Advaita is the epistemic counterpart of Brahman, the higher ontological reality. In contrast, the term 'corresponding coordinate' is reserved solely for *inter*-systemic reference. The term 'corresponding coordinate', used by Hertz in the theory of dynamical models¹⁶ which Wittgenstein employed as the cornerstone of his picture theory, ¹⁷ as employed in this dissertation implies the absence of the counterpart or cross-categorical relationship between terms (or their referents). Thus, an ontological term (or its referent) in system

A may be argued, correctly or incorrectly, to be the corresponding coordinate of an ontological term (or its referent) in system B. However, an ontological term (or its referent) in system A cannot coherently be argued to be the corresponding coordinate of an epistemic or syntactic term (or their referents) in system B. For example, the ontological term 'Being' (or its referent) in system A can, correctly or incorrectly, be argued to be the corresponding coordinate of the ontological term 'Reality' (or its referent) in system B. However the epistemic term 'knowledge' (or its referent) in system A cannot coherently be argued to be the corresponding coordinate of the ontological term 'Being' (or its referent) in system B, though the former might arguably be the epistemic counterpart since the relationship between the two terms (or their referents) is cross-categor-Philosophical categories then, will not be assimilated to one anther by referring to a term (or its referent) of category α as the corresponding coordinate of a term (or its referent) of category \$\beta\$. Instead, inter or intra-systemically related cross-categorical terms (or their referents) will be referred to as counterparts. Further, inter-systemically related cross-categorical terms (or their referents) may be referred to as corresponding counterparts when it is desired to advert to their intersystemic relationship.

As Hertz states (supra), the fact that terms t_m and t_n are corresponding coordinates does not entail that their referents are the same in all respects. For example, the substance of the world ($vyavah\bar{a}ra$) in Advaita is not explained in terms of configurations of immutable objects, necessary constituents of all possible words, as in the Tractatus, but rather in terms of eternal simple elements (tattvas), namely earth, fire, air, etc., and their compounds. Nevertheless, for the purpose of demonstrating the Advaitic thesis in the Tractatus, $vyavah\bar{a}ra$ is the

corresponding coordinate of the world (of the Tractatus) if and only if the world, like vyavahāra, is sublatable or cancellable as a primordial or transcendental illusion $(mul\bar{a}vidy\bar{a})$ projected by ignorance $(avidy\bar{a})$. The claim that two terms are corresponding coordinates must be implicitly understood with respect to the Advaitic thesis. This means that the terms are corresponding coordinates only if their differences are compatible within the framework of Non-Dualism. So that, for example, whether the world is made up of atoms, objects, tattvas, quanta or wavicles is not important to Advaita if a world made up of any one of these is the corresponding coordinate of a world made up of any other. Neither is the precise nature of the model of mind in the Tractatus of fundamental importance to the adequacy of the Advaitic thesis, provided that mind in its practical everyday and scientific function is part of māyā. Whether the function of mind is explained in terms of the fabrication of pictures or in terms of games and their rules is relatively unimportant to the Advaitic thesis, provided that mind is cancelled or sublated by what is higher. What is important for the Advaitic thesis is the ontological status of the world as appearance and of what is higher as the metaphysical absolute.

Formalizing the distinctions of comparative methodology somewhat, we have that if t_m^A (term m in system A) is a metaphysical (epistemic, syntactic, phenomenological, ethical, etc.) term (or referent) then t_m^A is arguably the corresponding counterpart of t_n^B (term n in system B) only if t_n^B is not a metaphysical (epistemic, syntactic, phenomenological, ethical, etc., respectively) term (or referent), and that t_m^A is arguably the corresponding coordinate of t_n^B only if t_n^B is a metaphysical (epistemic, syntactic, phenomenological, ethical, etc., respectively) term

(or referent), where in both cases $A \neq B$.

The formula, ' t_m^A and t_n^B are corresponding ontological coordinates' is well-formed, but ' t_m^A and t_n^B are corresponding ontological counterparts' is not a well-formed formula according to our definitions, for when the counterpart relation is in view, only one of the terms can be a member of the same philosophical category; in this case only one of the terms can be an ontological term. The correct locution places the category term α between the counterpart terms: ' t_m^A is the corresponding α -counterpart of t_n^B ' is a well-formed locution according to our definitions.

Neither the counterpart nor the corresponding coordinate relation are equivalence relations. The counterpart relation is a non-reflexive, that is, no term is its own counterpart, because the counterpart relation holds only between terms of different categories. The corresponding coordinate relation is non-reflexive since it holds only between terms in different systems, and is also non-transitive except under the special condition that each of the three terms of the transitivity formula must belong to a different system. The counterpart relationship, C, is defined as follows: two terms are counterparts if, and only if, they refer to the same thing under different philosophical categories, that is, if, and only if, they are cross-categorically synonymous. C is defined on the set of all pairs of terms, $[(t_m, t_n)]$, of all philosophical systems, where t_m and t_n are of different philosophical categories. Cmaps the set of cross-products, $[A \times B]$, of all philosophical systems into disjoint classes of philosophical terms. That is, the entire set of philosophical terms of all philosophical systems is divided into disjoint classes, each containing counterpart terms only. These classes

are not equivalence classes because no class of counterparts can contain only one term. \mathcal{C} is not an equivalence relation since for all t_n it is not the case that $(t_n)\mathcal{C}(t_n)$; however, \mathcal{C} is symmetrical and transitive: $(t_m)\mathcal{C}(t_n) \equiv (t_n)\mathcal{C}(t_m)$, and $\{(t_m)\mathcal{C}(t_n) \wedge (t_n)\mathcal{C}(t_z)\}$ entails $(t_m)\mathcal{C}(t_z)$, where $t_m \neq t_z$.

Cross-categorical differences between philosophical systems are describable in terms of the non-existence of counterparts for terms of one system in the other. The relation of cross-categorical asymmetry between different systems is defineable in terms of the non-existence of counterparts for fundamental terms of one system in fundamental terms of the other. Fundamental cross-categorical differences between different philosophical systems are describable in terms of the non-existence of counterparts for fundamental terms of one system in the other. Fundamental cross-categorical similarities between different systems are specifiable in terms of the existence of counterparts for fundamental terms of one system in fundamental terms of the other. Symmetrical fundamentally cross-categorically equivalent systems are such that fundamental similarities between the systems cover all fundamental terms in each system; that is, all fundamental terms in one system have counterparts in fundamental terms of the other.

We shall argue in this dissertation that the fundamental metaphysical terms of Advaita have counterparts in the fundamental syntactic terms of the *Tractatus* so that they are in a certain sense equivalent. A stronger equivalence between the two systems may be defined in terms of the *coordinate* relation. We define philosophical terms as coordinates if, and only if, they are synonymous under the same philosophical category. Thus, 'Being' and 'Reality', both ontological terms, are co-

ordinates. 'Coordinate' like 'counterpart' is neutral with respect to inter-systemic and intra-systemic reference. As stated above, 'corresponding coordinate' involves inter-systemic reference. The coordinate relation, CN, is an equivalence relation. Categorical difference between two systems is specifiable in terms of the non-existence of coordinates for terms of one system in the other. The relation of categorical asymmetry between two systems is defineable in terms of the non-existence of coordinates for fundamental terms of one system in fundamental terms of the other. Fundamental categorical differences between different systems are describable in terms of the non-existence of coordinates for fundamental terms of one system in the other. A categorical asymmetry is perhaps rather close to a fundamental difference. Fundamental categorical similarities between different systems are specifiable in terms of the existence of coordinates for fundamental terms of one system in fundamental terms of the other. Two systems are symmetrical fundamentally categorically equivalent if, and only if, all fundamental terms of each system have coordinates in fundamental terms of the other. The coordinate relation is sufficiently powerful to provide the reflexive equivalence relation between compared systems which the counterpart relation is too weak to provide. Nevertheless, cross-categorical or counterpart equivalence is a very strong relation. Coordinate equivalence may be defined in a variety of weak and strong forms. Symmetrical fundamental equivalence is a strong form of relationship between compared systems. Systems A and B are partial fundamental coordinate equivalents if, and only if, all fundamental terms of some (at least one) philosophical category in A have corresponding coordinates in fundamental terms of B; this is a weaker form. Partial fundamental coordinate equivalence is

not a sufficient condition for counterpart equivalence because it is possible for partial fundamental coordinate equivalents to be fundamentally cross-categorically different. Two philosophies may correspond perfectly at the ontological level and not correspond at all at the phenomenological level.

The following definitions and considerations are relevant to the formulation of the strength of the thesis which we take this dissertation to establish.

- (a) A category α in system A is the *coordinate equivalent* of a category β in system B if, and only if, all fundamental terms in α have coordinates in β and vice versa.
- (b) A category α in system A is the partial coordinate equivalent of a category β in system B if, and only if, some (at least one) fundamental terms in α has a coordinate in β and vice versa.
- (c) A category α in system A is the asymmetrical coordinate equivalent of a category β in system B if, and only if, all fundamental terms in α have coordinates in β but not vice versa.
- (d) A category α in system A is the asymmetrical partial coordinate equivalent of a category β in system B if, and only if, some fundamental terms in α have coordinates in β but not vice versa.
- (e) A category α in system A is the fundamental coordinate equivalent of a category β in system B if, and only if, all fundamental terms in α have coordinates in fundamental terms in β and vice versa.
- (f) A category α in system A is the fundamental partial coordinate equivalent of a category β in system B if, and only if, some fundamental terms in α have coordinates in fundamental terms in β and vice versa.
- (i) Systems A and B are coordinate equivalents if, and only if, each

category in A is the coordinate equivalent of a category in B and vice versa.

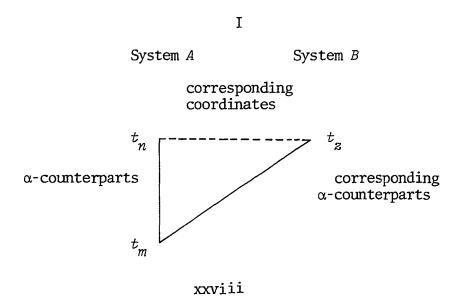
- (ii) Systems A and B are partial coordinate equivalents if, and only if, some category in A is the coordinate equivalent of a category in B. (iii) Systems A and B are fundamental coordinate equivalents if, and only if, each fundamental category of A is the coordinate equivalent of a category in B and vice versa.
- (iv) Systems A and B are partial fundamental coordinate equivalents if, and only if, some (at least one) fundamental category in A is the coordinate equivalent of a category in B.
- (v) Systems A and B are (a) symmetrical fundamental coordinate equivalents if, and only if, each fundamental category of A is the coordinate equivalent of a (non-)fundamental category in B and vice versa.
- (vi) Systems A and B are (a) symmetrical partial fundamental coordinate equivalents if, and only if, some (at least one) fundamental category in A is the coordinate equivalent of a (non-)fundamental category in B.

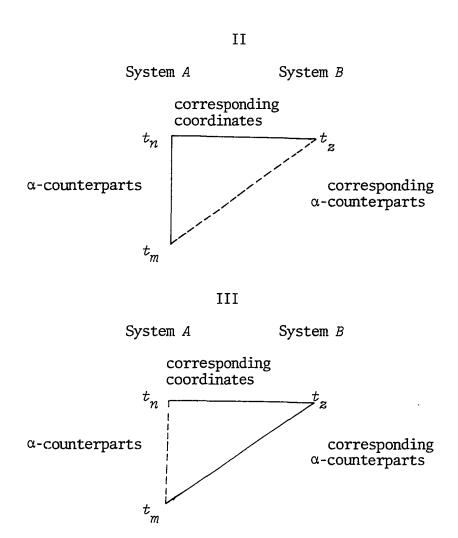
Clearly, the defined terms of a-f above may be substituted in definitions i-vi above for the term 'coordinate equivalent' to give a total of thirty-six comparative relations of coordinate equivalence between systems A and B, and another thirty-six comparative relations of counterpart equivalence, when 'counterpart' is substituted for 'coordinate' in a-f and i-vi, to give a total of sixty-four comparative relations between systems. Our claim is that Advaita and the Tractatus are symmetrical partial fundamental coordinate equivalents. Further application of the method of this dissertation will, we believe, move the relation between Advaita and the Tractatus in the direction of the relation of symmetrical fundamental coordinate equivalence, though the systems will

never fully instantiate this relation if only because the category of logical syntax in Advaita seems to be only the partial coordinate equivalent of the category of logical syntax in the *Tractatus*. The relation of symmetrical partial fundamental coordinate equivalence is nevertheless quite strong, and we believe that enough categories of Advaita are fundamental partial coordinate equivalents with enough fundamental terms corresponding between categories for us to assert that the system of Advaita basically coincides with the system of the *Tractatus*.

The relations among coordinate and counterpart relations are presentable in diagrams showing two givens and one unknown. The unknown coordinate or counterpart relation, indicated by the broken side of each triangle of comparative relations shown below, is deriveable from the two given relations, indicated by the triangle's solid sides. To indicate that both counterpart relations in the triangle of comparative relations are of the same philosophical category, that is, to indicate that they are both epistemic counterparts, or both metaphysical counterparts, and so forth, we prefix the category sign α .

The Triangle of Comparative Relations





Triangle II says that it is impossible to have $(t_m^A)\mathcal{C}(t_n^A)$ and $(t_n^A)\mathcal{C}(t_n^B)$ without $(t_m^A)\mathcal{C}(t_n^B)$, where $\mathcal{C}\mathcal{C}\mathcal{N}$ and $\mathcal{C}\mathcal{C}$ stand for 'corresponding coordinate' and 'corresponding counterpart' respectively. That is, if term m in system A is the counterpart of term n in system A, and if term n in system A is the corresponding counterpart of term n in system n in system

In this dissertation we will attempt to establish that the categories of logical syntax and metaphysics in the Tractatus are fundamental counterpart equivalents on the basis of Wittgenstein's methodological principle (vide infra, I, 1). On the basis of the same methodological principle we will attempt to establish that the category of the logical syntax of the Tractatus and the category of the metaphysics of Advaita Vedanta are fundamental partial counterpart equivalents. Whence it will follow on the basis of the triangle of comparative relations that the philosophy of Advaita and the philosophy of the Tractatus are symmetrical partial fundamental coordinate equivalents with respect to at least the category of metaphysics. We further maintain that enough fundamental terms of Advaitic metaphysics correspond to fundamental terms of the metaphysics of the Tractatus for us to be justified in saying that the metaphysics of the former basically coincides with the metaphysics of the latter; there is sufficient correspondence to justify the claim that the metaphysics of Advaita and the Tractatus model one another.

[6] This dissertation to some extent presupposes a knowledge of Advaita Vedānta. The reader is referred to Deutsch's Advaita Vedānta, Hiri-yanna's Outlines of Indian Philosophy, Iyer's Advaita's Vedānta and Müller's Six Systems of Indian Philosophy. Transliterated Sanskrit terms are included at the risk of obtrusiveness to indicate terminological correspondences between Western and Advaitic philosophical vocabularies. References to Śamkara's Brahmasūtrabhāṣya which is abbreviated 'BSS' are given first by section and then by part and page as found in Thibault's translation. References to the Tractatus are given by proposition number; we have adopted the convention of the translators in the Index of

the *Tractatus* of omitting the point after the first digit since its position is invariable. We have also at times made use of Max Black's method of referring to paragraph by number and to sentence by letter. Thus '63571(3)b' indicates the second sentence of the third paragraph of proposition 6.3751. When this procedure would be cumbersome we indicate that only a portion of an entry has been quoted through the use of three dots, '...'. All numbered reference to the *Tractatus* are to the Pears-McGuinness translation; references to the *Notebooks* are by dated entry. The term 'general propositional form' is abbreviated 'gpf'.

With a view to directing the reader's attention with least distraction by unnecessary material, for Wittgenstein often discusses more than one issue per numbered proposition, we have often extracted for quotation a key thought or paragraph of the proposition, but in so doing have exercised caution to avoid any misrepresentation of the original context. This practice would seem to be no more objectionable than extracting whole propositions for quotation with due regard for context, for whole propositions are similarly embedded in definite contexts. Nor, of course, do we claim our interpretation of a given passage to be the only one possible, though we do claim that it is consistent with our overall interpretation.

CHAPTER I

LOGIC AND BRAHMAN

"...from whence all speech, with the mind, turns away unable to reach it..."

Taittirīya Upanisad (II, 4)

1. Logic as the Basis of Metaphysics in the Tractatus

The full import of Wittgenstein's stated purpose of setting the limit of what cannot be said by setting the limit of what can be said (4114, 4115) cannot be adequately appreciated without a clear view of his fundamental methodological principle, shared by the logical atomists, that logic is the basis of metaphysics. 18 The methodological principle in effect says: logic underlies ontology. In accordance with this principle of metaphysical analysis, the categories of logical syntax have their ontological counterparts, and logic is the transcendental mirror (-image) (5511, 613 et al.) or counterpart of reality. Thus, names are the syntactic counterparts of objects, the ontological simples of the picture theory; propositions are the syntactic counterparts of facts, the units of experience; and to give the general propositional form (abbr. gpf) is not simply to give the essence of description but also of the existing world (54711). Similarly, transcendental logic (613) is not merely a formal abstraction, as is evident from the Philosophical Investigations, remark 97, but is rather, the syntactic counterpart of (642, 6432) what is higher.

2. Fundamentals of the Tractatus and of Advaita

In light of Wittgenstein's methodological principle that syntactic categories subtend metaphysical categories, his fundamental illumining insight or Grundgedanke (40312) -- the logic of the world is unthinkable or unrepresentable--must be construed as asserting that what is logically and metaphysically of the highest significance is unthinkable. Thus, the thrust of Wittgenstein's stated intention of setting the limit of thought, thereby to show what cannot be thought, emerges as a critique of the value and philosophical importance of everyday language (4002), of science (6371, 64312), of all representational modes of signification (642), and, by the methodological principle, of the representable world of fact (641, 6521) and its psycho-physical subject (5641). For, if what is of value is not in the thinkable world (641, 645) (though we do not wish to suggest that Wittgenstein held there is an unthinkable set of facts comprising a world) then it is mistaken to attach ultimate or metaphysical importance to the problem of the world, a problem which, from the transcendental standpoint of the 'experience' necessary to understand logic (5552), appears limited to the extent of vanishing (6521).

There is a striking similarity between the fundamental point of the *Tractatus* that what is higher is unthinkable or categorically unamenable to conceptualization and the basic tenet of Advaita Vedānta that Brahman or reality is non-dual. For the thesis that Brahman is non-dual is equivalent to the thesis that Brahman is unthinkable: if Brahman is non-dual it is beyond the triple distinction of knower, known and knowing (*triputī vilaya*) and is therefore unthinkable, and conversely, if

Brahman is unthinkable it is beyond the duality characteristic of thought.

Samkara, the great Indian philosopher of about the Eighth Century A.D., and the foremost representative of Non-Dualism, quotes the Upanisadic statement that Brahman is that "whence all speech, with the mind turns away, unable to reach it." Both for Samkara and Wittgenstein then, what is higher (paramārtha) is unsayable (avarṇam) and unthinkable (acintya), and as in the Tractatus, so in Advaita we find a critique of the value, importance and truth of ordinary consciousness and knowledge (vyāvahārikadṛṣti or vṛṭticaitanya) implied by the transcendence of what is higher.

Expressed concisely in the dictum 'Neti, neti' 20--Not this, not this--Non-Dualism categorically denies of Brahman all differentiation (visesatva) and determination and thus demotes all that is thinkable to the problematic status of illusion $(m\bar{a}y\bar{a})$. The ramifications of Non-Dualism are the logical developments of the categorical negation of differentiation and multiplicity and are chiefly concerned with reconciling the undeniable multiplicity of empirical reality or life with the distinctionless realization (nirvikalpaka sāksātkāra) of Brahman. Advaitic solution to the problem of life is that multiplicity is $m\bar{a}y\bar{a}$, the illusion of ignorance $(avidy\bar{a})$ expressed in the name and form (nāmarūpa) of language, the apparent reality of which is sublated or cancelled $(b\bar{a}dha)$ by Brahman, just as the reality of the dream is cancelled by the waking state. This solution involves that just as the illusion of the snake is the mere appearance (ābhāsa or vivarta) of the rope for which it is mistaken and on which it is a superimposition $(adhy\bar{a}sa)$, in comparable manner the duality of $m\bar{a}y\bar{a}$ is the superimposed

appearance of the non-dual Brahman. Just as the non-veridical appearance and accompanying fear of the illusory snake is dispelled by knowledge that it is really the rope, so also the illusion and suffering of life is said to be dispelled by Self-realization ($\bar{a}tmabodha$), the knowledge ($vidy\bar{a}$) that the Self ($\bar{a}tman$) is Brahman. Must of what we shall have to say in this work is directed towards showing that Wittgenstein grappled with the same problem as Advaita, namely the problem of reconciling the world with what is higher, and that he developed a basically Advaitic solution within the framework and logical idiom of the Tractatus.

At this point a note of caution against misinterpreting Advaita as a form of idealism must be sounded. For the view we have outlined does not entail the obliteration of the distinction between waking and dreaming, between hard and soft empirical data. Advaita explicitly opposes mentalism or idealism and maintains that the world, with all its empirical standards of truth, meaning and verification is undeniably real until the liberating knowledge of the higher standpoint is attained. $M\bar{a}y\bar{a}$, unlike the snake, is seen to be illusory only from the higher standpoint. The world in Advaitic thought is a transcendental $(m\bar{u}l\bar{u}vidy\bar{a})$ but not an empirical illusion $(tul\bar{u}vidy\bar{a})$, and there is literally all the difference in the world between the two. Nor is Non-Dualism to be confused with those forms of monism which suggest that the highest reality is thinkable as a numerical entity; Brahman is unthinkable and hence as categorically opposed to such forms of monism as to pluralism.

3. Nirguna Brahman as the Corresponding Metaphysical Counterpart of Logic and the Corresponding Coordinate of What is Higher

'Logic' in its primary sense, as Wittgenstein uses the term, is not what philosophers generally conceive it to be. It is neither a propaedeutic to the sciences nor a convenient tool for the manipulation of arguments, nor the tarka or hypothetical reasoning of Indian philosophy. In Wittgenstein's original treatment, logic is primarily neither a method of enquiry, nor a body of doctrine either descriptive or prescriptive, nor an instrument of elucidation or proof, though these functions may be performed by the application of logic, and by the inessential process (vide infra, III, 3) of logical proof and calculation.

Logic is indivisible and beyond the coordinated conditions of thought (34, 341, 4):

In logic there is no co-ordinate status (Nebeneinander), and there can be no classification.

Logic is anumerical:

All numbers in logic stand in need of justification.
Or rather, it must become evident that there are no numbers in logic.
There are no privileged numbers.

Which is to say that logic is non-dual:

4128 Logical forms are without number.

Hence there are no privileged numbers in logic, and hence there is no possibility of philosophical monism or dualism, etc.

Wittgenstein wrote in comment on 4128:

What I meant was that in Logic there are no numbers which are in any sense more important or of any greater significance, in any sense preeminent, as compared with the rest of numbers. Such for instance many people believe that the number *one* is such a number or the number 3. And if--for instance--

there was in Logic a definite number of primitive prop[osition]s or of primitive ideas--say the number one or any other--then this number would have, in some sense, to prevail all through logic and consequently also throughout philosophy. It would then be a number more important than the rest, an "ausgezeichnete Zahl". 21

If there were a 'special' number it would have to prevail in metaphysics, but as there are no preeminent numbers, or rather as there are no numbers in logic, the metaphysical counterpart of logic, namely what is higher, will have to be anumerical or non-dual.

Logic is non-hierarchical and therefore so also is its ontological counterpart:

55561(2) Hierarchies are and must be independent of reality.

Logic is beyond the most commonplace and essential distinctions of thought:

In logic there can be no distinction between the general and the specific.

And thus what is higher (642, 6432), the metaphysical counterpart of logic, cannot be thought by means of propositions in logical space:

624b Propositions can express nothing that is higher.

Like logic (412, 4121, et al.), what is higher can only be shown (642), that is, can only manifest itself as the unsayable mystical (cf. 6522). What is higher is thus non-dual or anumerical, without co-ordinate or 'side-by-side' (Nebeneinander) status, non-hierarchical, neither specific nor general, unclassifiable, unthinkable and unsayable. This characterization of Wittgenstein's metaphysical absolute describes nirguna Brahman, formless Brahman, about which it is strictly impossible to think and speak, whence it is clear that nirguna Brahman is the corre-

sponding metaphysical counterpart of logic and the corresponding coordinate of what is higher.

The 'experience' of Brahman is said to reveal reality's essential feature (svarūpa lakṣaṇa) to be existence (sat). Similarly in the Tractatus the 'experience' necessary to understand logic reveals a certain supra-empirical existence:

The 'experience' that we need in order to understand logic is not that something or other is the state of things, but that something is: that, however, is not an experience.

Logic is prior to every experience--that something is so.

It is prior to the question 'How?', not prior to the question 'What?'.

In his "Lecture on Ethics", Wittgenstein explains absolute ethical judgment in terms of the non-empirical 'experience' of 'wonder at the existence of the world". 22 The correct expression for the miracle of the existence of the world, he states, is "not a proposition in language" but rather "the existence of language itself". 23 The 'experience' necessary to understand logic, further described as "wonder at a tautology". 24 thus reveals 'the existence of language itself.' The Tractatus repeats this theme in the concept of the mystical not as how things stand in the world, but that the world exists (644). Wittgenstein's concept of the mystical experience of the world sub specie aeterni (645) is thus very much like the Spinozistic intellectual intuition of reality as essence identical with existence. Again, both what (i.e. essence) and that (i.e. existence) are contrasted with how in attempting to express the nature of the mystical experience of what is higher (5552, 644); essence and existence, as in Spinoza's thought, are thus identified with respect to the transcendental.

The logical basis of the metaphysical identification of essence and existence in the 'experience' of what is higher is the nature of logic as self-manifesting, as what is shown (4114, 6124g, 642, 6522; 4122d, 562, 623, 6522). Logic, the essence of language and so also its corresponding metaphysical counterpart, Brahman, is said to be self-revealing or self-shining (svatah prakāsya).

Advaita also contrasts how or thus (iti) with Brahman as existence (sat) in the dictum 'Neti, neti' (Not thus, not thus), the purport of which is the cancellation of all states of things (cf. 5552 α) representable by means of speech and thought. Similarly, logic cancels all representational relations (4462(2); vide infra, III, 4); the propositions of logic are only apparently propositions:

3/6/15(8) "p v -p" would then be a sign only in appearance. But in reality the dissolution of the proposition.

This cancellation is a logical basis for the metaphysical use of the distinction between *how* and *that* in the explication of what is higher. Thus the 'experience' necessary to understand logic is expressed by 'Neti, neti'.

The cancellation of *how* or *iti* by the propositions of logic and by 'Neti, neti' does not cancel either Brahman, ²⁷ so as to produce a doctrine of the void, or logic, but rather leaves them behind as a 'pure crystal', unclouded by the empirical projections of the limiting adjuncts (upādhis) associated with thought and speech:

97(1) Thought is surrounded by a halo.--Its essence, logic, presents an order, in fact the a priori order of the world: that is, the order of possibilities, which must be common to both world and thought. But this order, it seems, must be utterly simple. It is prior to all experience, must run through all experience; no empirical cloudiness or uncertainty

can be allowed to affect it.--It must rather be of the purest crystal. But this crystal does not appear as an abstraction: but as something concrete, indeed, as the most concrete, as it were the *hardest* thing there is (*Tractatus Logico-Philosophicus No.* 5.5563).

The Advaitic analogy between Brahman and a colorless crystal is intended to illustrate the illusory status of all qualifications of the non-dual and to clarify the nature and origin of illusion. Just as the color of a colorless crystal is due merely to the limiting adjunct of the colored surface on which it rests, so also all empirical determinations of Brahman are traced to the limiting adjuncts of the individual $j\bar{i}va$ or psycho-physical self. These limiting adjuncts of the $j\bar{i}va$'s ignorance ($avidy\bar{a}$) are intended to be sublated or negated by 'Neti, neti', to leave the pure indeterminate (nirvisesa) ground (adhisthāna) of all illusory appearances. A full treatment of sublation in the Tractatus is found below in Chapter III, where it is argued that the pure crystalline essence of language, namely logic (mentioned above in Philosophical Investigations §97 and suggested in Wittgenstein's mirror metaphor), also cancels or sublates representational language and its metaphysical counterpart, the world.

The ontological dimensions of Advaita and the *Tractatus* which we have been discussing run alongside decidedly counter-ontological currents of thought. In the *Tractatus* only states of affairs and facts are qualifiable as existent or non-existent in the strict sense of 'saying'. Precisely at the point at which the ontological theory begins to seem to 'say something' it is qualified:

For all I have said by shifting the expression of the miraculous from an expression by means of language to the expression by the existence of language, all I have said is again that we cannot express what we

want to express and that all we say about the miraculous remains nonsense. 28

In Advaita this point is made by saying that Brahman is indescribable in terms of existence and non-existence (sadasadanirvacanīya). Śamkara stated:

Only an entity which is an object of sense-knowledge can become an object of affirmative predication of the form, 'it is', or an object of negative predication of the form 'it is not'.... Reason also proves that Brahman cannot be expressed by words denoting existence (sat) or non-existence (asat). All words used by speakers for the purpose of conveying meanings and listened to by the hearers do convey their meanings through the categories of class $(j\bar{a}ti)$, action $(kriy\bar{a})$, attribute (guna), and relation (sambandha), and not otherwise, for no instance to the contrary is seen.... But Brahman has no class and hence cannot be expressed by words like existent, etc.: nor has it attributes, so that it may be expressed by a word denoting an attribute; nor can a word denoting action express it, for it is beyond activity.... Nor has it any relation, being one without a second. It stands to reason to hold that, not being an 'object' and being the Atman it cannot be expressed by any word whatsoever. 29

Thus Brahman and logic alike are inexpressible in terms of existence and non-existence. 'Existence', one observes, is not in the strict sense a predicate for either Śamkara or Wittgenstein. To indicate the metaphysical sense in which existence is predicated of what is higher it might be said not that Brahman exists but that it is existence, not that the metaphysical counterpart of logic has ontological status, but that it is ontological status.

4. The Distinction Between Logic and the Logic of Depiction

Although the propositions of logic are assigned unique status among all propositions (6112), most of the *Tractatus*, in keeping with the

strategy of signifying or showing what cannot be said by presenting clearly what can be said (4115), is devoted to formulating the general propositional form. The form of representation (i.e. logico-pictorial form) is given in the gpf, the sole general primitive sign of logic (5472), but in logic there is no distinction between the general and the specific (5454). How then can the gpf be a primitive sign of logic? Further, the gpf defines the coordinates of its values (34, 341), but there is no coordinate status in logic (5454). There are no numbers in logic (5453), but the exponent of the successive application of the operation of the gpf (6001) is a number (6021). Again, the propositions of logic cancel all representational relations (4462), while the gpf is the form of representational relations (cf. 55261). Therefore the logic of which the gpf is the sole general primitive sign is not logic simpliciter, but rather must be the logic of depiction or portrayal (as mentioned in 23/10/14, 25/10/14, 27/10/14).

The logic of depiction is the logic of the application of logic, for every depiction is an application of logic, as the following proposition shows:

A propositional sign, applied and thought out, is a thought.

Of course, a thought is a logical picture (3) or proposition (4), so that it follows from 35 that every depiction is an application of logic. That the formulation of the gpf is a task of the logic of the application of logic is clearly seen in the fact that the general propositional form says that

6001 ...every proposition is a result of successive applications to elementary propositions of the operation $N(\bar{\xi})$.

The logic of depiction given in the gpf is what can be clearly presented and is intended to signify what cannot be said, namely the logical constant N(), which it evidently (6) shows or displays. The connection between logic and the logic of depiction is that the former is shown by the latter as the limiting case of the values of the gpf, namely as the propositions of logic to which unique status (6112) is ascribed.

Further evidence that the logic of depiction is the logic of the application of logic is deducible from:

4015 The possibility of all imagery, of all our pictorial modes of expression, is contained in the logic of depiction.

Since the imagery of language, of our pictorial modes of expression, i.e. of propositions, was stated in 35 to be an *application* of a logical picture, i.e. of a propositional sign, it may be concluded that the possibility of the application of logic is contained in the logic of depiction.

It is therefore understandable that the gpf is contrasted with the application of logic (55563); for the gpf, by the above considerations, is the formulation of the logic of depiction rather than a depiction. That is, the gpf is the logic of the application of logic rather than an application of logic, which is to say that the gpf is not a picture, but the logico-pictorial form of all pictures.

Wittgenstein contrasts the gpf with the application of logic in

55563(1b) That utterly simple thing, which we have to formulate here, is not an image of the truth, but the truth itself in its entirety.

The context makes it obvious that the gpf is being formulated. Lest it be supposed that 'simple' is used in a pejorative sense, mention may be made of Wittgenstein's remarks in *Letters to Ogden* to the effect that

in proposition 55563 'simple' is meant in the sense of 'highest' as in 'the highest good', ³⁰ and 'image' is meant in the sense of 'simile'. ³¹ The subsequent proposition establishes that the gpf is to the image of the truth as logic (the logic of depiction) is to the application of logic.

5557 The application of logic decides what elementary propositions there are.

What belongs to its application logic cannot anticipate....

Thus, in formulating the gpf Wittgenstein is formulating the logic of depiction, which is to its application (35) as the truth in its entirety is to the image of the truth.

This understanding of the matter is supported by the fact that 'image' in both 4015 and 55563 has the same meaning, namely 'simile'; in comment on 4015 Wittgenstein wrote to Ogden, the first translator of the *Tractatus*:

Here instead of (") likenesses (") the plural form of simile would—I think—be better. This prop(osition) in English seems to me very awkward and unclear but I can't mend it. Would it perhaps be better to put instead of "...of the whole pictorial nature..." "of all the imagery of language"?³²

And with respect to 55563 he wrote:

"image" has the meaning of "simile" here. 33

Thus clearly Wittgenstein meant that all language and thought is the mere simile of truth, whereas the logic of depiction formulated in the gpf is the truth entire. This distinction between logic per se as given in the logical constant (or in the propositions of logic) and the logic of depiction as given in the gpf gives rise to the central problem of the Tractatus, dealt with in detail in Chapter III.

5. Saguna Brahman as the Corresponding Metaphysical Counterpart of the Logic of Depiction and the Corresponding Coordinate of God

The non-relational (akhaṇḍa) nirguṇa Brahman apprehended through the māyā of name and form (i.e. relationally) is saguṇa Brahman, Brahman with form. Similarly, logic without coordinate distinction viewed through the coordination of name and logical form is the logic of depiction as formulated in the gpf. That is, logic per se, which we shall refer to simply as logic, is the syntactic counterpart of nirguṇa Brahman, while the logic of depiction is the syntactic counterpart of saguna Brahman.

Saguna Brahman, however, is said not to be identical with $m\bar{a}y\bar{a}$, but rather to stand in relation to the names and forms of $m\bar{a}y\bar{a}$ as space stands to the enclosed spaces of vessels. Correspondingly, the gpf is not identical to the logical forms of individual propositions, but rather stands to them as logical space stands to the (sets of) points it contains. For each proposition defines a point or set of logical coordinates in logical space (34, 341, 3411, 342); seach proposition defines a place or (set of) points in logical space, and each place is defined by the gpf. Saguna Brahman and the gpf thus correspond with respect to the spatial metaphor.

Saguṇa Brahman is the appearance (ābhāsa) of nirguṇa Brahman in the limiting adjuncts of avidyā (viz., body (śarīra), senses (indriyas), mind (manas), intellect (buddhi), etc.), and depends upon the principles of name and form. Similarly the gpf is the appearance (vide infra, III) of logic (i.e. of the logical constant; vide infra, III) in the limiting adjunct of representational language. Saguṇa Brahman is sublated by nirguṇa Brahman and, as we shall see below, the logic of depiction as formulated in the gpf is sublated by depictionless (or sinnlos (4461,

44611)) logic.

The gpf, as the limit of what can be said, is in turn (4114, 4115) limited by the limit of what cannot be said. The gpf, that is, as the limit of what can be said, cannot itself be said and signifies its own limit, the limit of what cannot be said. As limited, therefore, the gpf cannot be the highest logico-metaphysical category of the *Tractatus*, but must stand, like saguna Brahman, a step removed from the highest.

Saguṇa Brahman is the seed $(b\bar{i}ja)$ or general form of duality or representativity and similarly, the gpf is the general form of representativity, the seed of name and form that defines the form of the riddle (64312, 65) or $m\bar{a}y\bar{a}$ of the world. When $avidy\bar{a}$, as it were, looks at the formless absolute (nirguṇa Brahman), it sees the absolute form (saguṇa Brahman). This absolute form in the Tractatus is the gpf, the general form of representation, and the corresponding syntactic counterpart of saguṇa Brahman.

The metaphysical counterpart of the gpf in the *Tractatus* is God. For Wittgenstein wrote in the *Prototractatus*:

The most general propositional form is: This is how things stand.

How everything stands is God. God is how everything stands.

Since proposition 45(3)b in the *Tractatus* states that the gpf is: This is how things stand, it is reasonable to conclude that God is the corresponding metaphysical counterpart of the gpf in the *Tractatus*. But saguna Brahman is Iśvara or God, so that saguna Brahman, since it is the corresponding metaphysical counterpart in Advaita of the gpf in the *Tractatus*, must be the corresponding coordinate of the metaphysical counterpart in the *Tractatus* of the gpf. That is, saguna Brahman is the

corresponding metaphysical counterpart of the gpf, its syntactic counterpart.

In this connection there is a most interesting statement in the Notebooks:

8/7/16j There are two Godheads: the world and my independent I.

This notion of a dependent and an independent Godhead certainly fits in with the understanding of the logic of depiction, formulated in the gpf, as saguna Brahman, the dependent Godhead, and logic simpliciter, given in the logical constant, as nirguna Brahman, the independent Self (ātman).

Samkara wrote:

Brahman is apprehended under two forms: in the first place as qualified by limiting conditions owing to the multiformity of the evolutions of name and form...; in the second place as being the opposite of this, i.e. free from all limiting conditions whatever. Compare the following passages:...'For where there is duality as it were, then one sees the other; but when the Self only is all this, how should he see another?'...'Not so, not so;'...All these passages...declare Brahman to possess a double nature, according as it is the object either of Knowledge or of Nescience.³⁷

Similarly, we can say within the framework of the *Tractatus* that language and reality are apprehended under two forms: in the first place as qualified by limiting conditions owing to the multiformity of name and form as presented in the gpf, and in the second place as being the opposite of this, i.e. free from all limiting conditions of representativity whatever, as shown by the propositions of logic. The gpf presents the limiting conditions of names and logical forms while the logical constant as expressed in the propositions of logic cancels those limiting conditions of name and representational relation (4462(2)). The

metaphysical counterpart of the limiting conditions of representativity as presented in the gpf is the essence of the world (5471, 54711), while the metaphysical counterpart of what cancels those conditions is 'what is higher'. Logic then, is the corresponding syntactic counterpart of nirguna Brahman, Brahman without limiting qualifications, while the logic of depiction is the corresponding syntactic counterpart of saguna Brahman, Brahman with limiting qualification.

The counterpart correspondence between the gpf and saguṇa Brahman is not merely metaphorical as might be supposed at first thought. For the nature of $\vec{l}svara$, as described below by Samkara, is well-duplicated in the gpf:

Though One and ever of the same unchanging essence He converts Himself, of the nature of Pure Consciousness, into multitudinous forms by subjecting Himself to the differentiating $up\bar{a}dhis$ (limiting adjuncts) of names and forms by the force of His Own Being and by His inscrutable power. 38

Śamkara's description of saguṇa Brahman as essentially one and converting itself into multitudinous forms can very adequately be expressed in terms of the essential oneness of the gpf, for the gpf is what all propositions have in common, and the manyness of the values which the gpf, as a variable (453), assumes. The conversion to many forms by Tśvara corresponds, we suggest, to the assumption by the variable of all possible propositional values. The gpf is also of the form of pure consciousness for it is the underlying syntactic counterpart of the form of consciousness or thought; as the logico-pictorial form of representation, that makes possible the depiction by a proposition of a non-linguistic state of affairs, it is the syntactic form of thought. The essence of thought, that is, pure consciousness, is the epistemic counterpart of

the gpf. It must here be emphasized that the 'two Godheads' of Advaita and the *Tractatus* are not different entities. Indeed Wittgenstein stated that the gpf is the sole logical constant. As will be shown below (III), the gpf is the appearance of the logical constant in the same sense in which saguna Brahman is the appearance of nirguna Brahman.

We continue the discussion of logic as Brahman by considering B. F. McGuinness' interpretation of the status of the world in Wittgenstein's system. McGuinness, who retranslated the *Tractatus* with the D. F. Pears, contrasts Wittgenstein's mysticism with Schopenhauer's and identifies it with Tolstoy's:

"...Wittgenstein has transcended Schopenhauer. In this he resembles Tolstoy..."³⁹

The claim he makes is that, unlike Schopenhauer, Wittgenstein did not hold the phenomenal world to be unreal:

...what the mystic finds striking is *not* that there is the particular world there is—for he is not interested in *how* the world is—but that there is α world—namely, that some possibilities or other... are realized...which is no more than to say that there are objects.⁴⁰

The possibilities that McGuinness refers to are the facts, and the objects he mentions are, as he correctly observes, inseparable from the facts. However, objects considered in isolation are as meaningless as names alone (20122, 33); therefore the existence of objects is as irrelevant to the mystical solution of the problem of life (and McGuinness agrees that mysticism is the answer to the problems of life), 41 as the following proposition shows the existence of the facts to be:

The facts all contribute only to setting the problem, not to its solution.

Wittgenstein, moreover, cannot possibly have been a Tolstoyan as shown

by their opposite attitudes towards the propositions of logic. In the course of his spiritual quest, Tolstoy came to a crossroads at which he had to choose between what appeared to him to be rational and what appeared to be irrational:

...either what I called rational was not so rational as I had thought; or that which to me appeared irrational was not so irrational as I had thought.⁴²

In examining the efficacy of the rational in answering his question as to the meaning of his life and life in general he found that the finite had to be equated with the infinite and vice versa and that nothing came of it:

There happened something like what at times happens in mathematics: you think you are solving an equation, when you have only an identity. The reasoning is correct but you receive as a result the answer: a = a, or x = x, or 0 = 0. The same happened with my reflection in respect to the question about the meaning of my life....The answer...as it is expressed by the Brahmans, by Solomon, and by Schopenhauer, is only an indefinite answer, or an identity, 0 = 0, life is nothing. 43I was inevitably led to recognize... a certain other irrational knowledge, which made it possible to live. 44

Contrast Tolstoy's disappointment in the tautology with Wittgenstein's mystical wonder at the existence of the world, which he describes as wonder at a tautology. 45

Clearly, in light of the fundamental difference with respect to Wittgenstein's rationalism and Tolstoy's irrationalism, as shown in their opposite attitudes to mathematics and logic, McGuinness' claim that Wittgenstein's mysticism was Tolstoyan must be incorrect. The world at whose existence Wittgenstein wonders is not a "system with a definite character" as McGuinness claims, 46 but rather the unthinkable (i.e. indefinite) reality as shown by the senseless propositions of logic. Our criticism of McGuinness' position is that the gpf, God, the

world, or saguna Brahman is not the apex of Wittgenstein's metaphysics. 47

6. Objections and Replies

First Objection

Advaita would say that nirguna and not saguna Brahman, which you claim corresponds to the gpf, is the truth in its entirety. Thus, the highest category of the *Tractatus*, the gpf, is only the lower truth of Advaita and the Advaitic thesis of the *Tractatus* is vitiated by the gpf's presupposition of name and form.

Reply to the First Objection

We reply that the truth in its entirety, which Wittgenstein identifies with the logic of depiction is not logic, the syntactic absolute of the system, but only the point of contact (cf. 5557) between logic and its application. Of logic Wittgenstein is as silent as possible, in accordance with proposition number 7. The attitude of silence in relation to nirguna Brahman is strictly the only correct attitude for Advaita and indeed, all epithets applied to nirguna Brahman, such as 'existence (or truth)-consciousness-bliss' (saccidananda), 'absolute truth' (satyasya satyam), etc., are recognized to be strictly inappropriate. Brahman is expressed by 'Neti, neti' ('Not this, not this'), so that all predicates referred to nirguna Brahman actually apply only to saguna Brahman.

Hence the Lord's being a Lord, his omniscience, his omnipotence, etc. all depend on the limitation due to the adjuncts whose Self is Nescience: while in reality none of these qualities belong to the Self whose true nature is cleared, by right knowledge, from all adjuncts whatever. Thus Scripture also says, 'Where one sees nothing else, hears nothing else, understands nothing else, that is the Infinite'. 48

Even the highest distinctions marked by 'saccidananda', 'satyasya satyam', etc. fall way from the distinctionless Brahman. Thus, whereas
Advaita violates the silence enjoined by 'Neti, neti' in ascribing positive predicates to nirguna Brahman, Wittgenstein in this case adheres to
his program of silence about what cannot be said, and predicates 'truth
in its entirety' of the gpf rather than of that whereof one cannot speak.

The sequence of major propositions of the *Tractatus* in conjunction with 4114 and 4115 shows that Wittgenstein thought there is a metaphysical category higher than the gpf:

- 1. The world is all that is the case.
- 2. What is the case--a fact--is the existence of states of affairs.
- 3. A logical picture of facts is a thought.
- 4. A thought is a proposition with a sense.
- 5. A proposition is a truth-function of elementary propositions.
- 6. The general form of a truth-function is $[\bar{p}, \bar{\xi}, N(\bar{\xi})]$. This is the general form of a proposition.
- 7. What we cannot speak about we must pass over in silence.

These propositions indicate that in addition to what Wittgenstein said in the first six propositions there remained nothing he could not say. In the first six propositions Wittgenstein worked outwards through what can be said in order to show what cannot be said:

- 4114b It [philosophy] must set limits to what cannot be thought by working outwards through what can be thought.
- It will signify what cannot be said, by presenting clearly what can be said.

The seventh proposition enjoins silence about what is shown by the limit of what can be said, namely the gpf, that is set in the first six propositions:

4114a It [philosophy] must set limits to what can be thought; and, in doing so, to what cannot be thought.

The silence of the seventh step is the limit of what cannot be said, namely of the gpf (the gpf as the form of representation and the limit of what can be said cannot itself be said). To say that the gpf is the highest category of the *Tractatus* is therefore to ignore the strategy of philosophical procedure stated in 4114 and 4115 and the overall structure of the *Tractatus* conforming to that strategy. Lest it be thought that 4114 and 4115 need not be taken seriously in connection with the overall structure of the *Tractatus* the following may be brought to attention:

The books' point is an ethical one. I once meant to include in the preface a sentence which is not in fact there now but which I will write out for you here, because it will perhaps be a key to the work for you. What I meant to write, then, was this: My work consists of two parts: the one presented here plus all that I have not written. And it is precisely this second part that is the important one. My book draws limits to the sphere of the ethical from the inside as it were, and I am convinced that this is the only rigorous way of drawing those limits. In short, I believe that where many others today are just gassing, I have managed in my book to put everything firmly into place by being silent about it. And for that reason, unless I am very much mistaken, the book will say a great deal that you yourself want to say. Only perhaps you won't see that it is said in the book. For now, I would recommend you to read the preface and the conclusion, because they contain the most direct expression of the point of the book.⁴⁹

This passage makes it abundantly clear that Wittgenstein considered the strategy of exposition enunciated in 4114 and 4115 to be of the greatest importance. ⁵⁰ If we take him seriously therefore, we will view the first six integral propositions of the *Tractatus* as rungs of the philosophical ladder that is thrown away when the transcendental point of view of logic is attained (654), and we will conclude that the gpf merely points toward the higher silence of Wittgenstein's conclusion.

These considerations alone are sufficient to dispose of the objec-

tion, but there yet remains the fact that the gpf as the logic of depiction presents the form of representation, number, coordination, and generality, in short, presents the form of duality in the presupposition of name and form, all of which are cancelled by the non-dual logic, whereas the converse is not true; it would be absurd to suggest that propositions cancel the logic which they show, though they do disguise it (4002*d*).

There is the further response that if the objection that the gpf is the ultimate category of the *Tractatus* is correct, then it may be concluded that objects and facts are ultimate. However, the facts all go towards setting the problem and not towards its solution (64321), for the facts are in the time and space given in the gpf, while the solution of the riddle of life lies outside time and space (64312). Therefore, if the gpf is the ultimate of the system, then the problem is insoluble, and the truth in its entirety amounts to the riddle itself. But the riddle does not exist, and the problem vanishes (65, 6521), so that the implications of the objection are not only absurd in themselves, but incompatible with explicit statements of the *Tractatus*.

The logic of depiction is actually the logic of $m\bar{a}y\bar{a}$, the logic of the facts and of the problem of life. It is therefore natural and necessary that the logic of the facts presuppose that names have meaning and elementary propositions sense.

The harmlessness of the status of the gpf for the Advaitic thesis may be seen by considering the context and meaning of 'the truth in its entirety'. Wittgenstein was concerned with the logical conditions under which a proposition's sense would be independent of its truth or falsity.

29/10/14 In order for a proposition to be true it must first and foremost be *capable* of truth, and this is all that concerns logic.

What a picture represents [its sense (2221)] it represents independently of its truth or falsity, by means of its pictorial form.

The gpf is the pictorial form (i.e. the form of representation) that all propositions must have in common with reality in order to depict it correctly or incorrectly (2171, 218, 3, 4, 5, 6) and, as such, it is the possibility of truth. In this sense it is referred to as the truth in its entirety. The truth in its entirety of the logic of depiction is the possibility of the correspondence between language and the world that makes possible true and false statements. This possibility of correspondence is the general form of sense, where the sense of a proposition is what is the case if it is true (4024). Logic on the other hand is without sense (sinnlos) (4461, 44611; vide infra, II); its propositions say nothing (611). The truth of a tautology and the falsity of a contradiction are determined from the signs alone, automatically, and independently of sense (6113, 6126). The truth in its entirety as concerns the logic of depiction is the possibility of empirical truth, truth relative to what can be said, while logic, independent of the world, transcends sense and empirical truth, and solely concerns what is shown, i.e. what cannot be said. The gpf as the truth in its entirety is thus the limit of sayable truth and is limited in turn by logic, the higher limit of unsayable truth (cf. 562).

With respect to the multiplicity of name and form presupposed by the gpf it is to be noted that Samkara states that the essence of the 'word' is the power of denotation and that there is an eternal connection between the 'everlasting words' and their 'eternal sense' (i.e. the ākrtis denoted). Thus the objection that the gpf as the truth in its

entirety presupposes the existence of names with meaning and elementary propositions with sense, destroys the non-dualistic thesis of the *Tractatus* by positing a *multiplicity* of objects and their configurations than does the analogous claim of Advaita that there exist a *multiplicity* of everlasting words with eternal sense. For both in the *Tractatus* and in Advaita the power of denotation is relegated to the conditioned absolute, to *saguna* Brahman in the case of the latter ⁵² and to the gpf, the logic of depiction, in the case of the former (2151, 217, 218, 3, 4, 5, 6).

Second Objection

Logic presupposes name and form as the following proposition states, but Brahman presupposes no name and form. Therefore *nirguṇa* Brahman is not the metaphysical counterpart of logic, as is claimed.

The propositions of logic describe the scaffolding of the world, or rather they represent it. They have no 'subject matter'. They presuppose that names have meaning and elementary propositions sense; and that is their connection with the world.

Replies to the Second Objection

- (i) The objection is not based on the proposition cited, because the proposition states that the *propositions of logic* presuppose, not that logic presupposes. The distinction is important because Wittgenstein states that the propositions of logic are not at all essential, without intending to imply that logic is similarly not essential:
 - 6122 ...we can actually do without logical propositions; for in a suitable notation we can in fact recognize the formal properties of propositions by mere inspection of the propositions themselves.

The same applies to the propositions of mathematics for the same reason:

occupied it is not necessary in order to show that the two expressions connected by the sign have the same meaning, since this can be seen from the two expressions themselves.

Since the propositions of logic are inessential so also are any presuppositions they may carry, e.g. the presupposition of name and form and the equivalent presupposition of the connection of logic and the world. Propositions of logic can be numbered but logic is without number (4128, 5453); propositions show tautology and not tautologies. There is thus a real distinction between logic and the propositions of logic, just as there is between logic and the logic of propositions (i.e. the logic of depiction).

The objector might respond that the propositions of logic have a unique status (6112) presupposing name and form. To this we reply that the unique status of the propositions of logic consists in their saying nothing, in their being sinnlos (4461, 44611; $vide\ infra$, II), or 'depictionless', and that where nothing is said nothing can be presupposed. Their uniqueness and importance is not that they presuppose name and form because all propositions do so but that they cancel the conditions of representation; they are inessential because an adequate notation would show this cancellation of the conditions of representation, the syntactic counterpart of Brahman's cancellation of the world, without the aid of propositions of logic. But in an inadequate notation, of which $avidy\bar{a}$ is the corresponding epistemological counterpart, the propositions of logic serve to stand for the sinnlos logic otherwise transparently revealed, and, as propositions, presuppose the name and form of their propositional constituents. The presuppositions of logic are thus

as inessential as inadequate notation or $avidy\bar{a}$. Our claim that Brahman and logic are corresponding counterparts thus stands against the second objection.

- (ii) Further, it would be absurd to suppose that a priori logic should presuppose anything, since nothing can be prior to the a priori.

 Only logic with an a posteriori component, namely the logic of depiction, an application of logic, can carry with it presuppositions.
- (iii) We grant now for the sake of argument that the objector's interpretation of the cited proposition is acceptable. If the objection were correct in claiming that name and form are presuppositions of logic, it would follow from the statement of the cited proposition to the effect that the presupposition of name and form is the connection of the propositions of logic with the world that the connection of logic with the world is on a par with the presupposition of name and form. We will show that the connection of logic and the world is inessential and that therefore the presupposition of name and form is similarly inessential to logic.

The connection of logic with the world is inessential, as shown by the proposition to the effect that there would be a logic even if there were no world:

- The 'experience' that we need in order to understand logic is not that something or other is the state of things, but that something is: that, however, is not an experience.
- And if this were not so, how could we apply logic? We might put it in this way: if there would be a logic even if there were no world, how then could there be a logic given that there is a world? (italics mine)

Since logic would be without a world (cf. 2013, where logical space

is said to be imaginable as empty) the connection of logic with the world is not essential to logic, though of course the connection is essential to the world.

Further, lest it be doubted, there *is* an important distinction in the *Tractatus* between what is essential and what is inessential to a symbol relative to the propositions of logic. That propositions of logic are like other symbols (334) in having essential as well as inessential properties is evident in:

Admittedly the signs are still combined with one another even in tautologies and contradictions--i.e. they stand in certain relations to one another: but these relations have no meaning, they are not essential to the symbol.

The inessential relations in which the signs in a tautology stand to one another are the basis of the presupposition by the propositions of logic that names have meaning and elementary propositions sense. For the meaning of a name and the sense of an elementary proposition are expressed by the *relations* of symbols (31432, 321, 33). The appearance of relatedness of signs presented in the tautology (cf. 3/6/15) represents the connection of logic with the world. Thus the connection of logic and the world is merely the projection of the inessential appearance of the relations of signs in the propositions of logic.

Again, in the following proposition Wittgenstein reaffirms the independence of the propositions of logic from any reference to the world:

One can calculate whether a proposition belongs to logic, by calculating the logical properties of the *symbol*.

And this is what we do when we 'prove' a logical proposition. For, without bothering about sense or meaning (my italics), we construct the logical proposition out of others using only rules that deal with signs.

Thus, the connection of logic and the world is merely the projection of the inessential appearance of the propositions of logic, as we concluded above in reply (i), and the presupposition of name and form by logic is therefore equally inessential.

(iv) As an illustration of the relationship between tautology and the senses of the elementary propositions which are its constituents, consider the Chinese way of writing 'Mozart': 莫札特 The first character means "greatest" or "extensive", the second means "a thin wooden tablet" or "letter", and the third means "special". tically the first is 'mo", the second "cha" and the third "tê". Chinese does not have an alphabetic system of writing, but a syllabary, the writing of a word like 'Mozart' has to be reduced to a series of characters representing the syllables of the word as pronounced by a The meaning of the characters is, of course, unconnected with the word as transcribed. This procedure eliminates as inessential the sense or meanings of the characters; however, the possibility of constructing the desired phonetic value (i.e. 'Mozart') in Chinese presupposes that the characters have a depictive function in the language. That is, only such symbols as are depictive are available for the formulation of the desired phonetic value: it is not permissible to invent symbols having solely phonetic values. Thus the spelling of the word 'Mozart' in Chinese presupposes that the constituent characters have sense. Evidently however, this presupposed sense is entirely inessential to the construction. "Extensive", "letter" and "special" have, at best, merely accidental relevance to the great composer. Similarly, elementary propositions are constituents of the propositions of logic and must have meaning in order to be possible constituents; but equally

evidently, on the basis of the quoted propositions, Wittgenstein regarded their sense as inessential to the propositions of logic. Just as the Chinese spelling of 'Mozart' annuls the presupposed sense of its symbols, so also the 'spelling' of the propositions of logic cancels and annuls the presupposed sense of its constituents.

- (v) The same reply given above to the first objection, based on 64321 is also applicable to the second objection.
- (vi) The mahāvākyas or 'Great Utterances' such as Tat tvam asi (Thou art that), aham brahmāsmi (I am Brahman), which are meditated on as means of liberation in Advaita, like logical propositions presuppose name and form, e.g. the name and form of the speaker and listener. Śamkara wrote:

Nor can the scriptures speak about an unknown thing without having recourse to conventional words and their meanings. 54

Similarly, logical pseudo-propositions, as propositions, may be said to presuppose, as do αll propositions that picture the world, that it makes sense to say anything, i.e. they presuppose that elementary propositions have sense and names meaning.

However, the *mahāvākyas* point beyond the presuppositions of names and forms to the nameless and formless. And so also do the propositions of logic, for when they are considered as *unique* among all propositions (6112), when they are not assimilated to the class of propositions that picture the world, they cancel all the representational relations (4462) upon which all presuppositions must be based.

Considered as having a point of contact (55563) or connection (6124) with the world, the propositions of logic are unexceptional values of the gpf and presuppose sense. Considered as unique they have no contact

or connection with the world, are not proper values of the gpf, and are senseless (sinnlos).

The propositions of logic are the limiting values of the gpf and constitute its null-class, sinnlos (4461, 44611) or 'depictionless' values. Thus the point of contact of the propositions of logic with the world is the fact that they are the null-values of the variable (i.e. of the gpf) which presents the essence of the world of facts. And as the limiting cases of values of the gpf, they are unique in showing what lies beyond representational, sensible language as its nameless and formless limit. Thus, Wittgenstein can say that logic points beyond the conditions of sense to the solution of the riddle of life in mystical intuition of the world as a limited whole (645).

Just as the purport of the mahāvākyas (viz. Brahman's non-difference from the Self) is entirely independent of the phenomenal world, which nevertheless exacts from them an external or inessential presupposition of listener and speaker, of name and form, so also the propositions of logic pay the world the price of the general presupposition of sense built into the gpf. The point of contact between logic and propositions is thus the logic of propositions (i.e. the logic of depiction). This is precisely the point of contact or connection between logic and its application in the world.

The gpf, as the point of contact of logic and the world corresponds to saguna Brahman as the point of contact of nirguna Brahman and maya. Just as logic presupposes name and form insofar as it is related to a world via the disguise of ordinary language (4002), the mere simile of the truth (5552), so also in Advaita, nirguna Brahman presupposes saguna Brahman insofar as it (the former) appears for avidya as related to a

world. In both systems, name and form are the point of contact or connection of non-duality with duality.

Wittgenstein stated that

5557 ...logic has to be in contact with its application. Logic has to be in contact with its application, that is, with the world, because an illogical world is unthinkable. This is the corresponding logical formulation of the metaphysical proposition that there can be nothing outside of Brahman, the ground of being. Satkaryavada, the theory of the 'pre-existence' of effect in its cause, and vivartavada, the theory of the effect as mere appearance of its cause, preserve the non-duality of Brahman within the requirements of cosmological causality by preserving the contact of Brahman with its effect (satkaryavada), and by reducing the effect to the mere simile or appearance of its cause (vivartavada). The concept of Brahman as a cause and of the world as an effect is however, relegated to the province of avidyā. For the duality presupposed by a causal theory does not from the higher standpoint exist. Saguna Brahman, in which all dualistic causal functions are sequestered from nirguna Brahman, is thus the causal point of contact between Brahman and the world. Thus the inessentiality of causality in Advaita is expressed in the Tractatus by the inessentiality of the point of contact of logic and the world.

- (vii) Formless logic is in contact (berühren) (5557) with the world through logico-pictorial form:
 - 2151 Pictorial form is the possibility that things are related to one another in the same way as the elements of the picture.
 - 21511 That is how a picture is attached to reality; it reaches right out to it.

- 21512 It is laid against reality like a measure.
- So a picture conceived in this way, also includes the pictorial relationship, which makes it into a picture.
- 21514 The pictorial relationship consists of the correlations of the picture's elements with things.
- These correlations are, as it were, the feelers of the picture's elements, with which the picture touches (berührt) reality.

(To tie these propositions in with the discussion so far, note that 'pictorial form' may be substituted by 'form or representation' or 'form of depiction', and that 'pictorial relationship' may be substituted by 'representational relation' (as in 4462).)

Logico-pictorial form is given generally by the gpf, and thus logic is in contact with the world through the gpf. The gpf, as the point of contact between formless logic and the forms of facts, presupposes name and form. But the gpf as the general form of representation is itself cancelled by the logical constant as expressed in the tautology that cancels all representational relations (4462). Therefore, since with the cancellation of the gpf goes the cancellation of the presuppositions inherent in the gpf, the presupposition of name and form is cancelled by logic. In Chapter III we shall further develop this theme of the cancellation or sublation of the dualistic point of contact of the non-dual logic or Brahman with the dualistic world. This series of elucidations answers the second objection.

Third and Fourth Objections

(3) Saguna Brahman is sublatable because it has form, but the gpf, as unrepresentable, has none and cannot be sublated. Hence saguna

Brahman and the gpf are not corresponding counterparts in Advaita and Tractatus.

(4) What sense can be made of the sublation of an unrepresentable? For where nothing can be represented, no difference can arise; whence sublation, relative or absolute, can make no difference.

Reply to the Third Objection

Saguna Brahman is contradictable not because it has form but because it is form. And this is precisely what Wittgenstein says of the gpf:

25/10/14 It [the completely generalized proposition] appears not to HAVE a form but itself to be a form complete in itself.

The gpf is the logical form of reality and is unrepresentable not because it lacks form but because it is the form of form. Saguna Brahman, moreover, is also unrepresentable in a strong sense, for it is identified in Advaita with the deep sleep state (susupti), where no difference exists except that which subsists in latent state. Saguna Brahman in Advaita is the causal or seed state of the universe of name and form, from which all beings spring, as plants from seeds. As such, saguna Brahman has no more form than the state of dreamless sleep, but may be said to be Brahman 'with form' insofar as it contains all form in the latent state, insofar as it is the manifested universe in unmanifest condition. This answers the third objection.

Reply to the Fourth Objection

The fourth objection may be answered by observing that the sense attaching to the cancellation of the unrepresentable gpf is the sense attaching to the negation of the condition of representation, and of course the same applies to the cancellation of saguna Brahman. The sublation of saguna Brahman is the cancellation of the power (sakti) of name and form, just as in the Tractatus the sublation of the gpf is the reduction of the logical form or possibility of representation. Nor is it true that the cancellation of the unrepresentable condition of representation cannot make a representable difference. For the cancellation of the logical form of empirical reality, as symbolized by the gpf, is the negation of the condition or possibility of representable difference. Therefore, since representable difference does make a difference, the cancellation of the condition or possibility of representation does make a representable difference.

CHAPTER II

THE NEGATIVE DIALECTIC

"...the objective mark of the happy life...cannot be a physical one, but only a metaphysical one, a transcendental one."

--Wittgenstein (30/7/16)

1. The Theory of Signification of the Tractatus

Wittgenstein said in the preface of the *Tractatus* that "...the aim of the book is to set a limit to thought...". This same idea is reiterated in a letter to Russell:

The main point is the theory of what can be expressed (gesagt) by prop(osition)s--i.e. by language--(and, which comes to the same, what can be thought) and what cannot be expressed by prop(osition)s, but can only be shown (gezeigt); which, I believe, is the cardinal problem of philosophy. 55

The purpose however, of Wittgenstein's attempt to set a limit to thought has had a varied history of interpretation and misinterpretation. The *Tractatus* was misunderstood by Russell as dealing primarily with logical propositions and was not understood at all by Frege. Wittgenstein wrote to Russell:

Now I'm afraid you haven't really got hold of my main contention, to which the whole business of logical prop(osition)s is only a corollary....I also sent my M.S. to Frege. He wrote me a week ago and I gather that he doesn't understand a word of it all.⁵⁰

The positivists saw the point of the *Tractatus* as the reduction of all that is important to the thinkable, while others ⁵⁷ consider the main

point to be somewhere in the realm of the unthinkable mystical.

In defense of the positivists it must be said that a destructive stance towards metaphysics seems not altogether absent from the *Tractatus:*

The correct method in philosophy would really be the following: to say nothing except what can be said, i.e. propositions of natural science--i.e. something that has nothing to do with philosophy-and then, whenever someone else wanted to say something metaphysical, to demonstrate to him that he had failed to give a meaning to certain signs in his propositions...this method would be the only strictly correct one.

The above proposition taken together with the conclusion:

7 What we cannot speak about must be passed over in silence.

might appear to suggest that Wittgenstein's position was either positivistic or Kantian. Thus we find Erik Stenius, ⁵⁸ a well-known commentator, maintaining that 'Wittgenstein was in essential respects a Kantian philosopher' though, to be sure, a Kantian 'of a peculiar kind'. ⁵⁹ Our purpose in this section is to show that Wittgenstein was neither a positivist nor a Kantian.

Stenius attributes to Wittgenstein a Kantian metaphysic "of a peculiar kind" and identifies the writings of Schopenhauer, "who was in his way a Kantian of a peculiar kind", ⁶⁰ as the Kantian influence on young Ludwig. According to Stenius,

...a fundamental line in Kantian thought, the dichotomy between questions belonging to the provinces of theoretical and practical reason is found in the very title of Schopenhauer's main work, The World as Will and Idea, where the 'World as Will' corresponds to the province of practical reason and the 'World as Idea' to the province of theoretical reason.61

Stenius claims that the same dichotomy is found in the Tractatus in the

distinction between sense and nonsense, ⁶² with sense corresponding to theoretical reason and nonsense (*Unsinn*), which Stenius identifies with the inexpressible mystical that shows itself (6522), corresponding to practical reason.

It is true that Wittgenstein was greatly influenced by Schopenhauer, but the question of course is: 'How peculiar can peculiar be?'' If there are no limits on the degree of peculiarity of a Kantian's doctrines then Spinoza was also a Kantian 'of a peculiar kind'. Stenius states:

Schopenhauer assumed that the mind has access to the *Ding an sich* through the intuition of the will, which rends the 'Veil of Maya' by which theoretical reason covers reality. But this was definitely a non-Kantian turn of Kantianism. To Kant himself any kind of 'knowledge' was a matter of theoretical reason: principles of practical reason cannot be known by any special faculty of intuition but only *postulated* as necessary conditions for the existence of a moral world order. ⁶³

This same "non-Kantian turn of Kantianism" is recognized in what Stenius unwillingly admits to be the "positive ring" in Wittgenstein's notion of nonsense. On the one hand he suggests the um-Kantian translation of 645 as: "The contemplation of the world under the aspect of eternity is the intuition of it as a--limited--whole", hill while on the other he vacillates to the position of attributing positivistic significance to 653 (quoted above), finally concluding that proposition 7 (quoted above) is an escape from, rather than reverence for the ineffable. For some reason, although Stenius recognizes that the conception of philosophy in the Tractatus suggests the adoption of Indian practices for the attainment of union with the ineffable (claiming "that his philosophy did not take this turn is significant"), he nonetheless be-

lieves that the 'ladder', which Wittgenstein advises (654) is to be discarded after being used to climb up beyond the propositional $m\bar{a}y\bar{a}$, is of 'more lasting value...than the philosophical system which is its alleged result". A parallel ambiguity haunts Stenius' account of Schopenhauer's position on human access to the thing-in-itself; for on the one hand he grants that the mind does indeed have access to the thing-in-itself in Schopenhauer's system (see above quote), while on the other he states that the thing-in-itself "appears in Kantianism and in Schopenhauer's philosophy as a symbol for the *unreachable* transcendent [italics mine]". 70

It is surely evident that the identification of any theory that affirms the accessibility to human intuition of the sphere which Kant reserved for the postulates of practical reason is too peculiar a form of Kantianism to be Kantian. For in the denial of human intellectual intuition of the suprasensible Kant laid the foundation of his system, and thus any doctrine that affirms the accessibility of such intuition to human consciousness contradicts Kant's system at its root, as his opinion of mysticism clearly shows:

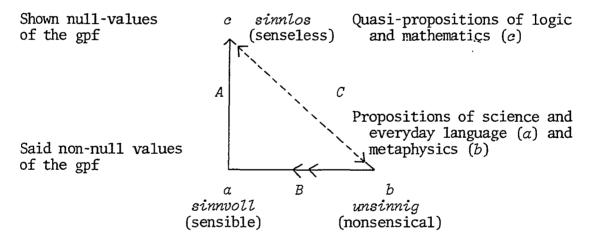
...the *mysticism* of practical reason which turns what served only as a *symbol* into a *schema*, that is, proposes to provide for the moral concepts actual intuitions, which, however, are not sensible... and thus plunges into the transcendent.⁷¹

...men strain their notions of their vocation and their expectation to an unattainable goal, hoping to acquire complete holiness of will, and so they lose themselves in fantastical *theosophic* dreams, which wholly contradict self-knowledge.⁷²

Therefore, whatever their acknowledged debts to the greatness of Kant, it can only be misleading to consider Schopenhauer and Wittgenstein Kantians.

Stenius' mistaken claim that the distinction between sense and nonsense in the *Tractatus* corresponds to the distinction between theoretical and practical reason in Kant's philosophy rests on the failure to observe the differences between the logic of each pair of terms. Practical reason is one pole of the fundamental *dichotomy* in Kant's philosophy, as Stenius observes, while nonsense figures in the *trichotomy* represented by 'sinnvoll/unsinnig/sinnlos' (4, 4461, 44611). This trichotomy may be diagrammed as follows:

System I
Fundamental Modes of Signification in the Tractatus



The propositions of everyday language (and of science) are *sinnvoll* or sensible, while those of metaphysics are *unsinnig* or nonsensical. The propositions of logic are unique (6112) in being neither sensible nor nonsensical but *sinnlos*, or, as we should like to say in order to avoid confusion with 'nonsensical', the propositions of logic are unique in being depictionless:

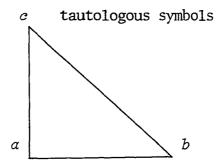
4461 Tautologies and contradictions lack sense (sind sinnlos).

Tautologies and contradictions are not, however, nonsensical (*unsinnig*). They are

part of the symbolism, just as '0' is part of the symbolism of arithmetic.

The modes of signification are the semantic or epistemological counterparts of the syntactic distinctions diagrammed below.

System I-A
Fundamental Syntactic Distinctions of the Tractatus



non-tautologous, syntactically well-formed symbols

non-tautologous, syntactically ill-formed symbols

As diagrammed in System I, side B of the right triangle represents the dimension in which Sinn (sense) and Unsinn (nonsense) are exhaustively contrastive. Since the system is two-dimensional (ab is the y-dimension; ac is the x-dimension) B is merely a sub-exhaustive contrast. The exhaustiveness of the contrast consists in the fact that there is no intermediary on B indifferent to its extremities; i.e. there is no point of symmetry on B, representing propositions both (neither) sinnvoll and (nor) unsinnig. The sinnlos (senseless) statements of logic and mathematics are quasi-propositions and not genuine propositions (62, 4461, 4462, 4464, 4021). Moreover, sinnlos statements are shown by both sinnvoll and unsinnig propositions. One therefore cannot argue that sinnlos is a point of indifference to Sinn and Unsinn on the propositional spectrum and that Sinn and Unsinn are not exhaustively contras-

tive. A proposition of everyday or scientific language is either sinnvoll or unsinnig, either has sense or is nonsense; sense is definite (323) and there are therefore no true borderline propositions indifferent to Sinn and Unsinn. (In Wittgenstein's later philosophy such vague borderline propositions are tolerated.) In the single dimension of B therefore, sinnvoll and unsinnig are exhaustively contrastive.

To the extent that the line B can be reduced or mapped into a *point* of polarity in a higher dimension of the system it is sub-contrastive. The notion of sub-contrastiveness may be explained as follows. In system I, line A represents the distinction between what can be said and what can only be shown: sense is sayable, the senseless is showable and "what ean be shown, eannot be said" (41212). Line B is reduced to or mapped into point a in the system as indicated by the double arrow from b to a because propositions say their sense (and point a represents a proposition's sense). Unsimning propositions have no sense to say and hence B is conflated or mapped into a. Thus B is sub-contrastive because the distinction between saying and showing represented by A is broader than that between Sinn and Unsinn, represented by B.

Line C represents the relation between unsinnig metaphysical propositions and the sinnlos logic that can only be shown. C is dotted to indicate that the contrast between what is shown (logic) and metaphysical propositions does not parallel the real contrast of A between what can be said and what can only be shown. Side A represents the exhaustive super-contrast of the Tractatus, in terms of which the essence of language is intended to be revealed; on super-concepts Wittgenstein wrote:

...what is peculiar, profound, essential in our investigation [in the *Tractatus*], resides in its trying to grasp the incomparable essence of lan-

guage. That is, the order existing between the concepts of proposition, word, proof, truth, experience, and so on. This order is a *super*-order between--so to speak--super-concepts.⁷³

The contrast between the poles of a super-contrast (A) is not of the same type as the contrast between one pole of a super-contrast and a conflatable pole of a sub-contrast; C is dotted to indicate this difference.

The single lower arrow on \mathcal{C} indicates the transformation of what can only be shown, i.e. of *sinnlos* logic, into *unsinnig* metaphysical propositions through the error based on the negation of the *Grundgedanke* of 40312. That is, through the attempt to represent *sinnlos* logic in words, nonsensical metaphysics is born. The single upper arrow on \mathcal{C} indicates that *unsinnig* metaphysical propositions, though strictly without meaning, nevertheless intimate the transcendent *sinnlos* logic; what metaphysical propositions mean to say is correct though it cannot be said (e.g. "...What the solipsist *means* is quite correct; only it cannot be *said*, but makes itself manifest" (562)). *Sinnvoll* and *unsinnig* meet at *sinnlos*, where the *sinnlos* logic that propositions show (upper arrow on \mathcal{L}) meets the *sinnlos* that metaphysical *Unsinn* intends (562) to express (upper arrow on \mathcal{L}).

The claim that the self-manifesting mystical is merely on the order of a regulative abstraction might apply at the lower levels of syntactic description and reduction (vide infra, III), but that Wittgenstein did not intend such a claim to apply at the highest level of his thought is evident in his theory of signification, according to which what some metaphysical propositions such as those of the *Tractatus* and those affirming solipsism (562) mean to say, manifests itself as true and cor-

rect, though unsayable, something which cannot be claimed to be the case with regulative abstractions and conceptions of the noumenon in the negative sense.

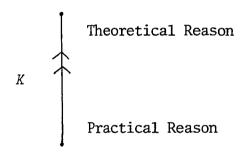
The upper arrow on \mathcal{C} indicates that *unsinnig* points toward *sinnlos* as its positive term or intended content, as the verbal confusion of "The barn flew into the chicken" points toward "The chicken flew into the barn" as its intended content. The difference between "The barn flew into the chicken" and "The essence of substance is existence" is that the former is a case of accidental verbal impropriety while the latter is a case of the unavoidable verbal impropriety of metaphysical expression (cf. *infra*, p. 55). Metaphysical statements are nonsense, but what they mean to express can be understood as true (cf. 562), although perhaps "only by someone who has himself already had...similar thoughts."

Very different from what we have described is the situation in Kant's system, where practical reason merely points back to theoretical reason; it cannot point toward or intend to express the suprasensible reality as unsinnig does in pointing toward sinnlos because in Kant's system pure reason is empty and there is no intellectual intuition. Practical reason is thus reduced, as indicated by the double arrow in System II below, by theoretical reason, in the sense that its emptiness is understood in terms of theoretical reason's standards. Unsinn on the other hand, unlike practical reason, is interdimensionally irreducible, that is, what is shown, its intended content, is irreducible. The metaphysical counterpart of sinnlos logic, which metaphysical statements mean to express is the shown reality which cannot be judged as empty by the empirical standards of sinnvoll propositions. In the empirical context, metaphysical Unsinn is reduced, since intradimensionally, Unsinn is

without content in the sense that what metaphysics means to express is not representable. But in the non-empirical context, metaphysical Unsinn intimates the reduction of empirical standards by pointing away from precedents of semantic appeal toward syntactic (i.e. logical) precedents (vide infra, III, 4). Thus the upper arrow on C indicates that by pointing to the higher standard of sinnlos logic, metaphysics intimates the limit of the lower empirical standard.

System II

Modes of Significance in Kant's System



Clearly, Kant's pair of concepts as diagrammed above in System II is of a different logical structure than Wittgenstein's (System I). Unlike Sinn/Unsinn, K is supercontrastive; that is, K is the fundamental distinction of the system and is conflated by no other distinction of the system. K organizes all of Kant's philosophy and is a straightforward dichotomy. Unlike Sinn/Unsinn, K does not constitute a set of subpoles of a broader contrast. There is no mode of significance in Kant's system that is neither practical nor theoretical; however in the Tractatus, logic is neither sinnvoll nor unsinnig, but sinnlos. Sinnvoll and unsinnig propositions are of the same syntactic type (54733) (i.e. they are non-tautologous symbols), but sinnlos propositions are of a differtype (i.e. they are tautologous symbols); this contrasts with practical

and theoretical reason which are not of the same epistemological type.

Practical reason is below theoretical reason in the sense that it depends upon the latter for the evaluation of its epistemological status; sinnvoll and unsinnig propositions are at the same level with respect to sinnlos propositions, for the propositions of logic are entirely independent of the sense of their constituent propositions.

Thus, if Stenius is correct in claiming that the distinction between Sinn and Unsinn corresponds to the distinction between theoretical and practical reason, then according to our diagrams Wittgenstein is not a Kantian. For the diagrams show that Kant's basic distinction (corresponding to ab) is conflated by Wittgenstein's fundamental distinction (ac). It is thus highly misleading to attribute Kantianism to Wittgenstein, and he no doubt would have regarded it as a serious misunderstanding.

If an objector were to insist on the parallelism of A and K it could be pointed out that such parallelism is impossible on the grounds of the impossibility of *postulating* anything in *sinnlos* logic. Wittgenstein denies the possibility of postulating the inexpressible:

- 41212 What can be shown cannot be said.
- one in which the nature of the natural and inevitable signs speak for itself.
- It now becomes clear why people have often felt as if it were for us to 'postulate' the 'truths of logic'. The reason is that we can postulate them insofar as we can postulate an adequate notation. (cf. 61224)

The claims of practical reason are postulates. Therefore the objection must be rejected.

The emptiness of metaphysical statements is not understood by Kant and Wittgenstein in the same sense. The former viewed them as empty because he could find no experience of intellectual or mystical intuition; the postulates therefore, strictly speaking, have no place in Kant's Dogmatically stating that all human intuition is sensible, Kant defined the categories of pure reason as empty outside the empirical manifold of sense intuition. Wittgenstein however, understood metaphysics' emptiness in terms of the inability of language to express the truth shown to the suprasensible intuition of mystical contemplation. Taking logic as the philosophical basis of the value, will and Self that are significant for philosophy, Wittgenstein attributed positive meaning to these limits of the world by drawing a sharp distinction between being without sense (sinnlos) and being nonsensical (unsinnig) (4461c, 44611). What is shown by reality as the logic of language is thus neither nonsensical (unsimnig) nor empty unless and until the philosopher attempts to put it into words. Like music, logic and its metaphysical counterparts simply cannot come down to earth, cannot be put into words, without being destroyed in the process. Far from being a noumenon in the negative sense, what cannot be put into words makes itself manifest (6522) as the mystical. Metaphysics was inexpressible for Wittgenstein not because it is either an impoverishment of cognition or of sense nor because its subject is humanly inaccessible, but because the depth of its richness exceeds the powers of speech. Engelmann said of Wittgenstein:

When he takes immense pains to delimit the unimportant it is not the coastline of the island which he is bent on surveying with such meticulous accuracy, but the boundary of the ocean. 76

Thus the diatribe against metaphysics in the Tractatus is based on a thesis concerning the limits of thought and language and not of intuition, whereas Kant's polemic is based on the thesis that the limits of sensible experience and of the forms of intuition coincide. ment along Wittgenstein, the logical empiricists and Kant is thus as superficial as the resemblance between silence and denial. Nor is his mystical silence merely a discursive silence rather than an Advaitic silence of plenitude, for the central problem of the Tractatus is the problem of life (6521) which Wittgenstein maintained could only be solved beyond the limits of space and time (64312(4)), and hence beyond the limits of discursive investigation. Wittgenstein's silence of the seventh and final proposition was not a denial of the metaphysical, but its adequate expression, not a silence about something but silence as an expression of the mystical feeling (Gefühl) of existence per se, not the silence of one asleep to what is higher, but of one awake to the limits of the world:

- It is not *how* things are in the world that is mystical, but *that* it exists.
- Feeling the world as a limited whole--it is this that is mystical.

2. The Limits of Empiricism According to Advaita and the Tractatus

Wittgenstein is interpreted as a positivist and as a Kantian on the grounds that he endeavors to demonstrate the limits of empirical signification. If such interpretations are well-founded, then Śaṁkara, per impossibile, would also be interpretable as a positivist or as a Kantian, since he also takes pains to delimit the range of empirical understand-

ing. It seems clear that that fact that a philosopher evinces an interest in drawing the limits of empiricism is not a sufficient condition for interpreting his position as either positivistic or Kantian.

In the Tractatus, the delimitation of the scope of strictly meaningful discourse performs the same function as the strict delimitation in Advaita of the value and utility for liberation (moksa) of the injunctions and prohibitions contained in the ritualistic part (dharmakānda) of the authoritative scripture. Sainkara's denial that propositions conveying injunctions and prohibitions impart the liberating knowledge of Brahman was intended to draw a limit to the degree of truth conveyable by what the Jaimini Mīmāmsā School saw as the essence of language. The Mimamsa School, an orthodox school of Indian thought, claimed that no scriptural statement is meaningful unless it conveys or is relevant to an injunction or prohibition, that is, unless it can be understood in terms of a reference to activity. Their theory of meaning is thus related to what Western philosophy refers to as operationalism. Similarly, Wittgenstein's aim in drawing the limits of language was to show that the problem of life is insoluble by means of the sense conveyed by what in the strict empirical sense can technically be said:

- The sense of the world must lie outside of the world.
- 64312(4) The solution of the riddle of life in space and time lies *outside* space and time.

 (It is certainly not the solution of any problems of natural science that is required.)

 [cf. 6432, 6521]

Measured against a conception of philosophy as a system of elucidations leading in stepwise fashion beyond the empirical conditions of space, time and representation to transcendental value, eternal Self and mystical silence, empirical science can only seem limited.

Wittgenstein's critique of the expressive scope of representational language corresponds to Śamkara's critique of Mīmāmsā operationalism insofar as both operational and representational reductionism both tend towards empiricism. Taking Brahman out of the domain of operationalism corresponds to taking logic (40312) out of the domain of representativity, for Jaimini's Mīmāmsā operationalism is the domain of action (karman), which is in turn the domain of language and representation. Samkara's diatribe against the Jaimini school thus corresponds in a certain sense to the Tractatus' argument against the existence of 'logical constants'.

- 54 ...there are no 'logical objects' or 'logical constants' (in Frege's and Russell's sense).
- 40312 ...there can be no representatives of the *logic* of facts.

These statements correspond at the syntactic level to:

Brahman is not an action or fruit of action.
Brahman is not perceivable.

The unrepresentability of logic is the syntactic counterpart of the transcendence of 'what is higher' in the *Tractatus* and is the corresponding syntactic counterpart of the unperceivability and incompatibility with action (*karman*) of transcendental Brahman. "There are no pictures of logic" corresponds at the syntactic level to "There are no thoughts or mental modifications of Brahman"; Brahman, like logic, cannot be captured or comprehended by psychological consciousness (*vritticaitanya*), hence the anti-psychologism of the *Tractatus*, but only by pure consciousness (*suddhacaitanya*), the corresponding coordinate of the vision of the world *sub specie aeterni* (645).

Both ritualistic worship and the representative metaphysics on which it is based are in Śańkara's view futile. Correspondingly, Wittgenstein's *Grundgedanke* emphasizes the nonsensical nature of the syntactic counterpart of representative metaphysics. Language, ritual practices and pictorial representations are limited to the world of finite facts according to Wittgenstein and Śańkara and hence cannot serve as means to real freedom and value (641). Just as, in Śańkara's view, the ritualist loses beatitude and freedom by assimilating Brahman to the fruits of action, i.e. to the karmically representable, so also, in Wittgenstein's view, the philosopher misses the sense of life (6521(2)) by assimilating what is higher to the linguistically representable.

Śamkara's and Wittgenstein's common philosophical aim is evident in the counterpart correspondence between the former's distinction between the knowledge of Brahman and the knowledge of duty (dharma) and the latter's distinction between the understanding of logic (5552) and the understanding of discourse or doctrine (613). Both distinctions are radical: Brahman, being already existent, does not depend for its essence on human modes of representation or action (whereas ritualistic duty does), 77 and thus corresponds in these respects to logic, which is not "a field in which we express what we wish with the help of signs, but rather one in which the natural and inevitable nature of the signs speaks for itself" (6124). Logic is neither a field in which we can make pictures of reality as we imagine it (whereas discourse is such a field (401)), nor one in which we deal with forms that we can invent (5555) (as discourse again is).

The similarity of their conceptions of reality again emerges in the fact that both Wittgenstein and Śamkara minimize the value of action for

the person who would know the world aright. Indeed, it may be argued that Wittgenstein devalues action even more than does Samkara. For while Wittgenstein denies that the will has causal efficacy in the world, Śamkara at least admits that it can bring about certain beneficial albeit limited effects, such as the attainment of temporary psychophysical satisfaction. Moreover, there is also an attempt in Advaita to specify the distinction between the world and what is higher in terms of the differences between the kinds of statements used to convey the knowledge of each. Advaita argues that the brahmakanda or jñanakanda differs from the dharmakanda or karmakanda (portions of the authoritative scriptures dealing with knowledge of Brahman and of duty respectively) on the basis of a distinction between the mode of signification of their respective statements, that of the former being non-relational (akhandartha) and secondary, that of the latter being relational and primary. 78 The Tractatus makes an outstanding contribution to the philosophy of Advaita in its full-scale elaboration of the distinction between non-relational (44661), shown logic and relational, sayable discourse or doctrine.

In summary then, the criticism in both the *Tractatus* and Advaita is not directed against either metaphysics or philosophy as such, but against wrong notions of philosophy and metaphysics. Metaphysics conceived as a set of positive prescriptions or pictures of reality cannot, according to both Wittgenstein and Śamkara, lead to what is higher, however as a set of negative remarks or elucidations (*infra*, II, 5) aimed at separating the empirical chaff of the world from its metaphysical kernel it can lead to the silence of the uniterable. Like Śamkara, Wittgenstein attempted to strip from discourse about the metaphysical

all that is ordinarily, scientifically and philosophically considered significant, for what is higher is

...that Brahman, whence all speech, with the mind, turns away unable to reach it...⁷⁹

Of course, this metaphysic of silence is equivalent to the elimination of all talk, and is exactly what Wittgenstein desired:

He [Wittgenstein] has penetrated deep into mystical ways of thought and feeling... 80

3. The Nonsensical

Sinnvoll, sinnlos and unsinnig (i.e. sensible, senseless and non-sensical) have so far been discussed in connection with the distinction between saying and showing, however the theory of signification is considerably complicated by a number of subdistinctions within the concept of the nonsensical which, though clearly evident in the *Tractatus*, have not been noticed by commentators.

For convenience of reference we shall number the types of nonsensical proposition mentioned by Wittgenstein. The *unsinnig-1* type of proposition allows one and the same sign to be associated with different symbols:

- 3323(1) In everyday language it frequently happens that the same word has different modes of signification—and so belongs to different symbols—or that two words that have different modes of signification are employed in propositions in what is superficially the same way.
- In this way the most fundamental confusions are easily produced (the whole of philosophy is full of them).

An example of an *unsinnig-1* proposition is, 'Socrates is identical' (5473). Of this type of proposition Wittgenstein remarks:

5473(2)e The proposition is nonsensical because we have failed to make an arbitrary determination, and not because the symbol, in itself, would be illegitimate.

The arbitrary determination that we have failed to make in such cases is that of specifying the meaning of certain signs; the problem is not that of illegitimate logical notation:

Frege says that any legitimately constructed proposition must have sense. And I say that any possible proposition is legitimately constructed, and, if it has no sense, that can only be because we have failed to give a *meaning* to some of its

constituents.

(Even if we think we have done so.)

Thus the reason why 'Socrates is identical' says nothing is that we have not given any adjectival meaning to the word 'identical'...

This error is based on the confusion (referred to in 3324) of one and the same sign with different symbols (3321). Wittgenstein continues:

54733 ...For when it appears as a sign for identity, it symbolizes in an entirely different way--the signifying relation is a different one--therefore the symbols are also entirely different in the two cases: the two symbols have only the sign in common, and that is an accident.

In such cases, although we believe ourselves to have discerned a word's meaning (54733), we have actually failed to discriminate between the different symbols associated with the word according to the different contexts of its use. The word then appears to have meaning (Bedeutung), be it philosophical or otherwise, only due to the superimposition of the meaning proper to the context in which it is well-defined upon the meaning proper to the context in which it is undefined, whereas in fact the word has no meaning.

Unsinnig-2 propositions, instantiating a more subtle form of confusion, stem from the syntactic deficiency of notation constructed with-

out full respect for the logic of language. The problem with such propositions is that they express the failure to discriminate between nonformal properties, which can be said, and formal ones, which can only be shown. Formal properties are syntactic or logical properties pertaining to the form of representation, i.e. to logico-pictorial form, that is, to the very symbolism itself. It is thus nonsensical to attempt to picture them (4126, 41272d) or, what amounts to the same, to ask whether they exist (41274). It is *unsinnig-2* to use the sign for a pseudoconcept (i.e. the concept for a formal property) as a proper conceptword (41272), and thus, pseudo-propositions such as, 'There are objects', '1 is a number', 'There is only one zero', etc. are *unsinnig-2*. What such propositions mean to express is shown by the variable which expresses the formal concept (41271, 4126, 4127).

Self-referring propositions, such as Russell's paradox (vide~3333), of the form F(F(x)) (3333), ostensibly about their own formal properties, are unsinnig-2, and are excluded as ill-formed formulae or illegitimate symbols in an adequate logical notation. In contrast to unsinnig-1 propositions, unsinnig-2 propositions are such that the symbol itself is illegitimate (cf. 5473 supra). The ambiguous association of signs and symbols characteristic of Unsinn-1 is based on the failure to make certain arbitrary assignments of meaning, whereas Unsinn-2 rests on the failure to recognize the inutility of arbitrary assignments of meaning in the expression of formal concepts.

Akin to unsinnig-2 propositions are unsinnig-2' metaphysical propositions, which again mean well (562), but cannot be said. Like the claim of solipsism, which in the *Tractatus* is the unthinkable and inexpressible notion of the one world-soul (563, 17/10/16, 15/10/16, esp.

25/5/15; et infra, IV), the intent of unsinnig-2' propositions cannot be said but makes itself manifest (562). The mystical essence of the world, for example, though it is the source of meaning and value in life according to Tractatus, cannot be expressed any more than the intended content of propositions such as 'There are alephobjects' (41272) and modus ponens (61264). Unsinnig-2' propositions are the metaphysical formulations with respect to the limit of the world of unsinnig-2 propositions, which are logical formulations with respect to the limits of language and syntax (cf. infra, IV). Unsinn-2' is thus the metaphysical counterpart of the syntactic impropriety of Unsinn-2. Metaphysics in the Tractatus follows logical syntax and evidently metaphysical confusion follows logical confusion.

The chief difference between *Unsinn-1* and *Unsinn-2-&-2'* is that the latter, especially in its metaphysical form, can act as the rungs of the ladder which leads to the understanding of what is higher, when and only when, it is grasped into a philosophically conscious manner, i.e. when it is recognized to be a symbol that is illegitimate on account of intending to say what cannot be said. The distinction between philosophically conscious and philosophically unconscious apprehensions of metaphysical statements marks the difference between the supposition that *unsinnig-2* statements are *not* representatives of the logic of the world and the supposition that they are representatives of the logic of the world. It thus marks the content of Wittgenstein's *Grundgedanke* (40312) or fundamental illumining insight.

The conscious philosophical use of metaphysical statements (unsinnig-2') is based on the recognition that what they mean is correct but, as in the case of the thesis of solipsism, cannot be said due to

the implicit, unavoidable presupposition by all discussion of name and form, as given in the gpf (cf. infra, pp. 80-85). It is this kind of usage which the Tractatus exemplifies; hence Wittgenstein states that his book will perhaps be "understood only by someone who has himself already had the thoughts that are expressed in it". 81 Only someone who has already thought along similar lines will be in a position to understand Wittgenstein in this philosophically conscious manner as attempting to show what cannot be said. Hence we define unsinnig-s propositions with reference to this conscious usage, in contrast to unsinnig-u propositions which are defined in terms of the unconscious usage of unsinnig-2 & 2' propositions. In a loose sense of saying we can use unsinnig-2 & 2'-s propositions to 'say' something. Clearly, propositions which are only unsinnig-1 cannot be unsinnig-s, for failure to make an arbitrary determination reveals lack of consciousness in the usage of language, whereas unsinnig-s propositions presuppose consciousness of the arbitrary and non-arbitrary logical requirements of sensible expression.

In neither meaning nor appearing to say anything, the *sinnlos* logical propositions gain the distinction of not being *unsinnig. Unsinnig-s* propositions, correct in intention, intend to say nothing, and succeed in intent (562(2)), and hence are on a par, as far as intention (though not syntax) is concerned, with *sinnlos* propositions. *Sinnlos* propositions are sheer syntactic essence and in this differ from *unsinnig-s* propositions.

The psychological consideration of *use*, with which *unsinnig-s* was distinguished from *unsinnig-u*, plays no important role from the logical point of view, and hence the distinction is really an artificial one. Therefore Wittgenstein, in keeping with his strenuous avoidance of

psychological or semantic considerations, classifies even the well-meant metaphysical propositions as <code>wnsinnig</code>. For in fact, there are no well-meaning propositions, but only well-meaning persons. Wittgenstein does however admit that <code>en route</code> to the vision of the world <code>sub specie aeternitatis</code>, metaphysical propositions are useful as rungs of the ladder to mystical vision. Since it is not to be supposed that Wittgenstein recommended that the ladder of his <code>Tractatus</code> be thrown away while the climber is still climbing it, we may conclude that Wittgenstein attributed to metaphysical propositions of the <code>unsinnig-s</code> type a provisional, practical or heuristic value.

4. The Advaitic Lineaments of the Theory of Signification

The three levels of reality distinguished in Advaita are paramārtha, vyavahāra and pratibhāsa. Paramārtha is the level of Brahman, the absolute metaphysical reality, and corresponding coordinate of what is higher in the Tractatus. Vyavahāra is the level of māyā, the transcendental illusion, and corresponding coordinate of the world of the Tractatus. Pratibhāsa is the level of empirical illusion, including nonveridical percepts such as mirages, hallucinations, dreams and the like. Vyavahāra and pratibhāsa are alike in being modes of appearance, and different in being transcendental and empirical modes of appearance (mūlāvidyā and tulāvidyā) respectively. That is, vyavahāra is the 'hard', public illusion while pratibhāsa is the 'soft', private illusion; the former defines while the latter is an aberration of ordinary empirical consciousness.

In chapter III it will become clear that what is higher in the

Tractatus is the corresponding coordinate of paramārtha or Brahman and that the world is the corresponding coordinate of vyavahāra or māyā with respect to the relationship of sublation that obtains between Brahman In this section we will show that the concept of the nonsensiand māvā. cal in the Tractatus is the partially corresponding syntactic counterpart of pratibhasa. The nonsensical in the Tractatus only partially corresponds to the level of empirical illusion in Advaita because the latter, in including phenomenological and psychological empirical illusions, is somewhat broader than the former, which is restricted to conceptual illusions grounded in syntactic improprieties. In spite of the incompleteness of the correspondence, an incompleteness due solely to the idiom of expression or model of exposition of the Tractatus, the real counterpart relationship between the nonsensical and pratibhāsa is evident in the fact that the nonsensical, like pratibhasa, allows of being superceded, cancelled, devalued or sublated at the empirical level at which sinnvoll language functions. All unsinnig propositions are recognizable as unsinnig relative to the standards of empirical language. Unsinnig-1 propositions, belonging to the same class of propositions as "The good is more or less identical than the beautiful", are easily recognizable as nonsensical by any speaker of ordinary language. Unsinnig-2 propositions manifest themselves in ontological language in the form of propositions containing concepts such as 'the bibliography that lists all bibliographies that do not list themselves', or 'the barber who shaves all those who do not shave themselves', which are also recognizable as nonsensical relative to the standards of sensible discourse. The fact that unsinnig-2' propositions are similarly recognizable as lacking straightforward empirical content no doubt in part explains the prevalence of a cynical attitude towards philosophy (not only on the part of positivism but also) of the 'man-in-the-street', who regards the utterances of philosophers as for the most part nonsensical. Since all unsinnig propositions arise out of the failure to understand the logic of sensible language, they all allow of being superceded, cancelled, devalued or sublated relative to the level of sensible or empirical discourse. The illusion of sense created by nonsensical language is therefore an empirical illusion corresponding to the empirical illusion definitive of pratibhāsa.

The illusion of sense created by the false grammatical disguise of nonsensical propositions further resembles the illusions of pratibhāsa described in Advaita, for there is a positive appearance of sense created by the propriety of the grammatical disguise of some unsinnig propositions that corresponds to the positive illusion (bhāvarūpam ajñānam) created by pratibhāsa. The positive illusion of pratibhāsa is due to the activity of memory in superimposing on the object what does not belong to it, while the positive appearance of sense of some unsinnig propositions (e.g. 'I had lunch with the barber who shaves all those who do not shave themselves') is due to the habit, a function of memory, of attributing referential meaning to grammatically correct sentences, thereby superimposing sense on the nonsensical.

5. Philosophy as Negative Dialectic in Advaita and the Tractatus

Wittgenstein and Śamkara share a conception of philosophy as negative dialectic. In the *Tractatus* philosophy is not a series of positive affirmations about reality but rather a ladder to be discarded once its

purpose has been served (654):

4112 Philosophy does not result in 'philosophical propositions'...

Philosophy is a description (*infra*, III, 3, 4) of the *limits* of affirmation (4114), intended both to exclude metaphysical propositions from the class of literally sensible affirmations and to show (4115) what metaphysics means to say.

The negativity of the Tractatus' approach is evident in the fact that the Grundgedanke (40312) or fundamental illumining insight of the work is formulated in negative terms: there are no representatives of the logic of facts (40312). The sole logical constant, N(), the Sheffer stroke, is negative in form:

If
$$\xi$$
 has only one value, then $N(\overline{\xi}) = -p$ (not p); if it has two values, then $(\overline{\xi}) = -p - q$ (neither p nor q).

Joint negation, 'neither p nor q', thus expresses the essence of logic just as in Advaita 'Neti', neti', 'Not this, not that', expresses the essence of Brahman (cf. infra, pp. 153-154).

The only strictly correct method in philosophy consists in the negative activity of demonstrating the unsayability of metaphysics (653). Wittgenstein's elucidations are intended to silence, negate or cancel the attempt to picture what is too subtle for words to convey, namely the mystical that shows itself (6522). And thus the essence (vide Preface of the Tractatus) of Wittgenstein's philosophical method and of the Tractatus is:

What we cannot speak about we must pass over in silence.

In Samkara's view philosophy does not and cannot *create* liberating knowledge. It can only promote the negation, sublation or cancellation

of $avidy\bar{a}$ by turning the student away from the psycho-physical impediments $(up\bar{a}dhis)$ that project the name and form of $m\bar{a}y\bar{a}$. The following passages state the negative purpose of philosophical enquiry $(vic\bar{a}ra)$ in Advaita.

If it should be objected that if Brahman is not an object (of speech, mind, etc.) the \dot{sastra} cannot possibly be its source, we refute this objection by the remark that the aim of the \dot{sastra} is to discard all distinctions fictitiously created by Nescience. The \dot{sastra} 's purport is not to represent Brahman definitely as this or that object...⁸²

...the removal of the obstacles which lie in the way of release is the only fruit of knowledge of Brahman...83

 $M\bar{a}y\bar{a}$ is animacaniya or indeterminable and therefore the enquiry into $avidy\bar{a}$ is directed solely towards transcending false conceptions; as in the Tractatus (6521), so in Advaita, once the world of $m\bar{a}y\bar{a}$ is transcended the problem of $avidy\bar{a}$ vanishes.

Samkara, claiming that the positive assertions of speculative metaphysics (utpreksa) are unfounded (apratisthita) and hence incapable of enunciating the freeing insight, severely curtails the scope and value of reason (tarka). Tarka is acceptable only to the extent that it conforms to the trans-conceptual insights of non-dual 'experience' as recorded in authoritative scripture (sastra). Reason in Advaita thus is bridled by the suprasensible intuition expunged in Kant's system. In its service of scripture however, tarka makes no positive affirmations, for it is not a pramāṇa or valid means of knowledge. Unguided by experience, reason (kutarka) is said to lead to interminable and irreconcileable controversy and is therefore regarded as barren. Guided by the pramāṇas, tarka assists in the negative function of sweeping away or sublating the obscuration (āvarana) and distortion (viksepa) arising

from the name and form definitive of nescience, which is to say that the pramāṇas aided by reason culminate in their self-destruction, so thorough is the negative dialectic of Non-Dualism carried to its logical conclusion. As Devaraja states: "the pramāṇas fulfill themselves by generating a knowledge which involves their negation or annulment." ⁸⁴
Potter's remarks bear on the issue of the negative nature of metaphysics in Advaita:

...They [certain post-Samkarite Advaitins] show a penchant for explaining their reluctance to resolve these difficulties through appeal to the unimportance of speculation and the relatively greater importance of teaching, which though ultimately false, nevertheless guides the pupil in the right direction. One may see here an attempt on the part of Advaita to absolve itself of responsibility toward the kind of doubt I have been suggesting gives rise to systematic philosophy.... As Advaita develops, there is a growing awareness that the only proper function of the philosopher's tools is the production of greater maturity--greater readiness for freedom--by the use of negative dialectic and subtle readings of Scriptures. Positive systems of theories become passé....Advaita begins to take on the look... of an eschewal of systematic philosophy rather than an espousal of it.85

Although Samkara's program is not the affirmation of unity but only the denial of difference, it is to be remembered, that the standards of truth and reality of $m\bar{a}y\bar{a}$ hold good so long as the higher truth of paramārtha is unrealized. Thus, although the texts and teachings of Advaita are ultimately false $(mithy\bar{a})$ or dependent on nescience $(avidy\bar{a}vadvisay\bar{a}ni)$, that is, although the primary means of attaining intuition of non-duality are themselves utterly $m\bar{a}yic$, they are nevertheless, for all empirical or practical purposes, unchallengeable. Prior to $s\bar{a}ks\bar{a}tk\bar{a}ra$ or realization, the empirical world's reality is as unquestionable as the reality of dream-phantoms for the dreamer prior to awakening.

For so long as a person has not reached the true knowledge of the unity of the Self, so long it does not enter his mind that the world of effects with its means and objects of right knowledge and its results of actions is untrue...Hence, as long as true knowledge does not present itself, there is no reason why the ordinary course of secular and religious activity should not hold on undisturbed.⁸⁶

In spite of the negativity of the non-dualistic dialectic there is thus adequate room for positive empirical content in Advaita, and one cannot object to the Advaitic interpretation of the *Tractatus* on the grounds that the negative thrust of Wittgenstein's Non-Dualism would render null and void all canons of scientific and everyday discourse. In this connection there is the controversial proposition:

55563(1) In fact, all the propositions of our everyday language, just as they stand, are in perfect logical order.--That utterly simple thing, which we have to formulate here, is not an image of the truth, but the truth itself in its entirety.

Some commentators interpret this proposition as contradicting Wittgenstein's 'ideal-language theory', and as indicating his endorsement of a philosophical interest in ordinary language as the highest standard of analysis, while others, assuming that the logically adequate symbolism which serves as the standard and tool of the logical investigation of the Tractatus, cancels and contradicts the natural symbolism of everyday language, in the same way in which the reductions of the theory of definite descriptions cancels and contradicts the apparent logical form of its reductum, namely through the substitution of an unexceptionable or ideal sense for an exceptionable one, ignore the proposition and maintain that everyday language in Wittgenstein's view is obsolete. To those who hold an ideal language interpretation of the Tractatus proposition 55563 seems to be an inexplicable reversal of position.

Wittgenstein's reply to the supposition that the ideal logical essence of language renders everyday language obsolete by substituting an unexceptionable sense is that logic is not simply one empirical entity among many (40312). No new empirical language awaits construction:

17/6/15(2) But this is surely clear: the propositions which are the only ones that humanity uses will have a sense just as they are and do not wait upon a future analysis to acquire a sense.

In the *Philosophical Investigations* Wittgenstein recapitulates the position of the *Tractatus* as follows:

98. On the other hand it is clear that every sentence in our language 'is in order as it is'. That is to say, we are not striving after an ideal, as if our ordinary vague sentences had not yet got a quite unexceptionable sense, and a perfect language awaited construction by us....

It follows that the assumption that the program of the *Tractatus* is the substitution of a preeminently unexceptionable sense for extant sense (the ideal language thesis) is unacceptable. Nor is 55563 supportive of the ordinary language thesis, for language is in order as it is not because it is already ideal but because the ideal is sinnlos rather than sinnvoll.

Wittgenstein's program is not the substitution of one sense for another but of the senseless for sense. His program is not the revision of everyday language with its limiting presupposition of name and form, but rather its absolute transcendence or overthrow in what is beyond sense as expressed the *sinnlos* propositions of logic. Wittgenstein thus rejected the logico-metaphysical substitution of a higher for a lower level characteristic of Russell's theory of types. Since propositions have a determinate sense and are in order as they are it is the truth in its entirety that concerns Wittgenstein in 55563 rather than the substi-

tution of this for that sense. The truth in its entirety, namely the logic for depiction, cannot say, "'The world has this in it, and this, but not that' "(561). In saying: This is how things stand (45), language is in perfect logical order as an application of the logic which however, is prior to how things stand (5552) and prior to this. Logic is sinnlos, and hence,

5557(4) It is clear that logic must not clash with its application.

The logical essence of language for Wittgenstein therefore cannot be given either in a revision of language amounting to no more than a new application of logic or in a remodelled image or simile of the truth in its entirety taking the form of an empirically superior language that clashes with the language it replaces. The remark of 55563 that language is in order as it is may be construed as denying that the 'experience' necessary to understand logic (55562) replaces one empirical sense with another more adequate or ideal sense. For this reason the world is "altogether different" (6423) and radically altered (cf. 6431) from the standpoint of logic.

The alteration of the world in the new standpoint provided by the transcendental 'experience' necessary to understand logic is, as in Advaita, not provided by mere intellectual comprehension, for the thoughts that comprise intellect are facts and as such, like the empirical will, lack causal efficacy (6374). The limit of the world is altered by the will of the transcendental metaphysical self rather than by any thought-process traceable to the empirical will. Since the limit of the world is unthinkable, the world does not cease to appear real or unlimited (cf. 645), and hence problematic (64321), unless and until the experience

necessary to understand logic has manifested (cf. 6522) itself. The actually experienced limits of my language are the actual limits of all I can comprehend about the world, so that until I enjoy mystical intuition the ideal essence of symbolism and its counterparts remain unthinkable abstractions. "The limits of my language mean the limits of my world" (56) and are determined not by the nature of this or that system of sense or symbolism, nor by how things stand, but by the nature of sense and symbolism per se, that is, by the vision of the world as a limited whole.

A Carnapian suggestion that what Wittgenstein is after is not an improved everyday language but an improved scientific language is unacceptable since to the extent that propositions are in any sense about the objects of the world they are rejected as constituting the solution of the riddle ($R\ddot{a}tsel$) of $m\bar{a}y\bar{a}$:

- The laws of physics, with all their logical apparatus, still speak, however indirectly, about the objects of the world.
- 64312(1)d The solution of the riddle of life in space and time lies *outside* space and time. (It is certainly not the solution of any problems of natural science that is required.)
- We feel that even when *all possible* scientific questions have been answered, the problems of life remain completely untouched. (cf. 6371, 6372)

Science is not the answer because in spite of the logical dimensions of science (6342) and its completely general nature (63432) it is 'still' about the objects of the world, that is, it still presupposes an indispensable connection between the symbol and the world. Science is not the solution because in preserving the semantic component of the symbol it perpetuates the facts that all go toward setting the problem

(64321). The generality of the gpf similarly preserves the semantic element in its essential connection with the world through the form of depiction. Propositions of logic on the other hand are essentially devoid of semantic or relational (44661) elements and as such are devoid of the form of depiction that constitutes the problem. It is the showing of these *sinnlos* propositions of logic that makes the adequate notation what it is, not its function in everyday or scientific discourse.

The objection to the Advaitic interpretation of the Tractatus to the effect that the substitution of the sinnlos for the sinnvoll would render everyday and scientific language disfunctional and nugatory is similar to the objection of Samkara's opponent in the argument quoted above, that if the adequate, ideal or non-dual reality indeed cancels, contradicts or sublates name and form then secular and religious life are also cancelled. These objections correspond in the sense that if they were correct, Brahman would have to be one empirical entity among many, just as the 'ideal language' would have to express one empirical sense among many. That is, the objection that the thesis of Non-Dualism makes of the world of common experience an empirical illusion (on a par with the snake-illusion or dream phantasm, so that at the empirical level $(vyavah\bar{a}ra)$ all is falsity $(mithy\bar{a})$ through and through, as it were) presupposes that Brahman is merely a preeminently unexceptionable empirical entity capable of sublating the exceptionable empirical entities in the manner in which the rope, an empirical thing, sublates the snake-illusion, another empirical thing. But Brahman is not an empirical entity and hence cannot be either perceived or conceptualized by everyone with properly functioning sense-mental faculties as is the case in the rope-snake and other empirical illusions. Thus, it is not the case that any normally

functioning percipient agent ceases to perceive name and form as real through the mere fact that Brahman is the only reality. The illusion of $m\bar{a}y\bar{a}$ is deeper and more stubborn than empirically corrible illusions such as the rope-snake. Since $m\bar{a}y\bar{a}$ is empirically incorrigible its $adhisth\bar{a}na$ or real ground is much more difficult to know. Thus, the notion that Brahman is not simply a sacred, preeminent or unexceptionable empirical reality capable of cancelling and replacing the empirical reality of secular and religious name and form corresponds to the notion that the logical essence of symbolism is not simply an unexceptionable sense or perfect language awaiting construction by us for the purpose of replacing our present language.

Ordinary and scientific language is empirically incorrigible, unlike anomalies dealt with by the theory of definite descriptions, such as "The present king of France is bald", which are empirically corrigible. Like language, $m\bar{a}y\bar{a}$ is only corrigible transcendentally. Professor Deutsch makes this point about $m\bar{a}y\bar{a}$ as follows:

Empirical reality...is transcended only absolutely. In short: "there is no reason to call the world unreal before the knowledge of the oneness of the Ātman (has been retained)." (Suresvara, Sambandha Vārttika, as quoted by N. K. Devaraja in Introduction to Samkara's Theory of Knowledge (Delhi: Motilal Banarsidass, 1962), p. 16.)87

Similarly, extrapolating Suresvara, we may say that there is no reason to call language unreal (thereby standing in need of an ideal replacement) before the 'experience' (5552) necessary to understand logic has been attained. Everyday and scientific language then, is not limited in expressing this sense but in expressing sense. Its sense must be transcended absolutely in order to see the world under the aspect of eternity:

641(1)a The sense of the world must lie outside

the world.

Thus, as we have shown, in spite of fundamentally transcendental preoccupations, the negative dialectic of the *Tractatus* and of Advaita allows ample room for the positive empirical content that defines the world of the psycho-physical self.

6. The Alleged Paradox of the Negative Dialectic

Commentators have found paradoxical the logical culmination of the negative dialectic as expressed in the concluding propositions of the *Tractatus*:

- My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them--as steps--to climb up beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.)

 He must transcend these propositions and then
 - He must transcend these propositions, and then he will see the world aright.
 - 7 What we cannot speak about we must pass over in silence.

Black argues that the *Tractatus* defeats itself in the claim of 654 that if the propositions of the *Tractatus* are true then they are nonsense and hence without truth-value, and attempts to solve the alleged paradox of Wittgenstein's final remarks by partitioning the propositions of the *Tractatus* into those that are *unsinnig* and those that are *sinnlos*.

Sinnlos statements will include, on this interpretation, the propositions of mathematics and logic and in addition "all those that belong to 'logical syntax' or philosophical grammar." He says that "This line of defense applies to all cases in which Wittgenstein is seeking the 'essence' of something," and adds that "there is no reason to maintain that

such rules (as formulated in terms of essence) resist adequate formulation: if Wittgenstein thought otherwise, he was refuted by his own practice."

It is necessary here either to admit that Wittgenstein was 'refuted by his own practice' or to find an alternate means of exit from the alleged paradox of the final statements of the *Tractatus*, for Wittgenstein maintained that his statements concerning logical syntax are *unsinnig* and not *sinnlos*. That this tenet of the *Tractatus* cannot be modified along the lines suggested by Black without doing violence to the entire fabric of Wittgenstein's thought is evident in the fact that the attempt to express the essential properties of symbolism by means of propositions results in nonsense (*Unsinn*):

41272(4) Whenever it [a formal concept-word] is used...as a proper concept-word, nonsensical pseudo-propositions (unsinnige Scheinsätze) are the result.

The presentation of the essential or formal properties of symbols, those properties without which the symbols could not signify (3341, 3344) is the task of logical syntax. Formal concepts however,

4126(4) ...cannot, in fact be represented by means of a function, as concepts proper can.

Rather,

The propositional variable signifies the formal concept...[cf. 41271]

This distinction between formal and proper concepts is at the heart of the distinction between saying and showing. A non-formal, i.e. a maaterial property, can be said by means of a propositional function but a formal property can only be shown by means of a variable possessing the distinctive feature of all symbols falling under the formal concept (4126(7)). Examples of pseudo-concepts are 'complex', 'fact', 'func-

tion', and 'number' (41272). The example used by Black however, to illustrate a salvageable proposition of the *Tractatus* deals with the distinction between a complex name and a proposition. ⁹⁰ But a proposition is a function and hence can be distinguished only through a variable. The attempt to distinguish it by means of a proper concept-word in a propositional function must result in nonsense according to the basic tenets of the *Tractatus*. The logical syntax of language is precisely what, according to Wittgenstein, cannot be said, but only shown. Therefore Black's attempt 'to salvage' some of Wittgenstein's propositions (note the failure to treat the work as a whole) by viewing them as sinnlos must be rejected.

Another misunderstanding on Black's part is his notion that the non-tautological statements of the *Tractatus* which deal with logical syntax can *show* what Wittgenstein wishes to say. He states:

There remains the alternative of treating many of his remarks as formal statements, 'showing' something that *can* be shown. Then they will be in no worse case than logical and mathematical statements and there will be no theoretical barrier to their use in rational communication. ⁹¹

Black's interpretation is unacceptable not only for the reason already stated, (namely that the expression of formal concepts by means of propositions is unsinnig) but also for the reason that sinnlos statements cannot be used in communication, and especially not in rational communication; especially not in rational communication because 'rational' connotes thought and Wittgenstein's point is just that the sinnlos is unthinkable; and not in anything that in the strict sense is communication because communication involves the saying of something, whereas the propositions of logic say nothing. If we follow Wittgen-

stein's thought closely on this point we can see that Black must be wrong, for

6111(1)a All theories that make a proposition of logic appear to have content are false.

Black plays on the ambiguity of the term 'discipline', not a term of the *Tractatus*, when he says that "Wittgenstein is not rallying us to the destruction of the *a priori* disciplines"; ⁹² for, not saying anything (543), logic is not a body of doctrine (613) and therefore not a discipline in which anything can be said or communicated. Black quotes Moore on the meaning of 'senseless' as applied to tautology and contradiction:

'So far as I can see, if we use 'make sense' in any way in which it is ordinarily used, "Either it is raining or it's not" *does* make sense, since we should certainly say that the meaning of this sentence is different from that of "Either it's snowing or it's not", thus implying that since they have different meanings, both of them have meaning' (Moore, *Papers*, pp. 272-3).93

Moore's suggestion, accepted by Black, ⁹⁴ is that the propositions of logic, contrary to 6111, *do* have some content. But Wittgenstein's reply to Moore's argument would have been that it fails to distinguish between understanding a proposition and understanding that a proposition is either true or false:

I understand the proposition "aRb" when I know that either the fact that aRb or the fact that not aRb corresponds to it; but this is not to be confused with the false opinion that I understand "aRb" when I know that "aRb or not aRb" is the case. 95

Understanding a tautology is not a sufficient condition of understanding its constituent propositions. Since it is possible to understand any tautology, without understanding the tautology's constituent propositions, it follows that the sense which Moore and Black associate with the tautology as its content is *inessential* to the tautology. ⁹⁶ Tautol-

ogy is without sense because it is not a proposition:

- 3/6/15(8) "p v ~p" would then be a sign only in appearance. But in reality the dissolution of the proposition.
- 4466(4) Tautology and contradiction are the limiting cases--indeed the disintegration--of the combination of signs.
- Admittedly the signs are still combined with one another even in tautologies and contradictions--i.e. they stand in certain relations to one another: but these relations have no meaning, they are not essential to the symbol.

Logical propositions are absolutely without sense (*sind sinnlos*) as the above passages state; therefore Black's argument to 'salvage' part of the *Tractatus* is unacceptable.

Another passage cited by Black⁹⁷ in support of the idea that the propositions of logic are not quite without content in Wittgenstein's view is the following:

3/5/15 We cannot say that both tautology and contradiction say nothing in the sense that they are both, say, zero points (Nullpunkte) in a scale of propositions. For at least they are opposite (entgegengesetzte) poles.

Not cited by Black are Wittgenstein's second thoughts on the matter:

11/5/15 Is there really such a thing as the duality: tautology--contradiction?

Clearly, the proposition cited by Black is the statement of what Wittgenstein viewed as a problem rather than as a settled position. Moreover, it is illegitimate to cite the *Notebooks* in support of an interpretation of the *Tractatus* unless the same position is evident in the *Tractatus*. The *Notebooks* are the records of a philosophy in progress
and show all the false starts of tentative endeavor. In particular,
Black is unjustified in citing the earlier passage of 3/5/15 in light

of:

Tautologies and contradictions are not, however nonsensical. They are part of the symbolism, just as '0' is part of the symbolism of arithmetic.

The above proposition clearly shows that the statement of 3/5/15 is rejected in the *Tractatus*. It is worth observing that in arithmetic the opposite poles of '0' are equivalent: +0 = -0 = 0. Further, Wittgenstein states:

It is clear that one could achieve the same purpose by using contradictions instead of tautologies.

The chief significance of tautology and contradiction is that they are senseless. Though they are opposite poles syntactically their significance does not differ. Wittgenstein's unwillingness to accept a dualism of positive and negative propositions is made clear very early in the *Notebooks* in the following remarkable proposition:

25/11/14 It is the *dualism*, positive and negative facts, that gives me no peace. For such a dualism can't exist. But how to get away from it?

The vexatious problem of the apparent dualism of positive and negative facts is dispelled by clearly understanding the nature of propositions as given in the gpf:

26/11/14 If all the positive statements about a thing are made, aren't all the negative ones already made too? And that is the whole point. The dualism of positive and negative that I feared does not exist, for $(\chi).\phi(\chi)$, etc. etc. are neither positive or negative.... [' $(\chi).\phi(\chi)$ ' is the forerunner of the gpf (23/10/14, 24/11/14, 2/12/16)]

That the non-duality of positive and negative facts is Wittgenstein's main point emerges in the following passage from 'Notes on Logic':

The chief characteristic of my theory is: p has the

same meaning as ~p...98

The Tractatus echoes this idea in:

40621

But it is important that the signs 'p' and '~p' can say the same thing. For it shows that nothing in reality corresponds to the sign '~'

The propositions 'p' and ' p ' have opposite sense, but there corresponds to them one and the same reality.

Thus, nothing corresponds in reality to the negation sign that interconverts tautology and contradiction. As unique values of the gpf, which is neither positive nor negative, tautology and contradiction are essentially neither positive nor negative. There is no correspondence in reality, according to the *Tractatus*, to the polarity of positive and negative, of tautology and contradiction, as Wittgenstein originally supposed in 3/5/15. Black's citations then, while expressing his own views about the *sinnlos*, misrepresent those of Wittgenstein. His solution of the alleged paradox of the negative dialectic is therefore more a full-scale modification of the *Tractatus* than an interpretation faithful to the basic views of its author.

Before presenting what in our opinion is Wittgenstein's understanding of these matters let us take up Russell's and Ramsey's criticisms of the culminating propositions of the negative dialectic. In the following passage Russell expresses his dissatisfaction with the position he believes allows Wittgenstein to say less than he seems to succeed in saying:

What causes hesitation is the fact that, after all, Mr. Wittgenstein manages to say a good deal about what cannot be said, thus suggesting to the skeptical reader that there may be some loophole through a hierarchy of languages, or by some other exit. The whole subject of ethics, for example, is placed by Mr. Wittgenstein in the mystical, inex-

pressible region. Nevertheless he is capable of conveying his ethical opinions. His defense would be that what he calls the mystical can be shown, although it cannot be said. It may be that this defense is adequate, but, for my part, I confess that it leaves me with a certain sense of intellectual discomfort. 99

Ramsey wrote:

We must take it seriously that it [philosophy] is nonsense, and not pretend, as Wittgenstein does, that it is important nonsense. 100

Ramsey, Russell and Black thus agree that there is a problem in reconciling what the *Tractatus* preaches with what it practices. Russell states directly that it says more than it allows itself while Ramsey points out the unacceptable implications of the theory for the practice. Evidently the concensus of opinion is that the logic of the *Tractatus* clashes (cf. 55563) with its application.

These criticisms seem to be based on the failure to take account of the distinction between levels of truth in the *Tractatus*. Wittgenstein stated (654) that his propositions are *eventually* seen as nonsense from the standpoint of the transcendent:

654(1) He must transcend these propositions, and then [and only then] he will see the world aright.

While it cannot be maintained that Wittgenstein's elucidations say something in the sense that they represent objects and material properties, it must nevertheless be admitted that they are not *prima facie* nonsense. Russell would presumably have agreed with Black that, "it would be a howler to take it [the *Tractatus*] as consisting of empirical statements", ¹⁰¹ and thus far we are in accord with him. The question must then be: "If they do not make empirical sense, what kind of sense do they make?" Three complementary responses suggest themselves. First,

they are unsinnig-s and presuppose consciousness of the limits of language and the intentions of speakers. To someone who has had at least similar thoughts and who therefore understands what they intend to say, Wittgenstein's theory allows that some propositions dealing with logic and metaphysics are understandable. These propositions say something by intention in the manner in which (as argued above, II, 1) nonsensical metaphysical statements intimate the senseless (sinnlos) that can only be shown. This intimation of the suprasensible by unsimnig-s propositions of logic and metaphysics was the purport of the upper arrow of the hypotenuse of the modes of signification diagram (system I) (vide supra, II, 1). Thus the propositions in question, while not saying anything in the strict sense in which sinnvoll propositions say something, nevertheless say something in the loose sense of *intended* saying appropriate to statements uttered with awareness of what metaphysics intends to say. On this view, the Tractatus may be understood as accepting the conditions for strictly sensible utterance laid down by empiricism and as explaining how metaphysical propositions can be nonsensical in the strict sense while in the loose sense capable of saying a good deal; since what some unsinnia propositions are intended to say makes itself manifest (6522 et al.) it is thus possible by their means to make ourselves metaphysically understood by those who have had at least similar thoughts. In this way it is possible to preserve the consistency of the Tractatus without resorting to radical modifications such as Russell's suggestion of a hierarchy of languages as an exit from the alleged paradox of the negative dialectic.

This same line of thought also answers Ramsey's objection, for since Wittgenstein's elucidations may be claimed to be true and unas-

sailable *in intent*, they cannot be unimportant to someone who has had the 'experience' necessary to understand logic (5552), and who is therefore in a position to understand what they intend to say. Metaphysics necessarily falls short of expressing the inexpressible and lapses into nonsense in the attempt, but because the inexpressible is of ultimate importance both logically and metaphysically, the attempt is of unchallengeable importance to those who understand what metaphysics intends to say.

Thus, Russell's criticism that the book says more than it allows itself to say, Black's view that it is in danger of being refuted by its own practice and Ramsey's remark that if nonsense, it is unimportant nonsense are answerable within the framework of the uncompromised Tractatus by respecting this loose sense of intended saying. Wittgenstein's critics could overlook this because like Black they misinterpreted the term 'nonsense' as a strictly pejorative one. Admittedly the term has a pejorative use when applied from the higher level of the 'experience' necessary to understand logic to metaphysical propositions that make it look as though logical constants are empirical objects (the negation of the Grundgedanke) and metaphysical absolutes thinkable entities, however this is its use as applied to non-empirical propositions applied without consciousness of their intended suprasensible significance, not as applied to non-empirical propositions made with such consciousness of intention and therefore without hypostatization of their suprasensible contents. This latter type of proposition is unsinnig-s and is nonsensical in a technical non-pejorative sense.

The second way of responding to the objections posed above is to view the elucidations of the *Tractatus* as making sense on the false but

discursively unavoidable, implicit premise of philosophy that the logic of the facts is representable, that is, on the negation of the Grundge-The formal properties of language, for example, about which Wittgenstein speaks can only figuratively be spoken about. Only by false analogy with material properties produced by configurations of objects can formal properties be mentioned. On the view under consideration, Wittgenstein's propositions thus present the appearance of saying a good deal about the ostensibly unsayable until, when the world is seen in light of the Grundgedanke, the appearance vanishes and they are seen to be nonsensical. This line of response is related to the previous in that one who intends by the use of unsinnig-s propositions to intimate what cannot be said recognizes that he cannot strictly achieve his aim due to the implicit presupposition by his unsinnig-s propositions of the false premise of name and form excluded by the Grundgedanke. Given the entirely general implicit assumption that something can be said about what is higher, Wittgenstein could claim his propositions to be true and unassailable on all essential points (Preface of the Tractatus), and at the same time could without contradiction claim them to be nonsensical from the higher standpoint of the negation of the assumption, that is from the standpoint of the Grundgedanke. Wittgenstein's point amounts to the claim that if anything at all can be said about the logic of the world, that is, if there is to be any philosophical approach to what is higher, then the Tractatus is what must be said, in spite of the fact that since nothing at all can be strictly said the Tractatus is nonsensical. Notice that the negation of the consequent does not follow from the negation of the antecedent of the conditional statement that if anything at all can be said about the logic of the world then the Tractatus

is true and unassailable on all points. 'P implies Q' and ' $\sim P'$ does not entail ' $\sim Q'$.

The vision of the world under the aspect of the intuitive 'experience' (5552) necessary to understand the Grundgedanke comprehends that some things cannot be put into words, that there is the inexpressible. In light of this comprehension it is seen that what is of ultimate importance cannot be represented and is not part of the world. The propositions of the Tractatus in this light no longer seem to make sense because they no longer need to make sense. Prior to the attainment of higher understanding the ladder cannot be discarded, for at the discursive level reality naturally and necessarily presents itself in terms of sense, and thus the search for truth spontaneously proceeds by way of propositions that ostensibly have sense. After attainment of what is higher, the propositional sense that had seemed indispensable presents itself as limited and unneeded. With, but not before, the logicometaphysical transcendence of language and the world, the philosophical and ethical valuelessness (641) of the psycho-physical self, of science and of all modes of representation reveals itself, and thus, where language cannot reach the ladder falls away. Prior to the realization of the philosophical Self as the limit of the world and not a part of it (vide infra, IV), that is, prior to the attainment of the insight of the Grundgedanke, the psychological self and the value of science and of our pictorial modes of representation seem unquestionable. For reality at the discursive level is integral with sense, and continues in operation as if it were based on and inseparable from sense in the face of any amount of discursive persuasion to the contrary. Thus when, and only when, language is recognized as limited, through the living vision of

the world under the aspect of eternity (6/7/16(4); 64311; 30/7/16(8)), rather than through any discursive process, are the propositions of the *Tractatus* convincingly and realistically recognized as nonsensical. Only at the higher level does the illusion of self and representable logic actually or phenomenologically give way to the metaphysical Self and the *Grundgedanke*.

This line of response agrees with Russell that the *Tractatus* makes sense, but removes the paradox by affirming that it makes sense only from the standpoint of the error of imagining that the logical constants are representatives (i.e. the standpoint of the negation of the *Grundge-danke*). It further maintains that the error of negating the *Grundgedanke* is a natural one 102 inasmuch as thought is confined to representation, so that the levels are in a very real, lived sense separate. Clash between them thus cannot occur either logically, metaphysically or phenomenologically.

Wittgenstein could claim the propositions of the *Tractatus* to be true and unassailable on all essential points at the philosophical or discursive level, in spite of their status as nonsensical at the higher level, on the grounds that he was merely presenting the only possible logical description of the sole general primitive sign of logic, namely the gpf. Against this it might be objected that the argument based on the implicit false presupposition of the negation of the *Grundgedanke* must be unsound and hence assailable. This objection differs from the objection that the implications of the negation of the *Grundgedanke* must be as false as the negation of the *Grundgedanke*; the latter objection we put aside simply by pointing out that 'P entails Q' and '~P' does not entail '~Q'. The reply to the objection at hand is that Wittgenstein

thought his *Tractatus* to be unassailable, in spite of its presupposition of the false negation of the *Grundgedanke*, on the grounds that the only premise which he thought could be substituted for the negation of the *Grundgedanke*, namely the *Grundgedanke* itself, would eliminate not only the *Tractatus* but also all discursive enterprise in general. The objection is mistaken since the negation of the *Grundgedanke* is not the negation of one empirical premise among many, but is rather the denial of the essential unsayability of logic. If anything at all is to be said about logic and metaphysics the false premise is unavoidable. One cannot therefore, assail the *Tractatus* by rejecting the premise on which it is possible by substituting a more adequate premise from which to argue; for there are no alternate premises at the entirely general level of the *Grundgedanke* that allow anything to be said.

The false, implicit, unavoidable premise of the propositions of the Tractatus, namely the negation of the Grundgedanke, is provisionally accepted by Wittgenstein as an unavoidable precondition of the merely heuristic descriptive process of the Tractatus. Just as the process of logical proof is inessential (6126) and merely heuristic (cf. infra, III, 3) so also the propositions of the Tractatus are an inessential and merely heuristic process of logical proof. The false, implicit premise is unavoidably presupposed by the inessential, heuristic process of the Tractatus; so that the attempt to assail the truth of the Tractatus by substituting the Grundgedanke for its negation must result in the destruction of the heuristic process, whence, were the substitution accepted, instead of having the Tractatuswe would have only the silence with which it concludes.

It is the inessential, heuristic process of the Tractatus that

seems to make sense on the false implicit premise of the negation of the *Grundgedanke*. But when the result of the heuristic process has been achieved the process transcends itself by becoming equivalent to its result (cf. 61261), namely the 'experience' necessary to understand the *Grundgedanke*. At this point the process is seen to be nonsensical insofar as it is predicated on the negation of the *Grundgedanke*, a negation which falsely affirms the non-equivalence of the process and results of the logico-metaphysical enterprise of the *Tractatus*.

Nor may it be argued that one philosophy is as true as any other on the grounds that all philosophies are based on the false implicit premise that something can be said about what is higher. For the simile of truth also has its standards and logic permeates the illusion that philosophy can say something about the logic of the world. Accepting the false premise as a necessary part of the heuristic process means accepting that something, not that anything, can be said about what is higher.

Both of the responses to the objections introduced at the beginning of this section involve the notion of levels of understanding and truth. The first response states that the propositions of the *Tractatus* are nonsensical at the empirical level where sense requires corresponding pictureable objects and that they are true or correct (562) at the *intended* suprasensible level beyond or without sense. The second involves that the propositions which are allowed sense under the unavoidable, implicit assumption that metaphysics can be discussed at the level of the simile of the truth (55563) are deprived of sense and hence of truth when the assumption is recognized as dispensable or false from the higher level of transcendent, silent truth in its entirety.

This distinction of levels of truth is explicitly invoked by Witt-

genstein in what commentators view as the paradoxical and self-defeating propositions. In 654 he states that his elucidations are *eventually* recognized as nonsense when, and only when, they are transcended: "He must transcend these propositions, and *then* he will see the world aright" (654, my italics). They are not recognized as nonsense at the philosophical level at which they are presented as the unassailable and definitive truth on all essential points, for that indeed would create a clash between logic and its application. Rather they are recognized as nonsense at the higher level at which the sense of the world is seen to lie outside of the world (641), so that there is no clash of levels and no paradox, in accordance with:

5557(3) It is clear that logic must not clash with its application.

Until the insight formulated in the *Grundgedanke* is 'experienced' the propositions of the *Tractatus* are true and useful as a ladder to the higher truth. The sense of the *Tractatus* is thus merely apparent, but like $m\bar{a}y\bar{a}$ is transcendentally and not empirically illusory. The *Tractatus* is therefore neither incoherent, paradoxical, self-defeating or important at the discursive philosophical level.

Our third line of response to the critics is that the *unsinnig* propositions leading up to proposition 6, in which the gpf variable is presented, are important to the extent that they elucidate the gpf. The gpf is not *unsinnig*, for it is a variable and not a proposition and is strictly the only correct way (4127, 41271 et al.) to signify the formal properties of language which the preceding *unsinnig* propositions *intended* to express. Wittgenstein states that his *propositions* are *unsinnig*, not that the gpf is *unsinnig*. The gpf variable presented in 6 is the pre-

sentation of what can be clearly said (4115) and as such signifies what cannot be said (4115). It is thus neither nonsense nor unimportant, and therefore the *unsinnig* propositions that precede and *prepare the way* for its formulation cannot be unimportant. One cannot throw away the ladder while climbing it.

In essence the *Tractatus* boils down to one symbol with positive significance—the gpf—and one negative proposition (7) enjoining silence. Thus Wittgenstein stated that

...the whole sense of the book might be summed up in the following words: what can be said at all [as presented in the gpf] can be said clearly, and what we cannot talk about [i.e. what is shown by the gpf] we must pass over in silence. 103

The entire Tractatus consists of unsiming propositions including the final proposition (7) (insofar as it refers to the unreferrable), and one non-unsiming variable, the gpf, given in 6, which presents what can be said and shows what cannot be said. But again, proposition 7, though strictly unsiming, is not unimportant to the extent that it intends to express what the gpf shows. The fact that the Tractatus consists not only of propositions but also of the gpf variable, shows that even if the critics were correct in arguing that the propositions of the Tractatus are self-defeating, it would not follow that the whole Tractatus is self-defeating; for the gpf is not a proposition. On this view the Tractatus consists of the unsayable name of God (saguna Brahman)--the gpf, which shows what cannot be said (nirguna Brahman)--and nothing else.

In Advaita Vedānta the annulment or sublation $(b\bar{a}dha)$ of the means of lower knowledge $(apar\bar{a}\ vidy\bar{a})$ by the higher knowledge $(par\bar{a}\ vidy\bar{a})$ to which they lead is comparable to the relationship between process and result in logical proof and to the ladder metaphor in the *Tractatus*. In

this connection an interesting discussion is given by Śaṁkara in response to the objection that if Non-Dualism is correct then, being itself bound up with name and form, it must be false or self-defeating and hence incapable of leading out of transmigration (saṁsāra) to union with Brahman. Śaṁkara's response may be taken as the form of an answer to the question: How can the *Tractatus* if nonsensical be true and unassailable?

But how can the Vedānta texts if untrue convey information about the true being of Brahman? ... This objection we reply is without force (because as a matter of fact we do see real effects to result from unreal causes), for we observe that death sometimes takes place from imaginary venom, (when a man imagines himself to have been bitten by a venomous snake) and effects (of what is perceived in a dream) such as the bite of a snake...with regard to a dreaming person. 104

The above argument adverts to the case of a man who actually dies as a result of imagining himself to have been bitten by a snake and to a second case in which a man experiences in a dream the dreamt effects, such as the pain, anguish and weakness, of being bitten by a dreamt snake. An objection is made to the second case.

--But it will be said that these effects are themselves unreal. $105\,$

To this Samkara replies that real pain is experienced as the effect of an unreal cause:

These effects we reply are themselves unreal indeed; but not so the consciousness which the dreaming person has of them. The consciousness is a real result; for it is not sublated by the waking consciousness. 106

Thus Samkara admits that the dialectic of Advaita is self-defeating but capable of producing the intended result, namely knowledge of the true being of Brahman. Knowledge of the highest truth (uttama satya) can

according to Śamkara, be achieved through the valid means of knowledge that from the ultimate standpoint belong to the false $(mithy\bar{a})$ $avidy\bar{a}$.

There are fruitless and fruitful delusions (visamvādibhrama and samvādibhrama, respectively) according to Vidyāranya, 107 a post-Śamkarite Advaitin. The pramāṇas or valid means of knowledge belong to the category of fruitful delusions. Thus Wittgenstein might say with Śamkara and Vidyāranya that the propositions of the Tractatus, though non-sensical, are fruitful delusions (samvādibhrama) in that they lead to the 'experience' necessary to understand the world from the transcendental standpoint.

CHAPTER III

SUBLATION

"Words are like the film on deep water."

--Wittgenstein (30/5/15)

1. Sublation or Cancellation in Advaita and the Tractatus

Given that empirical life $(vyavah\bar{a}ra)$ is one stupendous illusion from the ultimate standpoint $(param\bar{a}rtha)$, it is natural that a theory of ignorance $(avidy\bar{a})$ should assume a central position in Advaita. The general definition of $avidy\bar{a}$ is given in terms of superimposition $(adhy\bar{a}sa)$, defined and discussed by Samkara as follows:

But what have we to understand by the term 'superimposition'?--The apparent presentation, in the form of remembrance, to consciousness of something previously observed, in some other thing.

Some indeed define the term 'superimposition' as the superimposition of the attributes of one thing on another thing. Others, again, define superimposition as the error founded on the non-apprehension of the difference of that which is superimposed from that on which it is superimposed. Others, again define it as the fictitious assumption of attributes contrary to the nature of the thing on which something else is superimposed. But all these definitions agree in so far as they represent superimposition as the apparent presentation of the attributes of one thing in another thing. And therewith agrees also the popular view which is exemplified by expressions such as the following: 'mother-of-pearl appears like silver,' 'The moon although one only appears as if she were double. 108 (my italics)

Superimposition is illustrated paradigmatically in the case of the

superimposition of the snake on the underlying rope mistakenly taken for a reptile. Extension of the concept is made to the case in which the underlying ground ($adhisth\bar{a}na$) of the non-veridical appearance ($\bar{a}bh\bar{a}sa$) is not an object in contact with the sense organs (indriyas), as when the color blue is superimposed on the ether $(ak\bar{a}\dot{s}a)$ or space of the sky, and, more significantly, when the non-Self is superimposed on the Self. This mutual superimposition of the Self and the non-Self, of Brahman and $m\bar{a}y\bar{a}$ is termed $avidy\bar{a}$, the basis of all human cognitional activity. Apart from its metaphorical associations and illustrations, the concept of superimposition as to the confusion of the properties of one thing with another's, the notion of superimposition would seem to be unexceptional, for error is naturally thought of as the misattribution of properties. What is outstanding in Advaita is the careful development of the concept in its metaphysical application. Superimposition at the cosmic level of saguna Brahman is due to the limiting adjuncts (upādhis) (viz. body, sense-mental faculties, etc.) coordinate with the name and form of $nescience^{109}$ which project form onto the formless Brahman, thus giving rise to the cognition of saguna Brahman. Samkara likens the upādhis to a body of water and Brahman to the reflected sum. When the water moves, the sun's image in the water moves and expands, and were the observer to mistake the reflection for the sun he would believe the sun itself expands and moves with the water's movement. Similarly, nirguna Brahman appears to have name and form when reflected in the upadhis of the deluded.

Through de-superimposition (apavāda) the upādhis are eliminated and the concealment (āvaraṇa) and distortion (vikṣepa) of the Self by the non-Self are removed. The mechanism of de-superimposition is called

sublation (badha) and corresponds to cancellation in the Tractatus (4462, 5253; vide infra, III, 4). The cancellation of what is shown by what is said and of the apparent logical constants by the real logical constant is not mere truth-functional negation, but rather involves the replacement of the cancelled by what cancels it, as for example in the cancellation and replacement of the accidental properties of language and the world by the essence of language and the world as presented in the gpf. Note also that the gpf has ontological significance and is thus not a mere regulative concept or noumenon in the negative Kantian sense. From the fact that there is every reason to believe that both of the shown limits, namely the gpf and the limit which it shows (4114, 4115; vide infra, IV) have ontological status, it follows that cancellation in the Tractatus is not mere truth-functional negation (vide infra, III, 4). Reflection (manana) on the Self as Neti, neti (Not this, not this), that is, as different from the limiting adjuncts and their objects, leads to the freedom of absorption (nididhyāsana) in Brahman. Similarly in the Tractatus, as will be explained, the intuition of the world under the mystical aspect of eternity (645) is brought about by understanding the logical constant--the Sheffer stroke, not p and not q--as a non-representative (the *Grundgedanke*, 40312), that is, by cancelling the appearance of representativity which disguises (4002) the essence of language and thought.

Sublation literally means cancellation. Its basic features are mirrored in the reductionism of the *Tractatus'* fundamental illumining insight or *Grundgedanke* (40312), which sets forth the cancellation or reduction of the apparent logical constants. According to Wittgenstein there can be no representatives of the logic of facts (40312), and hence

the logical constants which Russell and Frege thought to be representatives (at least in Wittgenstein's understanding of their theories) do not exist (54) and are merely apparent (5441). Thus, sublation is of fundamental importance not only in Advaita, as is well-known, but also in the *Tractatus*, as we shall show in detail below.

Paradigm cases of sublation given in Advaita include the case in which the veridical percept of the rope cancels the illusion of the snake superimposed upon it and the case in which the waking-state ($j\bar{a}garitasth\bar{a}na$) sublates the reality of the dream-state ($svapnasth\bar{a}na$). Sublation par excellence occurs when the awakening of $vidy\bar{a}$ (knowledge) through discrimination of the superimposed non-eternal empirical standpoint ($nity\bar{a}nityavastuviveka$) sublates $avidy\bar{a}$, that is, when the Self sublates the superimposed non-Self. 110

In each case of sublation what we have then, is the explicit (in the case of the verbalizable *sublatans*) or implicit (in the case of the unverbalizable *sublatans*, i.e., Brahman) rejection of a judgment about the reality of the object of cognition on the attainment of a more adequate judgment (in the case of the empirical *sublatans*) or intuition (in the case of transcendental *sublatans*) with respect to the same object.

One of Wittgenstein's important statements in connection with superimposition and sublation in the *Tractatus* is:

40031 All philosophy is a 'critique of language'
...It was Russell who performed the service of
showing that the apparent logical form of a
proposition need not be its real one.

In this proposition Wittgenstein gives Russell credit for demonstrating an important insight in his theory of definite descriptions. This theory provides a logical demonstration of the claim that 4002(3) Language disguises thought. So much so, that from the outward form of the clothing it is impossible to infer the form of the thought beneath it, because the outward form of the clothing is not designed to reveal the form of the body, but for entirely different purposes.

In so doing the theory provides a syntactic counterpart in the *Tractatus* of a rope-snake paradigm of Advaita. For clearly, according to the theory of definite descriptions, the proposition *reduced* by the theory of definite descriptions (e.g. 'The present king of France is bald') is, like the snake, a mere superimposed appearance or disguise of its underlying form, and from the logical viewpoint is sublated, cancelled or reduced by the substitution of definite descriptions for denoting phrases. Russell in fact viewed his theory as a technique for reducing the unparsimonious ontology of Meinongian metaphysics.

The analytical reductionism of Russell's theory of definite descriptions may be characterized as a technique for sublating the judgments conveyed by grammatically misleading propositions such as 'The present king...' by means of judgments conveyed by more perspicuous formulations in the symbolism of *Principia Mathematica*. Through his reading of Schopenhauer Wittgenstein had long been familiar with the idea that Russell had succeeded in demonstrating logically. In *The World as Will and Representation* he read:

Grammar is to logic as clothes are to the body. 111

Of course, Wittgenstein's development of this thought differs from Schopenhauer's, but it is fair to say that it hardly came as a surprise to him that logic, as the theory of definite descriptions showed, cancels or sublates the disguise of grammar.

Samkara invokes the soft illusion $(tul\bar{a}vidy\bar{a})$ of the rope-snake to

explain how the hard illusion (mulavidya) of veridical empirical experience in $m\bar{a}y\bar{a}$ appears from the higher standpoint of Brahmic 'experience'. This extrapolation of the soft illusion to the hard illusion means that the hard, public $m\bar{a}y\bar{a}$ is to Brahman as the soft, private $m\bar{a}y\bar{a}$ is to the hard, public māyā, (i.e. that vyavahāra is to paramārtha as pratibhāsa is to vyavahāra). Similarly, Wittgenstein extrapolates the reduction of anomalous statements such as 'The present king...' to the reduction of non-anomalous everyday language and recognizes the distinction between the hard illusion (vyavahāra) and the soft illusion (pratibhāsa) in linguistic terms by on the one hand stating that "all the propositions of our everyday language...are in perfect logical order" (55563), and on the other hand agreeing with Russell's notion that the apparent logical form of language need not be its real one. The extrapolation is evident in 4002, quoted above, which states that language disguises thought in the process of serving the purpose for which it is designed. Both for Advaita and the Tractatus the illusion of everyday language is essential to practical life. The apparent logical forms of everyday language are essential to the performance of the functions of everyday life; language is useful because it is a transcendental illusion, for utility, presupposing the dualities of agent and object, of means and ends, is itself illusory. Thus, Wittgenstein does not propose the substitution of another form and sense for everyday form and sense, in the manner of 'ideal language' philosophy. The world of everyday language is not a mere linguistic dream or fantasy, as would be suggested by a simplistic extrapolation of the rope-snake ('present king') to common discourse. Wittgenstein's acceptance of ordinary language as adequate in its own terms (i.e. in terms of the purposes for which it is designed (55563))

is fully in agreement with Samkara's realistic, non-reductionistic analysis of empirical experience as such. The Indian and Viennese ācāryas concur in the view that the world of common experience is sublatable or reducible from the higher standpoint of Brahman or logic, but certainly and evidently not from its own.

Against the objection that the 'thought' which is disguised in Wittgenstein's system is still at the $vy\bar{a}vah\bar{a}rika$ or phenomenal plane and
not on the $p\bar{a}ram\bar{a}rthika$ plane, where Brahman alone is, cancelling all
thought, we reply that just as Śamkara extrapolates the rope-snake paradigm to the Brahman- $m\bar{a}y\bar{a}$ relationship, Wittgenstein extrapolates the present king of France..." paradigm to the logic-world relationship. The
language that disguises thought is clearly not the logical essence of language as shown in the general propositional form, but rather is everyday
language. This is evident in Wittgenstein's subsequent statement:

4002(5) The tacit conventions on which the understanding of everyday language depends are enormously complicated. (Cf. 4002)2))

Nor is the reality which language disguises at the level of mere pictorial representation; that is, Wittgenstein is not suggesting that beneath the disguise of everyday language there lurks another thought, waiting to be brought out into the light of some ideal language. For as the following proposition shows, Wittgenstein does not propose the substitution for ordinary language of a logically more adequate 'ideal language' (contra Russell's interpretation of the Tractatus). 112

In fact, all the propositions of our everyday language, just as they stand, are in perfect logical order.--That utterly simple thing, which we have to formulate here, is not an image of the truth, but the truth itself in its entirety. (Our problems are not abstract, but perhaps the most concrete that there are.)

The removal of the disguise of everyday language does not, as is evident from the parenthesized proposition of the above quotation, consist in a progressive abstraction of thought, to produce the ultimately abstract thought, but rather, in the presentation of what can only be shown. What is disguised is not merely another more abstract thought in the form of some ideal language, but rather the very transcendental essence of thought.

Everyday language disguises the real logical forms of language with the merely apparent forms (of grammar) suited to its "entirely different purposes" (4002). The real logical forms of language, the forms of elementary propositions, are designed for the entirely different purpose of showing or revealing the senseless, transcendental logic which is the corresponding counterpart of the level of paramartha. Thus Wittgenstein's use of the insight (that the apparent logical forms need not be the real logical forms of language) of the theory of definite descriptions leads from the level of everyday language to the level of the transcendental.

Moreover, the fact that Wittgenstein states that from the outward form of everyday language it is not just difficult but actually *impossible* to infer the underlying form (4002) indicates that he does not identify the underlying form with what can be inferred on the basis of theories such as Russell's; for on the basis of such theories it is possible to infer some form from the outward form; on the basis of Russell's theory it is possible to infer a series of definite descriptions from an apparently denoting phrase. The reality beneath the dis-

guise of language is transcendental and it is therefore not merely as difficult but as impossible to infer the nature of the underlying form from the nature of the outward form of language as it is to infer the nature of Brahman from the nature of $m\bar{\alpha}y\bar{\alpha}$. It follows that Russell's theory merely provides an analogical paradigm for Wittgenstein just as the cases of non-veridical perception do for Śańkara. Neither the paradigm of "The present king of France..." nor the paradigm of the ropesnake is meant to suggest that ultimate reality is at the level of the empirical, representable world at which the rope exists and to which the definite descriptions advert.

Nor is it important for Wittgenstein that it is impossible to infer the specific forms of elementary propositions underlying the forms of everyday language; he is noted as saying that deciding what is a simple or a complex thing is an empirical matter of no concern to the metaphysician. It is unimportant that not one example of an elementary proposition is offered in the *Tractatus*. All that is important for the *Tractatus* is that the underlying forms are known a priori to show the transcendental, sinnlos logic that is the syntactic counterpart of transcendental reality.

What is the nature of cancellation in Advaita and the Tractatus? The main point here is that the negation involved in sublation is not relative or truth-functional, but categorical or transcendental. The local constant, as will be demonstrated in detail below, negates the gpf categorically. It does not negate the gpf in the relative or truth-functional sense of negation, for relative negation does not remove one from the facts of the world that constitute the problem of life: $\sim p$ is as much part of the world as p; so that truth-functional negation simply

switches the polarity of the facts without changing the coordinated reality and without solving anything.

Since the gpf is neither positive nor negative, one of Wittgenstein's main points (26/11/14b; cf. 25/11/14f), it does not allow of either affirmation or negation. Its status as unsayable is part and parcel of this neutrality with respect to affirmation and negation, for saying is either affirming or negating. Being unsayable it cannot therefore be denied through the very truth-functional negation it defines.

Similarly Brahman does not negate either maya or saguna Brahman and the waking state does not contradict and cancel the dream state in the sense of relative negation. Negating the visions of a dream within the dream does not remove one from the state of dream, for the negation of a dream-image is another image of the dream. In the waking state the negation of the dream-image qua dream-image, not simply qua image occurs. That is, the waking state cancels the dream state by cancelling not only the content of the presentation but also the mode or category of the presentation. As explained below (III, 4), the logical constant as expressed in tautology similarly cancels the mode or category of presentation (i.e. the mode of syntactic description) of the gpf and with it the world as a multiplicity of facts. Relative negation, that is, negation of the content of presentation, does not cancel the dream. One can dream a series of negative propositions as well as positive ones. Nor is the illusory snake negated in the relative sense by the rope any more than the grammatical form (i.e. the apparent logical form) of troublesome propositions such as "The present king of France is bald" is simply truth-functionally negated (to give "It is not the case that the present

king of France is bald") by the version of the proposition constructed under Russell's theory of descriptions. The theory cancels the category of denoting phrases in favor of the category of definite descriptions. Rather, the rope categorically negates the snake, that is, negates it not qua snake but qua illusory appearance. The rope might have appeared in any one of a number of equally non-veridical guises (e.g. as an eel or piece of seaweed), each of which would also be negated by the veridical perception of the rope qua non-illusory presentation, but not by the relative negation of the snake; for the relative or truth-functional negation, "It is not a snake" does not negate "It is an eel", which also negates the content of "It is a snake". The categorical nature of the cancellation of the snake by the rope is necessarily not reflected in the logical syntax of "It is a snake" and "It is a rope" because the snake can cancel the rope when the illusion is reversed.

This brings us to the second important point about sublation, namely that the sublating negation is based not simply on the recognition of illusion, but rather on the recognition of reality, not simply on the unsatisfactoriness of the cognition, but rather on the recognition of its unsatisfactoriness in light of the recognition of the truth. Categorical negation is essentially a reduction of the limited $terminus\ a$ quo by the limiting $terminus\ ad\ quem$ of corrective recognition. It is as much a shift towards something as a shift away from something. Thus, while negative in form it is positive in content. The positivity of the true (satya) sublates the false $(mithy\bar{a})$. In this connection Spinoza's words speak well:

Even as light displays both itself and darkness, so is truth a standard both of itself and of falsity. 114

The formal property or mode of presentation of the snake is its status as mere appearance, as non-veridical, and the formal property or mode of presentation of the rope is its status as real, as veridical; the category of the latter, namely reality, cancels the category of the former, namely appearance. The cancellation of the snake by the rope is the non-commutative presentation of the formal property of the former by the latter, and as such is a case of reduction (defined below, III, 4). The entire process of sublation or categorical negation in Advaita corresponds in the Tractatus to the syntactic reduction of the limited by its limiting syntactic description (vide infra, III, 4).

Just as the rope cognition cancels, reduces or negates the snake appearance not qua snake but qua appearance, so also the quantified statement of the propositional calculus of Russell's theory of description cancels, reduces or negates the troublesome proposition not qua proposition about the king of France but rather qua proposition with grammatically misleading form. Using the distinction between "How?" and "What?" of the Tractatus, we may put it as follows: the waking state, veridical percept, and reconstructed proposition limit and cancel the what rather than the how of the dream state, illusory appearance and misleading proposition respectively.

The distinction between the logic of depiction and its application, between what and how (5552), helps explain the nature of the presentation and concomitant cancellation of the gpf by the logical constant. Logic per se is also prior to 'What?'', for where nothing is represented the question of what a thing is cannot arise. The logical constant cancels the what of the gpf that provides the contact between logic per se and the application of logic. Logic as prior to how is the what of the

gpf. Logic as prior to the gpf is the *that* of mysticism (644). Alternately we may say that logic as prior to the gpf is *that* as equivalent to *what*, existence (644) as equivalent to essence.

The logical constant (i.e. logic) as the limit of the world negates the world from outside the world, as the waking state cancels the dream state from outside the dream state. Thus the limit of the world does not simply remove the existence of the world, just as Brahman does not simply remove the existence of $m\bar{a}y\bar{a}$. The logical constant does not negate the existence of the gpf in the simple sense in which it is incorrectly supposed that Brahman converts the world into an illusion on the order of the snake. The argument that the Advaitic analysis of the *Tractatus* is unacceptable on the grounds that it makes of the world an illusion on the order of the Golden Mountain or present king of France is unacceptable. For the Advaitic analysis of the *Tractatus* affirms a realistic position with respect to the reality of facts at the level of facts, in line with Śańkara's realistic position with respect to $m\bar{a}y\bar{a}$ at the level of $m\bar{a}y\bar{a}$. Wittgenstein's realism is seen in

In fact, all the propositions of our everyday language, just as they stand, are in perfect logical order....

Though the propositions of everyday language are not designed to reveal the transcendental logical form of facts, they are nevertheless not false. The standard of truth of the level of the application of logic is not controverted at its own level. For again, what is involved in the presentation of the world by logic is not the mere truth-functional negation of propositions that would be involved if logic controverted the propositions of everyday language. Brahman and logic do not simply remove the existence of the facts. For since $m\bar{a}y\bar{a}$, the world of facts, is represented it is not non-existent; but since Brahman, the counter-

part of logic cancels $m\bar{a}y\bar{a}$ by eliminating all representational relations, nor is it an absolutely infinite existent. That is to say, $m\bar{a}y\bar{a}$, the world of fact, is indescribable as either existent or non-existent; it is sadasadanirvacaniya. In logical terms, the world is indescribable as either logically necessary or as logically impossible; it is describable as possible, merely possible. The scholastics marked this point by referring to the world as contingent.

And thus the Non-Dual in both nirguna and saguna aspects (i.e. as corresponding to the logical constant and gpf, respectively) cancels the bipolarity of duality, 115 cancels $m\bar{a}y\bar{a}$'s existence-non-existence, rather than simply one or another pole of the duality of existence and non-existence. The absolute ontological value cannot logically either affirm or deny the relative ontological value of the world any more than mathematical propositions can either affirm or deny that crows are black. The Non-Dual can only relativize the world's ontological status.

Logic categorically negates the world by remaining indifferently silent about it. Not overlapping and not clashing with the world (5557), 'nirguna logic' is in contact with the world only through its mask (pratika) 'saguna logic', the logic of depiction formulated in the gpf. Therefore, the Non-Dual's cancellation of $m\bar{a}y\bar{a}$ does not touch (cf. 21515; supra, p. 33) or contact (5557) any of the world's predicates, but rather cancels the world qua limited whole. Brahman cancels the world not qua positive or negative limited whole, for qua limited whole it is neither positive nor negative; it cancels the reality or formal mode of presentation of $m\bar{a}y\bar{a}$, of name and form, and not its positivity, negativity, existence, non-existence, parts, properties, dispositions or predicates.

2. Sublation and the Central Problem of the Tractatus

This section is devoted to outlining the concept of sublation as the key to understanding the central problem of the *Tractatus*.

In proposition 547 Wittgenstein identifies the gpf and the sole logical constant:

547(4) One could say that the sole logical constant was what all propositions, by their very nature, had in common with one another.

But that is the general propositional form.

Let us recall that the logical constant is the sign to which definite significance is attached in logic. It is thus the essence of logic. The identification of the constant with the gpf entails that the significance of the gpf is that of the logical constant, whence it follows that the gpf is the essence of logic. But is it logically possible to identify the logical constant and its properties with the gpf and its properties in this way? The following considerations show it is not.

The gpf is the form of representation which all propositions have in common; as such it may be said to be representative. That the gpf is a representative is seen in the fact that it represents a general sense (5472): "This is how things stand, (45) and in the fact that it stands in a signifying relation to the world (55261). It is a variable (453) and presupposes the coordinate status of logical space (cf. 34, 341). The logical constant however, as stated in the *Grundgedanke* (40312) is not a representative, for there can be no representatives of the logic of the world. It is not a general representative for it has absolutely no sense; the senselessness of the logical constant is that of tautology, and tautology certainly does not say: "This is how things stand". Logic

rather dissolves the representational relations (4462) on which the appeal to coordinate status is based. The impossibility of identifying the gpf and the logical constant is evident in the rejection of all theories that make logical propositions appear to have sense (6111). The gpf and the sole logical constant are thus logically incompatible. Again, there is the fact that the gpf is a variable, while the constant is a constant. Again, the gpf is the form of the world, while the constant is transcendental (613). In the gpf the world appears, as it were, embryonically, while in logic it does not appear at all. Thus, the logical constant and the gpf have opposite and incompatible properties and it is as logically impossible to equate them as it is to equate their corresponding counterparts, nirguna and saguna Brahman. The resolution of the contradiction in the identification of logic (the logical constant) and the world (the gpf) is the basic problem of the Tractatus. The technical logical apparatus mainly goes towards setting the philosophical terrain in such a way that the problem cannot arise. To see that the problem cannot arise it is necessary to see that the gpf is cancelled or sublated by the logical constant.

In opposition to this it might be supposed that Wittgenstein was not at all aware of the contradiction seemingly inherent in the identification of the gpf with the constant. Such a supposition would however be unwarranted, for there is ample evidence in the *Tractatus* to show that Wittgenstein indeed recognized the problem of the relationship between logic and the world as the chief problem of metaphysics. The contrast between logic and the world and the dynamic tension between them is evident in:

64312(1)d The solution of the problems of space and time

lie outside space and time.

- The facts all contribute only to setting the problem, not to its solution.
- 5557(3) It is clear that logic must not clash with its application.
- 5557(5) Logic and its application must not overlap.

The above propositions show that Wittgenstein recognized the problem of the logic-world relationship and that his solution involves the transcendence of the facts comprising the world. Further, in 64312 and 65 mention is made of the riddle ($R\ddot{a}tsel$) which we have said is the corresponding coordinate of $m\ddot{a}y\ddot{a}$. Lest it be supposed that this term belittles the problematic through the association of frivolous overtones, the following quote from Wittgenstein's letters to Ogden may be brought to attention:

There is another difficulty about this prop(osition) still. "Rätsel" has been translated with "riddle". Now I don't know if this is right. Possibly it is. The word "Rätsel" in German has two meanings. Such, e.g. "Why is a raven like a writing desk (?) we call a rätsel. But we also talk of, say, the "Rätsel des menschlichen Lebens" or of the "Rätsel der Existenz der Welt" etc. and here the word "Rätsel" has a different meaning, it has a higher meaning. Now do you use "riddle" in this second sense also? IF SO IT IS QUITE ALRIGHT. Only I don't wish that there should be anything ridiculous or profane or frivolous in the word when used in the connection "riddle of life" etc.116

Thus, in 65 where Wittgenstein states that "The riddle does not exist" and in 6521, where he states that "The solution of the problem of life is seen in the vanishing of the problem", far from belittling mysticism and metaphysics he acknowledges the existence of the problem of the world and, moreover, defines the manner of its solution. The statement of the problem and the manner of its solution also find expression

in the contrast between 'What?'' (closely related to that) and "How?":

The 'experience' that we need in order to understand logic is not that something or other is the state of things, but that something is: that, however, is not an experience.

Logic is *prior* to every experience--that something is so.

It is prior to the question 'How?', not prior to the question 'What?'

- It is not *how* things are in the world that is mystical, but *that* it exists.
- 645(2) Feeling the world as a limited whole--it is this that is mystical.

That the world is transcends the facts, transcends the how of things that sets the problem (64321); therefore the solution is in seeing the world as a limited whole. Such mystical vision answers the question posed in the following proposition:

And if this were not so, how could we apply logic? We might put it this way: if there would be a logic even if there were no world, how then could there be a logic given that there is a world?

The same contrast between what and how runs through 55563 and 5557 where the truth in its entirety is contrasted with the image of the truth, the former identified with logic, the latter with its application to the world. The distinction between saying and showing that runs parallel to the interrelated theories of facts, objects, and portrayal which constitute the problem is again a statement of the problem of the relationship between logic and the world. Wittgenstein's care in separating the domains of saying and showing in such a way as to preclude overlap (superimposition (5557(5)) and clash (5557(3)) is abundant evidence of his awareness of the problem of the relationship between logic and the world.

All this shows that Wittgenstein did not simply blunder in identi-

fying the constant with the gpf. The *Tractatus* is deeply concerned with the problem of the dichotomous opposition between logic and the world, that is, between the constant and the gpf. It is this problem to which Wittgenstein considered his work a definitive solution.

Many Tractatus commentators have been impelled to dissociate the final metaphysical portions of the work from the more technical and empirical sections by what they consider to be the unmitigated obscurity of concepts such as the vanishing of the problem (6521), the non-existence of the riddle due to the unsayability of the solution (65), and the understanding of logic as the vision sub specie aeternitatis of the world as a limited whole (645). This, however, has had the unfortunate effect of divorcing the problem from its solution, of thereby resting content with the problem and of reducing an extraordinarily systematic work to what one writer has minimized as "an intelligent chat on epistemological and logical problems". 117 So far has this tendency progressed that some writers are more concerned with the nature of objects, the constituents of the facts that go only towards setting the problem and not to its solution (64321), than with the second, third and higher rungs of the ladder of Wittgenstein's elucidations (654). These writers are so thoroughly involved in the problem that they have lost sight of it as a problem.

It seems clear that the reason commentators such as Ganguly regard discussion of Wittgenstein's mysticism as self-defeating is that they have not formulated the fundamental problem of the *Tractatus*, namely the contradictory identification of the constant and the gpf. Naturally the concluding section constituting a metaphysical synopsis of the solution must be viewed as "a 'free-for-all' zone of the book" when the prob-

lem Wittgenstein attempted to formulate in the first section is unrecognized. When the problem is recognized, its solution can be appreciated.

The following preview of the solution to the central problem of the *Tractatus* is included here to facilitate the comparative exposition which we have been developing parallel to the exposition of the *Tractatus*.

In logic the world simply vanishes. For in the 'experience' (5552) necessary to understand transcendental logic (613) nothing is represented. In cancelling or sublating the conditions of agreement of language with the world, logic obliterates all representational conditions between language and the world:

4462(2) In a tautology the conditions of agreement with the world--the representational relations--cancel one another, so that it does not stand in any representational relation to reality.

The "How?" of the world represents something, the content of a given presentation, but the "What?" and the "That" of mysticism are prior to "How?" (5552). "How?" is cancelled by "What?" and by "That".

The statement that the problem of life or of the world vanishes (6521) can be appreciated as a statement of the solution of the central problem of the *Tractatus* when it is understood that the problem is how to reconcile the world and its properties with the transcendental and its properties. The statement may be appreciated as saying that the problem of the world vanishes because in being sublated by the transcendental the world vanishes, and so naturally does the problem of reconciling the world with what is higher. The statement that the riddle does not exist (65) can similarly be appreciated as the statement of the solution, rather than as an *obiter dictum*, when it is understood as a response to the central problem of the *Tractatus*, a response based on the notion that the transcendental sublates the world. In unsayable

logic, where nothing can be said, no answer can be given, and therefore no riddle can be posed. Thus, the riddle does not exist. Again, the statement that seeing the world as a limited whole is mystical (645) can be appreciated as a statement of the solution of the central problem, and its position and content relative to 64321 strongly suggests that it is so intended, when it is understood as saying that the world and logic are reconciled in the vision of the world as a limited, that is, as a sublated or sublatable whole. Of interest in this connection is the following passage from Schopenhauer, with which young Ludwig was no doubt familiar:

Raised up by the power of mind, we relinquish the ordinary way of considering things, and cease to follow under the guidance of the forms of the principle of sufficient reason merely their relations to one another, whose final goal is always the relation to our own will. Thus we no longer consider the where, the when, the why and the whither of things, but simply the what. Further, we do not let abstract thought, the concepts of reason, take possession of our consciousness, but, instead of all this, devote the whole power of our mind to perception, sink ourselves completely therein, and let our whole consciousness be filled with the calm contemplation of the natural object, whether it be a landscape, a tree...or anything else. 120

In the *Tractatus*, the object of contemplation is the world as a whole, which through contemplation as what becomes a limited whole, a whole limited by the metaphysical Self or, as Schopenhauer put it, by the "pure subject of knowing". The contemplative Self, existing timelessly, above thought, cancels the conditions of representation that give rise to the world.

In more technical terms, the outline of the solution of the central problem is that the logical constant cancels the general propositional form. The gpf is expressed as the general term of a series of forms by

giving its first term and the general form of the operation that produces the next term out of the proposition that precedes it. The first term is the set of elementary propositions and the operation is the Sheffer stroke. Thus the gpf is a variable much like the general proposition 'b is a successor of a' (41273). The gpf is a variable representing the constant form that all its values possess and may be regarded as a formal property of those values (41271). Cancellation of the gpf comes about through the fact that in the limiting case the variable that presents an expression becomes a constant and the expression becomes a proposition (3313). That is, the gpf is presented by means of the constant, and its formal properties are those of the constant (41271). But the formal property of the logical constant is non-representativity. Hence, the values of the constant, namely the propositions whose general form is the gpf, possess the formal property of non-representativity. The gpf's status as the form of representation in general is thus cancelled by the constant that presents it.

This is but another way of expressing the cancellation by logic of the world. For the logical constant is the sole primitive sign of logic and the gpf represents the world. One may say that when the formal nature or syntactic essence of language is presented, its semantic function vanishes, taking with it the problem of the world. The identification of the semantic and syntactic aspects of language is contradictory only as long as the two aspects are conceived as standing on the same logical level of importance. Logic, the syntactic aspect of language is prior to (5552) and cancels its application, the semantic aspect, in the same sense in which the real logical forms of language cancel its apparent logical operations or constants and its apparent logical forms.

Following the notion of the *Tractatus* that the operations are the expression of the internal properties of the propositions, that is, of their logical forms, it may be concluded that the cancellation of the operations by the sole primitive sign of logic is equivalent to the cancellation by that sign of the internal properties or logical forms of the propositions. The logical constant then, the formal property of which is non-representativity, destroys the forms of propositions as represented in the gpf. The formless in other words cancels the forms.

The cancellation of the forms of propositions by the logical constant is equivalent to the cancellation of the general propositional form, for the gpf is the general form of propositions. The relationship between the gpf and the logical constant is therefore not contradictory. The latter reduces the former in a radical sense, thus eliminating the representative properties of the former and rendering their identification non-contradictory.

Although Wittgenstein, unlike Śamkara, develops the concept of cancellation and its metaphysical implications with a certain mathematical laconism, his idea, once developed, is very much on the pattern of the Advaitic notion of sublation as expounded by Śamkara.

3. Jñana as the Corresponding Epistemic Counterpart of Logic as Syntactic Description

In the previous section the concept of sublation as the key for resolving the central problem of the *Tractatus* was considered in outline. In this section we shall move towards the rigorous development of the concept, presented in section 4 of this chapter, by analyzing what we shall refer to as Wittgenstein's theory of syntactic description. Simul-

taneously we shall argue that $j\tilde{n}ana$ (knowledge) is the corresponding epistemic counterpart of logic as syntactic description.

Philosophical elucidation proceeds by way of description in the Tractatus. In 'Notes on Logic' Wittgenstein wrote:

In philosophy there are no deductions; it is purely descriptive. 122

By description the mode of explanation found in science is not intended:

Philosophy gives no pictures of reality, and can neither confirm nor confute scientific investigations. 123

What then are we to understand by description that is neither deductive nor representational? Description, it seems, must have something to do with logic:

It [philosophy] consists of logic and metaphysics, the former its basis. 124

Philosophy is purely descriptive and consists fundamentally of logic; therefore, logic so understood must be purely descriptive. The view that philosophy is a descriptive activity consisting of logic is reiterated in the *Tractatus*:

- In logical syntax...only the description of expressions may be presupposed.
- 4111(1) Philosophy is not one of the natural sciences.
- 4112 Philosophy aims at the logical clarification of thoughts.

 Philosophy is not a body of doctrine but an activity.

A philosophical work consists essentially of elucidations.

A rather obvious objection against the claim that logic is the corresponding counterpart of Brahman may be based on the notion of philosophy as descriptive activity. If philosophy consists of logic, as Wittgenstein stated in the *Notebooks*, then logic must be an activity. But

Brahman transcends action (karman) and the power of action (kriyāśakti); being pure (śuddha), free (mukta) and non-relational (akhanda), Brahman cannot be assimilated to activity or attained through activity. Again, if philosophy is descriptive and consists of logic, then logic must be descriptive; but describing is an activity and logic must therefore be an activity. Brahman therefore cannot be logic. Moreover, the objection might continue, it was stated earlier that logic is not descriptive, so that to state now that philosophy consists of logic and is descriptive is to contradict what was said earlier.

The reply is that the logic which corresponds to Brahman is not the logic that is an activity. That is, there is another sense in which Wittgenstein uses the term 'logic' in which logic is an activity. Logic in this sense is not Brahman. Thus, there is neither barrier to the counterpart relationship between logic and Brahman nor contradiction with what was said earlier. The following three-step argument shows that in this further sense logic is inessential and that there is therefore no conflict between the essential logic, logic as Brahman, and logic as an activity of descriptive elucidation. Consider first that logical propositions are descriptive in the sense that they show the logic of their constituents:

- The fact that the propositions of logic are tautologies *shows* the formal--logical--properties of language and the world.
- 6124 The propositions of logic describe the scaffolding of the world, or rather they represent it. They have no 'subject matter'....

Secondly, observe that the method of description of the logical properties of propositions is by the zero-method of proof:

The propositions of logic demonstrate the logi-

cal properties of propositions by combining them so as to form propositions that say nothing.

This method could also be called a zero-method....

One can calculate whether a proposition belongs to logic, by calculating the logical properties of the *symbol*.

And this is what we do when we 'prove' a logical proposition....

One describes the logical properties of propositions by combining them according to the zero-method into provably tautologous propositions. The activity of description thus consists in combining the propositions into propositions and proving them to be tautologies. We might say that the activity consists in proving certain combinations to be tautologies or in combining propositions in tautologies according to a rule of proof. Thirdly, Wittgenstein held that the activities of proving propositions to be logical propositions and combining propositions into logical propositions are inessential:

- 6122 ...we can actually do without logical propositions; for in a suitable notation we can in fact recognize the formal properties of propositions by mere inspection of the propositions themselves.
- The proof of logical propositions...is not at all essential to logic, if only because the propositions from which the proof starts must show without any proof that they are tautologies. (my italics)
- 61261 In *logic process and result are equivalent*. (Hence the absence of surprise.) (my italics)
- 61262 Proof in logic is merely a mechanical expedient to facilitate the recognition of tautologies in complicated cases.

While philosophy activity is thus not essential to the reality of the self-manifesting transcendental logic, what is *shown* by logical propositions *is* essential. That is, logic as the corresponding counterpart of *nirguna* Brahman is essential:

- 6124 ...logic is not a field in which we express what we wish with the help of signs, but rather one in which the natural and inevitable nature of the signs speaks for itself.
- 4121(3) What expresses *itself* in language, we cannot express by means of language. Propositions show the logical form of reality.

Language and reality are self-describing; they show or manifest themselves as the mystical. And thus, logic as a set of descriptive elucidations in the form of proofs (and variables, (5501, et infra)) is merely a mechanical expedient. Therefore, although on the basis of the statement of the Notebooks to the effect that philosophy consists of logic, together with the statements in the Tractatus to the effect that neither philosophy (4112) nor logic (613) are bodies of doctrine, it might seem possible to identify logic with philosophy, the fact that logic as the counterpart of Brahman is essential and transcendental, while logic as philosophical description is merely a mechanical expedient, shows such an identification to be impossible. Logic as the counterpart of Brahman is not descriptive. The Advaitic thesis is thus not vitiated in the Tractatus by the objection; for, as we have shown, the spheres of logic as the counterpart of Brahman and logic as a method of description or calculation neither clash nor overlap (cf. 5557).

In the following paragraphs we shall develop the very special sense in which logic may be said to be an activity of description. We shall then argue that logic as description is the corresponding syntactic counterpart of the process of knowing $(j\tilde{n}ana)$ in Advaita.

Relative to the question of why Wittgenstein chose to use the term 'logic' for realities so diverse as transcendental logic and descriptive activity it is important to observe that the activity characteristic of

philosophy is altogether atypical of human activity in general; for in logic process and result are equivalent and:

Proof in logic is merely a mechanical expedient to facilitate the recognition of tautologies in complicated cases. (cf. 61265)

Proof in logic is merely a mechanical expedient coordinate with human psychological or intellectual limitations, for in logic there is nothing to be accomplished. In philosophical description, unlike in scientific description, there is neither act of invention nor experiment, hence there is nothing to be accomplished:

55555(3) Any anyway, is it really possible that in logic I should have to deal with forms that I can invent? What I have to deal with is what makes it possible for me to invent them.

For necessity expresses itself in logic, not us,

- Although there is something arbitrary in our notations, this much is not arbitrary—that when we have determined one thing arbitrarily, something else is necessarily the case. (This derives from the essence of notation.)
- 6124(f) We have said that some things are arbitrary in the symbols we use and that some things are not. In logic it is only the latter that express: but that means that logic is not a field in which we express what we wish with the help of signs, but rather one in which the natural and inevitable nature of the signs speaks for itself.
- 4121(3) What expresses *itself* in language, we cannot express by means of language.

Error and surprise, constant factors in human experience and activity are absent in the philosophical activity of description:

- In a certain sense we cannot make mistakes in logic.
- 54731 Self-evidence...can become indispensable in logic, only because language itself prevents every logical mistake. What makes logic a priori

is the impossibility of illogical thought.

61251 Hence there can *never* be surprises in logic.

The "certain sense" in which we cannot make mistakes in logic is the sense in which process and result are equivalent in logic (61261). The process is nothing more than the result manifesting itself in the unveiling of the essence of language. Thus, although philosophy in some sense is an activity, it does not result in bodies of doctrine where invention can play a role (4031). Language with sense is constructed by man:

- 4031(1) In a proposition a situation is, as it were, constructed by way of experiment.
- 401(2) A proposition is a model of reality as we imagine it.

Language as such does not exist independently of man's limited psychological powers and purposes. But logic in contrast is complete, independent and a priori.

Philosophy is an activity with an altogether atypical result, though this is not immediately evident. It results in the clarification of thoughts and propositions:

Philosophy does not result in 'philosophical propositions', but rather in the clarification of propositions.

Without philosophy thoughts are, as it were, cloudy and indistinct: its task is to make them clear and to give them sharp boundaries.

Such clarification however, is not chiefly directed towards sharpening the content of thoughts, but rather towards defining the limits or boundaries of thoughts. It is concerned with what language shows rather than with what it says:

It [philosophy] will signify what cannot be said by presenting clearly what can be said.

Philosophy describes or presents by showing what cannot be said, by saying what can be said. The resultant elucidation shown by logic is not intended to expand science, from which it differs as saying differs from showing (41212), but rather to limit it:

Philosophy sets limits to the much disputed sphere of natural science.

Philosophy is intended, in line with Wittgenstein's quest for freedom, to provide a path of ascent to the transcendental:

My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them--as steps--to climb beyond them. (He must, so to speak, throw away the ladder once he has climbed up it.)

He must transcend these propositions, and then he will see the world aright.

The result of philosophical description, then, is higher knowledge ($par\bar{a}$ $vidy\bar{a}$) rather than scientific knowledge ($apar\bar{a}$ $vidy\bar{a}$), and in this respect as well philosophical activity is unique, for it results in the detachment of the will (6373) from the world rather than its expression in the world, as in ordinary human activity. Philosophical activity is exceptional in resulting in the annihilation of the will (as in Schopenhauer's thought) and of itself, for once the ladder of philosophical activity has been climbed it is discarded.

Let us examine more closely the statement that process and result are equivalent in logic. This thought follows from the fact that in formless logic there is no coordinate status, and therefore no coordinate status of cause and effect, process and result. It also is intended to express that the absolute logic of reality which is shown by

tautologies and equations (622) is neither a product invented by the philosophical process leading up to the tautology nor a result established by inferential proof (anumāna) external to itself.

of a proposition that has sense and a proof in logic must be entirely two different things.

Logic is self-established (svasiddha):

61265 It is always possible to construe logic in such a way that every proposition is its own proof.

Thus, from the higher standpoint, the ladder is equivalent to the higher standpoint; process and result are equivalent.

The "certain sense" in which process and result are equivalent in logic is the same as the "certain sense" in which the formal properties of objects and facts can be discussed:

4122(1) In a certain sense we can talk about formal properties of objects and states of affairs, or, in the case of facts, about structural properties; and in the same sense about formal relations and structural relations.

Since logic as description is the specification of formal properties, and since in logic process and result are equivalent, the sense in which the formal properties of objects and facts can be specified is the sense in which the process of specification is equivalent to the result of the specification. But both the means and the result of specifying formal properties in logic is the tautology. Therefore, only to the extent that the specified formal properties of objects and states of affairs are steps in the direction of the result are they tolerated. The formal properties of the process are nothing apart from the formal properties of the result. Thus, the formal properties of objects and states of affairs are nothing apart from the formal properties of the propositions of logic. But the formal properties of the propositions of logic con-

sist solely of non-representativity. Therefore, to the extent that objects and facts involve representativity they are nothing. The description of objects and facts is thus only a step in the process of logical description leading to the result that by cancelling all representational relations shows them (objects and facts) to be as dispensable as the ladder of Wittgenstein's elucidations.

Throwing away the ladder is the expression of the realization that the climb was not at all essential to the summit itself. Similarly, proof in logic is not at all essential (6126) to the result, the world of objects and facts is not at all essential (cf. 55521 \S 2012(1)b) to logic, the world is not at all essential to the metaphysical will, and the facts are not at all essential to the solution (64321). What is higher is independent.

Like logic, Brahman is not a thing to be accomplished, not something in the future, but it already exists (avatisthati). Brahman is independent (kaivalya) of māyā and knowledge of Brahman is not dependent on the agent (kartrtantra) but on the reality of its content (vastutantra). The process of knowing in Śamkara's thought is merely a mechanical expedient for unveiling what is already present in the object. It neither creates nor invents its object, but, and this is especially true in the knowledge of Brahman, simply realizes it. Although the employment of jñāna leads to the intuition of Brahman, it is not at all essential to the being of Brahman. For Brahman is its own proof (svasiddha) and cannot be proven through inference (anumāna) external to itself (cf. 6123):

...as soon as there supervenes the comprehension of the non-dual Self...all objects and agents vanish, and hence there can no longer be means of proof.125 With $j\bar{n}ana$, as with logic as description, process and result are equivalent from the higher standpoint of the Non-Dual where there is no coordinate status or difference. $J\bar{n}ana$, like logic as description, is a most extraordinary form of activity. For although it is a process of doing, it operates through the negation of the $up\bar{a}dhis$ by the $up\bar{a}dhis$ rather than through their straightforward exercise:

[5] Through repeated practice, Knowledge (jñāna) purifies the embodied soul stained by ignorance, and then itself disappears, as the powder of the katakanut disappears after it has cleansed muddy water. 126

Like proof in logic or philosophical elucidation, jñāna acts as a precipitate, eliminating itself in the process. It is a process of doing through undoing, an activity of reversing activity resulting in cessation of activity, as the braking of a car is the activity of reversal of motion resulting in stillness. The stillness resulting from absorption in jñāna (nididhyāsana) is the state of samādhi in which Brahman is directly intuited. It is vision sub specie aeterni corresponding to the silence (7) (mauna), that results from the successful ascent of the ladder of philosophical or discriminative activity through logical description. The process of knowing, like that of philosophical description is thus essentially negative. Like logical description it culminates in the removal of the limiting adjuncts of language and the world providing release from thought in a state of unthinkable non-action.

Thus we see that the equivalence of process and result in logic involves that logical activity is cancelled by logic. In cancelling all sense, logic cancels all activity, just as Brahman, in cancelling the duality of agent and object, cancels all activity. The culmination of the logical process cancels the process, just as the culmination of the

process of knowing in the intuition of Brahman cancels the process by showing it to be a mere appearance of its absolute ground. The failure to recognize that logic as a process is not distinct from logic as a result characterizes the Russellian school of Tractatus interpretation, according to which the Tractatus is mainly about the techniques and foundations of formal logic. Hence of Russell's approach it is easy to see why Wittgenstein wrote that it concentrated on the mere corollary of his main thought. 127 For the technique of logical calculation or description is logically necessary only with respect to the psychological limitations ($avidy\bar{a}$) which project (311, 312) the illusion ($m\bar{a}y\bar{a}$) or disguise (avarana) of symbolism. Description is only of corollary value. Similarly, in Advaita, one who took the stages or techniques of knowing, namely listening (śravana), reflection (manana) and absorption (nididhyāsana), for their result would be said to be under the sway of $m\bar{a}y\bar{a}$; for such an attitude would amount to supposing the raft for crossing the river, or the ladder for climbing, to be more important than the destination.

Our discussion has established $j\tilde{n}\bar{a}na$ as the corresponding epistemic counterpart of philosophical activity or logic as syntactic description. Here it may be objected that philosophical activity or logic as syntactic description is not an intuitive process whereas $j\tilde{n}\bar{a}na$ is. We reply that logic as syntactic description, like $j\tilde{n}\bar{a}na$, does bring about intuition. For the zero-method (6121) of syntactic description is stated to be an intuitive method:

In order to recognize an expression as a tautology, in cases where no generality-sign occurs in it, one can employ the following intuitive method [the zero method]...

It is important to observe that the null or zero-method is a method of calculation or proof, for calculating serves to bring about intuition:

- 6233 The question whether intuition is needed for the solution of mathematical problems must be given the answer that in this case language itself provides the necessary intuition.
- 62331(1) The process of *calculating* serves to bring about the intuition.

These propositions deal with mathematical intuition, but there is every reason for extending their relevance to logical intuition. For logic and mathematics are extremely closely related in the *Tractatus*:

The logic of the world, which is shown in tautologies by the propositions of logic, is shown in equations by mathematics.

Both logical and mathematical propositions are *sinnlos* quasi-propositions:

- The propositions of mathematics are equations and therefore pseudo-propositions.
- A proposition of mathematics does not express a thought.

Mathematical and logical propositions are dispensable for the same reason:

- 6122 ...we can actually do without logical propositions; for in a suitable notation we can in fact recognize the formal properties of propositions by mere inspection of the propositions themselves.
- 6232(2) ...the essential point about an equation is that it is not necessary in order to show that the two expressions connected by the sign have the same meaning, since this can be seen from the two expressions themselves. (Cf. 533, 623)

Proof in logic and mathematics is thus merely a mechanical expedient (61262) to bring about recognition in difficult cases, and, of course, in both mathematics and logic the precedent of appeal is always to the

symbol alone without reference to its meaning:

The possibility of proving the propositions of mathematics means simply that their correctness can be perceived without it being necessary that what they express should itself be compared with the facts in order to determine its correctness.

333(1) In logical syntax the meaning of the sign should never play a role.

Both logic and mathematics are syntactically descriptive:

623(2) When two expressions can be substituted for one another [in an equation] that characterizes their logical form.

What signifies in a symbol is what is common to all the symbols that the rules of logical syntax allow us to substitute for it. (cf. 3315; et infra)

The method of syntactic description in logic and mathematics, namely substitution, is the same:

The method by which mathematics arrives at its equations is the method of substitution.

For equations express the substitutability of two expressions, and starting from a number of equations, we advance to new equations by substituting different expressions in accordance with the equations.

In logic the substitutability of expressions is expressed by operations that generate further tautologies out of the initial ones:

of other logical propositions consists in the following process: we produce them out of other logical propositions by successively applying certain operations that always generate further tautologies out of the initial ones.

It is emphasized that

- Mathematics is a logical method.
- Mathematics is a method of logic.

Wittgenstein even identifies logic and mathematics with one another in

543(1)b And it is no less remarkable that the infinite number of propositions of logic (mathematics) follow from half a dozen 'primitive propositions'.

That the null-method of proving a proposition to be a tautology is indeed a method of calculation is evident in the following proposition:

6126(1) One can calculate whether a proposition belongs to logic, by calculating the logical properties of the *symbol*.

And this is what is done when we 'prove' a logical proposition....

By figuring a given proposition into the calculation or 'proof' of a tautology the null-method demonstrates or describes its logical properties by bringing about the intuition of what is shown by language. Indeed, the only notable but seemingly inessential difference between logic and mathematics is that the former employs tautologies while the latter employs equations (62341). There is therefore every reason to extend Wittgenstein's remarks on mathematical calculation and intuition to logical calculation. Hence we conclude that logical calculation serves to bring about intuition and that, as in mathematics, the language itself provides the necessary intuition (6233).

Thus, the 'intuitive method' of 61203 and the zero-method of 6121 are uniform with the mathematical intuition of 6233 and 62331, and the logical 'demonstration' of 6121 and the calculation or logical 'proof' of 6126 are uniform with the mathematical calculation of 62331 which brings about intuition. This uniformity of mathematical and logical calculation with its resultant intuition underlies the claim of 622 that the logic of the world is shown in both equations of mathematics and tautologies of logic. Since calculation is the demonstration of syntactic properties, we have a situation in which calculation brings about

both syntactic description and intuition. This means that the intuition brought about by calculation is the intuition of a syntactic description.

In the following section we will show rigorously that syntactic description is accompanied by the sublation of the inessential properties of the expressions described and that the highest stage of syntactic description is the sublation of all representative relations of language, whence it will follow that the intuition provided by the highest stage of syntactic description, like the intuition provided by the highest jñāna, is the intuition of the sublation of all representative relations of language; it will follow, in other words, that as in Advaita, so in the Tractatus, the highest intuition comprehends the phenomenal world's sublation. From the fact that syntactic description is description by way of showing and is based on the calculation of what can only be shown, it will further follow that the logical description of the world is the sublation of what can be said by what can only be shown, and that logic as description is the calculation of the syntactic counterpart of the sublation of the world. Philosophy as logic or syntactic description, like $j\tilde{n}ana$, its counterpart in Advaita, will thus rigorously be shown to be directed towards the 'experience' (5552) or mystical intuition necessary to understand the world from the non-dual standpoint of the transcendental.

4. Sublation and Syntactic Description

A rigorous understanding of the relationship between sublation and logic as syntactic description may be extracted from the *Tractatus* through an analysis carried out in terms of what in our opinion are

Wittgenstein's principles of logic as syntactic description, namely the principle of syntactic appeal and the principle of holism. The first principle is stated as follows:

The precedent to which we are constantly inclined to appeal must reside in the symbol itself.

The unique status of the propositions of logic among all propositions (6112) depends on this appeal to the symbol itself as the criterion of importance in logic:

It is the peculiar mark of logical propositions that one can recognize that they are true from the symbol alone, and this fact contains in itself the whole philosophy of logic....

Logic, in the sense we are here considering, is a method of philosophical analysis directed toward the establishment of logical syntax by means of the description of symbols or (331) expressions:

In logical syntax...only the description of expressions may be presupposed.

The description of an expression is not a description of its sense:

In logical syntax the meaning of the sign should never play a role. It must be possible to establish logical syntax without mentioning the *meaning* of a sign....

Thus, from the above proposition it is clear that the principle of appeal to the symbol is not an appeal to the sense of the symbol. It commands appeal to what enables a symbol to signify rather than to what it signifies:

What signifies in a symbol is what is common to all the symbols that the rules of logical syntax allow us to substitute for it.

The principle of syntactic appeal is the expression of the concern in logic with the essence of language. For what is common to all symbols

that the rules of logical syntax allow us to substitute for a given symbol is just the *essence* of the symbol:

So what is essential in a proposition is what all propositions that can express the same sense have in common.

And similarly, in general, what is essential in a symbol is what all symbols that can serve the same purpose have in common.

So one could say that the real name of an object was what all symbols that signified it had in common. Thus, one by one, all kinds of composition would prove to be unessential to a name.

The common features of symbols referred to in the two preceding propositions are the common features isolated by logical syntax mentioned in 3344. For example, the essential features of a proposition

...are those without which the proposition could not express its sense.

Thus, what enables a symbol to signify according to the rules of logical syntax is the essence of the symbol. Logic as description is thus based on the precedent of appeal to the essence of language. The fact that the symbol as Wittgenstein defines it is the essence of a class of signs shows that the appeal to the symbol is the appeal to essence.

I call any part of a proposition that characterizes its sense an expression (or symbol).

(A proposition is itself an expression.) Everything essential to their sense that propositions can have in common with one another is an expression....

Thus, the symbol or expression to which appeal is made under the first principle is what remains of a sign when its accidental properties have been stripped away. And therefore the principle of syntactic appeal is an appeal to the essence of signs and in the limiting case to the essence of language.

To confirm that an expression or symbol is considered in the Tractatus to be the essence of a class of signs it is only necessary to consider the status of the gpf, which, as the common characteristic mark of propositions, is also their essence:

- An expression...is the common characteristic mark of a class of propositions.
- 3312(1) It is therefore presented by means of the general form of the propositions that it characterizes.
- 5471 The general propositional form is the essence of a proposition.

The principle of appeal to the symbol or expression is thus applied to the description of the essence of language. Philosophy in the *Tractatus* is the presentation of the essence of language and reality through the description proper to logical syntax.

It is clear that description holds a central place in the *Tractatus*:

- To give the essence of a proposition means to give the essence of all description, and thus the essence of the world. (cf. 45)
- 5472 The description of the most general propositional form is the description of the one and only general primitive sign in logic.

The precise nature of such description however, is not yet clear. For example, which expressions are descriptively relevant and how the description is established are still unexplained. Generality is not a guarantee of logical relevance, for scientific description is general but not philosophical:

63432 ...any description of the world by means of mechanics will be of the completely general kind.

The limitation of scientific description is that it is still about the world:

The laws of physics, with all their logical apparatus, still speak, however indirectly, about the objects of the world.

64312(1)d The solution of the riddle of life in space and time lies *outside* space and time. (It is certainly not the solution of any problem of natural science that is required.)

The generality of science is not philosophically relevant, not descriptive in the logical sense because it is about the facts which merely set, but do not solve the problem (64321). Wittgenstein distinguishes between the generality of logical and scientific descriptions:

The mark of a logical proposition is *not* general validity.

To be general means to be no more than to be accidentally valid for all things. An ungeneralized proposition can be tautological just as well as a generalized one.

61232(1) The general validity of logic might be called essential in contrast with the accidental general validity of such propositions as "All men are mortal."

Thus, scientific law does not establish logical syntax. Wittgenstein stresses the principle of syntactic precedent in contrasting accidental and essential generality in a way that illuminates the nature of logical description:

One can calculate whether a proposition belongs to logic, by calculating the logical properties of the *symbol*.

And this is what we do when we 'prove' a logical proposition. For without bothering about sense or meaning, we construct the logical proposition out of others using only rules that deal with signs....

From this it may be gathered that the logical properties of a proposition can be established by determining whether it is a tautology.

Propositions that are tautologies have one kind of logical syntax, and those that are not have another. Proving that a proposition is a tau-

tology describes its syntax as of one kind, while proving that it is not establishes its syntax as of another.

There are two more types of syntactic description to be considered. The first type describes (non-logical) symbols (names and propositions) by means of other non-logical symbols (variables), while the second describes them by means of the logical symbol (tautology or the logical constant). In the former case, Wittgenstein's theory of syntactic description provides that the logical syntax of non-logical expressions (i.e. expressions that are not logical propositions) is presented by means of a variable in which the expression is a constant:

Thus an expression is presented by means of a variable whose values are the propositions that contain the expression.

(In the limiting case the variable becomes a constant, the expression becomes a proposition.)

I call such a variable a propositional variable.

The variable describes its values by representing a constant form that its values possess. It establishes the formal properties or logical syntax of its values.

Every variable is the sign for a formal concept.

For every variable represents a constant form that all its values possess and this can be regarded as a formal property of those values.

Description in logic thus proceeds by means of variables rather than as in science by means of propositions. Thus the gpf, a variable, is the description of its values, which include all propositions, and is also their common essence under the principle of syntactic precedent. Hence Wittgenstein can say:

To give the general propositional form is

to give the essence of all description, and thus the essence of the world. (cf. 45)

There are three methods by which a variable describes its values in accordance with the three methods by which the values are stipulated (5501); but how the description of the values of the variable is produced is not essential (5501). What *is* important is that description in logical syntax, and hence in metaphysics, cannot be expressed in propositions:

4126(3) When something falls under a formal concept as one of its objects, this cannot be expressed by means of a proposition. Instead it is shown in the very sign for the object. (cf. 4124, 4125)

The elucidations of philosophy cannot be put into words because syntactic description is not a matter of saying anything with propositions, but rather consists in choosing a notation which *shows* the adequate description of language and the world.

61223 ...we can postulate them [the 'truths of logic] in so far as we can postulate an adequate notation.

The attempt to state what can only be shown in the way of formal description must result in nonsense:

Thus the variable name 'x' is the proper sign for the pseudo-concept object.

Whenever the word 'object' ('thing', etc.) is correctly used, it is expressed in conceptual notation by a variable name....

Wherever it is used in a different way, that is as a proper concept-word, nonsensical pseudo-propositions are the result....

And in general, what logic would say it cannot. Logical description and therefore philosophical and metaphysical description is hence merely pseudo-description. However, it would not follow that logic, considered as what is shown by an adequate notation, is not descriptive.

For the variable does actually signify a formal property of its values, and in the limiting case logic shows about language and the world not how things stand in the realm of accident (641), but rather their natural and inevitable, unthinkable or *sinnlos* essence.

Let us now examine the third type of syntactic description, description of non-logical symbols by means of logical symbols. This type of description is the null or zero-method of tautology:

The propositions of logic demonstrate the logical properties of propositions by combining them so as to form propositions that say nothing.

This method could also be called a zero-method (Nullmethode). In a logical proposition, propositions are brought into equilibrium with one another, and the state of equilibrium then indicates what the logical constitution of these propositions must be.

Compare also

44611 Tautologies and contradictions are not, however, nonsensical. They are part of the symbolism, just as '0' is part of the symbolism of arithmetic.

Worthy of investigation is the parallel in light of the above between

The general form of a truth-function is $[\bar{p}, \bar{\xi}, N(\bar{\xi})]$.

This is the general form of a proposition.

and 603 The general form of an integer is $[0,\xi,\xi+1]$.

From these propositions it is clear that a proposition (non-logical symbol) has its logical syntax described or established by being combined in tautology (logical symbol). The point is emphasized in

The fact that the propositions of logic are tautologies shows the formal--logical-- properties of language and the world.

The fact that a tautology is yielded by this particular way of connecting its constit-

uents characterizes the logic of its constituents.

The formal characteristics of propositions are presented by means of the null-method. It is their role in establishing logical syntax in this manner that is part and parcel of the unique status of logical propositions among all propositions. And, of course, the principle of syntactic precedent is expressed in the fact that tautology shows the formal properties of language and the world by means of the zero-method, for it is only the logical proposition that can be recognized as true from the sign alone.

A question arises as to the relationships among the three methods of syntactic description so far discussed. Is one method primary and are the methods well-ordered with respect to the principle of syntactic appeal? The answer would seem to be that the principle of syntactic precedent merely requires appeal to the symbol as precedent, but does not assert any parameters of symbolic precedent in terms of which priority could be established.

Although a ranking on the basis of the principle is not possible, an arrangement of the three methods of description is discernable in the fact that the zero-method describes the variable (provided by the variable-method of description) by means of a logical proposition (provided by the logical 'proof' method of description). The zero-method thus mediates between, incorporates or applies the other two methods. But in the absence of a method of ranking, it is not clear whether the zero-method is a full-fledged incorporation, a mediation or merely an application.

A ranking is provided by Wittgenstein's second principle of syntactic description, the principle of holism, as stated in

55555 ...when there is a system by which we can create symbols, the system is what is important for logic and not the individual symbols.

Although, by the first principle, the precedent of appeal is always to the symbol itself and not to its meaning, according to the principle of holism appeal to the symbol is tempered, as it were, by the system as a whole. The symbol to which appeal is required is the symbol qua system rather than qua individual symbol. We may thus speak of holistic description as description in which the formal properties of expressions are specified in terms of the system as a whole. Description by the variable method is itself an approximate expression, if we may speak loosely, of the principle of holism, for obviously the establishment of the logical syntax of a name by means of the propositional variable, and the establishment of the logical syntax of propositions by the gpf variable are examples of description of symbols not qua individuals, but qua parts of larger systematic wholes; the proposition of course is a system of names while the gpf is the general term of a series or system of forms. Logical syntax is thus the holistic description of the essence of language and the world in terms of what is common to all symbols of the system. But what is common to all symbols, and what constitutes their systematicity, is logic. And thus the principle of holism is an appeal to the unique status of the propositions of logic. Again, such appeal is inseparable from the notion of the essence of our modes of signification:

6124 ...We have said that some things are arbitrary in the symbols that we use and that some things are not. In logic it is only the latter that express...

The principle of holism prevents the system from disintegrating into the

mere sum of its individual symbols, thus ruling out a pluralistic view of logic and the world.

Concerning the question of the relationship among the forms of syntactic description, the principle of holism implies that variable-description is related to null-description in the same way as the values of the variable are related to the variable. For just as syntactic description under the guidance of the principle of holism requires a name to be formally specified in terms of the systematically wider context of the propositional variable, so also it requires the propositional variable to be formally described in terms of the systematically still wider context of the gpf variable. By extension of the same descriptive process the gpf is specified by means of the limit (3313) of the system, namely the tautology as signified by the logical constant. Syntactic description proceeds in each of the above cases either by a process of proof or contextualization. The process of proof establishes that a proposition is the highest syntactic context, namely tautology. process of disproof establishes that the proposition is not completely contextualized. But since contextualization is a way of presenting the logico-syntactic employment of a sign, the principle of holism goes hand in hand with logico-syntactic employment as the determinant of the formal or internal properties of a sign:

A sign does not determine a logical form unless it is taken together with its logicosyntactic employment.

The employment of a name is shown by contextualizing it in a propositional variable; the employment of a proposition is shown by contextualizing it in a propositional variable that expresses what all propositions that can express the same sense have in common (3341); the employ-

ment of propositions in general is shown through contextualization in the gpf; and the employment of the most general form is shown by contextualization in tautology. All methods of syntactic description proceed by way of contextualization according to the principle of holism because the employment of a sign is shown by means of contextualization. The principle of syntactic appeal requires that the highest category of contextualization, and hence of logico-syntactic employment, must be the category for which appeal solely to the symbol is sufficient for complete description. Appeal solely to the symbol is not sufficient in the case of a specific name or proposition, for the meaning of names is determined arbitrarily and hence so also is that of a specific propositional function of names. Only at the level of tautology, where all representational relations are cancelled is the arbitrary eliminated; only in logic does the essential alone express itself (6124). The propositions of logic are thus both the widest holistic context and the most essential mode of syntactic employment, and it is for this reason that metaphysics follows logic. The method of specification of the gpf is the zero-method, which, in light of the principle of holism, emerges as the means of calculating which respect to each and every proposition, what 'proof'-description shows about language and the world, i.e. what tautology shows about language and the world. For just as the formal property of the propositional variable is a property of its values, so also the formal property of tautology, namely its senselessness, is a property of its non-logical propositional constituents. Just as the accidental properties of the values are annulled by their variable, so also the accidental property of the non-logical constituents, namely sense (vide 641 on sense and accident), is cancelled (vide 4462 on cancellation; 4466 on limits; 44661 on the relation between essence, cancellation and limits) through the zero-method of description.

The zero-method is that stage of syntactic description--the limiting case (3313)--in which contextualization is applied to propositions in their most general status, and in which the variable is a constant. The logical constant is intuited through the zero-method of logic and is simply the context of tautology in which the proposition is definiendum.

Lest it be supposed that the gpf and not tautology is the highest concept of the system and as such is the 'undescribed describer', it must be pointed out that

In logic there can be no distinction between the general and the specific.

There can therefore be no *general* propositional form in logic. Further, in addition to everything we have said in the previous paragraph and elsewhere, there is also the fact that Wittgenstein says that the gpf can be described:

5472 The description of the most general propositional form is the description of the one and only general primitive sign in logic.

In the limiting case, in which the variable becomes a constant (3313) and the expression becomes the general propositional form, the gpf is described by the constant. An objector might reply that there is a contradiction between 5454 and 5472, for in the former the *irrelevance* of the distinction between the general and the specific in logic is affirmed, while in the latter its *relevance* is affirmed. Therefore, either Wittgenstein is confused or the claim that there can be no gpf in logic does not follow from 5454. To this we reply that 'logic' in 5472 refers to 'the logic of portrayal'--logic as *saguna* Brahman--and not to

pure logic which, saying nothing, is indifferent to portrayal. The distinction between transcendental logic, indifferent to the requirements of representation, and immanent logic, formulated in response to the requirements of the portrayal, settles the objection.

Our claim then, is that the gpf is not ultimate since it is subject to description by the logical constant, which can only be shown and not described. The difference between the logical constant and the gpf that prevents their straightforward identification is seen in the fact that the gpf can be shown and described while the logical constant can only be shown and not described. To understand how this is so, consider the three rungs of syntactic description: (i) the proposition describes the name, (ii) the gpf describes the proposition and, as we have argued, (iii) the logical constant describes the gpf. Further, consider that according to the following proposition what falls under a concept shows the formal concept:

 $412721(1)\alpha$ A formal concept is given immediately any object falling under it is given.

Each rung leads to the next higher rung, whence it follows that (i') the name shows the formal concept of the proposition, (ii') the proposition shows the formal concept of the gpf, and (iii') the gpf shows the formal concept of the logical constant. Thus, the gpf can be described (iii) and shown (ii'), while the logical constant can only be shown (iii'). Of course, it must be borne in mind that in this context to describe an expression means to show its formal properties by means of a systematically broader contextualizing expression; the object, however, does not similarly describe the variable signifying the formal concept under which it falls since, at the very least, the value falling under the

formal concept has both formal and informal properties, while the variable signifying the formal concept represents no non-formal properties with respect to its values (though it may have non-formal properties with respect to a higher syntactic context). It is clear that the gpf shows the logical constant; for the gpf is $[\bar{p},\bar{\xi},N(\bar{\xi})]$ and the constant is $N(\cdot)$. It is also clear that the gpf does not describe the constant, because the constant is not a representative and says nothing while the gpf is a representative and says: This is how things stand (45). On the other hand it is clear that the constant describes the gpf, for the gpf is defined in terms of the constant, and the formal properties of the constant must, therefore, constitute a description of the logical context or syntax of the gpf.

As the reader will recall, our purpose was to expand the outline of the notion of sublation in the *Tractatus* through an examination of the theory of syntactic description, thereby to reinforce our solution of the contradictory identification of the gpf and the logical constant. To this end the principles of philosophical analysis and the theory of description were formulated.

That the syntactic description of an expression is the reduction or sublation of the inessential properties of the expression is abundantly clear from the connection between the essence/accident distinction and the principles of philosophical analysis. Wittgenstein agreed that Russell showed the apparent form of a proposition need not be its real logical form (40031) and proceeded to formulate the theoretical framework for a generalized program of linguistic reduction by means of his theory of description. While Russell's theory of definite descriptions was limited to the reduction of grammatically misleading proper names, Witt-

genstein's program provided for radical reduction even of so-called logically proper names. For example, the indexical expression 'this' according to the *Tractatus*is cancelled in logic; logic is prior to how, that is, prior to this, and prior to this is how things stand.

Syntactic description is thus the radical extension of Russell's reductionism; radical in the sense that it pushes beyond the empirical reductionism of 'immediate acquaintance' with sense particulars to the transcendental reductionism of direct realization (sākṣātkāra) of what is higher.

Reduction may be defined as follows: A reduces B, if, and only if, A presents the formal (i.e. logically essential) properties of B, and B does not present the formal properties of A, where A and B are symbols or expressions. Holistic reduction is the reduction by the system of its individual symbols. It will be observed that reduction is non-commutative and that holistic reduction expresses the second of Wittgenstein's principles of philosophical description. 'Reduction', 'cancellation', 'annulment' and 'sublation' are synonymous terms. Clearly syntactic description is non-commutative and reductive, and clearly the descriptions (of propositions) by the gpf and of the gpf by the logical constant are holistically reductive.

There are three main stages of syntactic reduction corresponding to the three main stages of syntactic description. The bottom rung of the ladder of syntactic reduction is the stage at which the reductum is the name. One stage higher in the ascending process of holistic reduction through syntactic description is the level at which propositions are reduced by the completely generalized propositional variable. Here, the formal properties of propositions are presented by the gpf which gives

only the common essence of all propositions, (i.e. the presupposition of representativity (6124)), all other properties being reduced in the process. At the highest rung, the gpf itself is reduced by the logical constant; the performance or solution (Lösung) of this uppermost stage of the descriptive task or problem (Aufgabe) (64321) of working outwards through what can be thought (4114), the stage at which the general form of facts is transcended, is by means of the zero-method, and is the limiting case in which the expression has become the gpf and the variable has become the logical constant (cf. 3313).

The theory of syntactic reduction is the basis of Wittgenstein's notion that names have meaning only in propositional context (33). This is not surprising in light of the fact that the theory of description is basically a theory of contextualization. The theory entails that the formal properties of names, i.e. the properties in virtue of which names can signify their meanings, are described by the formal properties of propositions. Since names signify only through their formal properties and since these are relative to the formal properties of propositions, names must be meaningful only in propositional context, from the logical point of view. Psychologically or grammatically, names may perhaps be thought to have meaning independently of propositional context, however Wittgenstein had eschewed all psychological barriers in his logical investigations. Objects, the bearers of names must conform to the a priori requirements of syntactic definition and, therefore, must also be defined in terms of configurations with others of like kind. This explains why Sellars 128 must be incorrect in supposing that an object can configure alone; alone it is without logical defining context, hence without formal properties, i.e. without logical syntax, hence without meaningful

function, i.e. meaningless.

The problem to which we may now finally address ourselves is the apparent incompatibility of the gpf and the logical constant. As stated, the gpf is the form of representation and of representational relations, while the logical constant is without sense, is not a representative and is the negation of representational relations. The statement, "The gpf is the sole logical constant (547)" is, however, not a simple identity in the manner of "gpf=logical constant". It is rather a reduction equation, based on syntactic description, and therefore the contradiction of equating incompatibles does not arise. The statement must be taken in the same way as the identity statement deducible from the following proposition:

33411(1) α So one could say that the real name of an object was what all symbols that signified it had in common.

What all symbols that can signify the same object have in common is the formal property signified by the propositional variable that presents the set of intersubstitutable symbols for the object. The propositional variable that presents the real name is "what is common to all the symbols that the rules of the logical syntax allow us to substitute for it" (3344). The reduction statement that follows from this is "The name is a propositional variable". This statement is apparently as contradictory as the above, for propositions are complex signs and not names (343) (i.e. not simple signs). That our derivation of this holistic reduction statement is in harmony with a straightforward interpretation of the *Tractatus* is seen in

The world is the totality of facts, not things.

In this proposition 'thing' is synonymous with 'object'. The fact as the reductive context of things defines independent things out of the explicit ontological furniture of the world by cancelling the false grammatical appearance of names as independently meaningful units. Since language and the world are parallel, it follows that language is the totality of propositions, not names; this is doubtless the case, as is seen from the gpf (6) and from:

314(2) A propositional sign is a fact

Only facts can express a sense, a set of names cannot.

Thus parallel to the ontological reduction of things by facts there is the syntactic reduction of names by propositions. The reduction identity, "Names are propositional variables", must be understood to mean "Names manifest themselves in propositional variables" in conformity with

3221 Objects can only be named....I cannot put them into words.

and 6522 There are indeed things that cannot be put into words. They make themselves manifest [zeigt sich: indicate, show]....

Names manifest or show themselves in the propositional variables by means of which they are described and reduced. Like objects, names are in this sense dependent on propositions. Compare:

Things are independent in so far as they can occur in all *possible* situations, but this form of independence is a form of connexion with states of affairs, a form of dependence. (It is impossible for words to appear in two different rôles; by themselves, and in propositions.)

This dependence of names on propositions (and of objects on facts) is expressed in the reduction through description of the former by the latter in the identity statement. At the second and middle rung of syn-

tactic description all differences are reduced through generalization; and since the gpf is the essence of a proposition, the reduction identity statement might be "The proposition is the gpf", which again is contradictory on the grounds of the incompatibility between the specificity of the proposition and the non-specificity of the gpf. Here again we have a case of the manifestation of a constant expression (the proposition) in a variable (the gpf) as well as a case of reduction by the essence of a proposition of its accidents. On the basis of the foregoing it would follow unobjectionably that at the uppermost rung of the syntactic ladder the formal property of the gpf, namely representativity and what is essential to representativity, is cancelled or reduced by the logical constant, so that the apparently contradictory identification of gpf and logical constant is understandable as a reduction statement rather than as a philosophical blunder.

Ontologically speaking, we say that corresponding to the lower levels of syntactic description containing propositions, not names, there is the world containing facts, not things, and that corresponding to the upper level of logic there is the transcendental, uncluttered even by facts.

It might be supposed, in objection, that at the lower level of Wittgenstein's ontology things persist within facts and that by parity of reasoning facts should persist within logic at the highest level. We reply, that although it is correct that objects persist within facts just as names persist within propositions (3141), it is not correct that facts also persist incorporated into logic. For not only is logic the solution of the problem posed by the facts, but parity of reasoning cannot apply at the highest level where nothing can be represented. Facts

persist at the middle level through generalization rather than through incorporation, and at the lower level facts may indeed be imagined as composed of things. At the middle level things are still involved, though in a completely generalized way. But at the highest level all representative relations are cancelled, and nothing at all is representable either as existing or as not existing:

6111(1) All theories that make a proposition of logic appear to have content are false.

At this point in our discussion of the objection, a digression on the nature of the logical operations is in order. Max Black's view of the nature of logical operations seems to be mistaken, or at least ambiguous, for he maintains that symbols such as 'v' and ' $^{\prime}$ ' "contribute to the sense of the compounds in which they occur", ¹²⁹ and points out in defense of his position that p v q has a different sense than p $^{\prime}$ $^{\prime}$. If Black's position is to be defensible, the ambiguous phrase 'contributes to' must be interpreted such that the logical constant is not taken to be a constituent of a proposition's sense. Wittgenstein states that

The occurrence of an operation does not characterize the sense of a proposition.

Indeed, no statement is made by an operation, but only by its result, and this depends on the bases of the operation.

(Operations and functions must not be confused with each other.) (Cf. 23/1/15)

P v q and p \wedge q differ in sense because the operations that map the senses of p and q into their truth-functional results are different; however, this does not mean that the logical operations contribute to the sense in a constitutive fashion. Rather, the operations of conjunction and disjunction highlight in different ways the internal properties

already present in p and q by showing how different results can be produced from the same bases (521). Moreover, not only is an operation not a mark of forms of propositions but rather of the differences of forms (5241), but an elementary proposition actually contains in itself all the logical operations (547). This shows rather forcibly that the operation 'contributes to' sense only in the indirect sense in which it can be used to highlight the internal properties of propositions. The mathematical operations, '+', '-', 'x', etc., contribute nothing to the sense of the elements of the set $\{0,1,2,3,\ldots\}$ but are simply signs for the rules which highlight the internal properties of numbers.

'1+1 \neq 1-1' does not entail that '+' and '-' are constitutive elements of the sense of '1+1' and '1-1'. The role of numbers and constants is completely different; the latter merely represent the way of unfolding the sense already present in the former. For this reason, $p \vee q$ makes sense if, and only if, $p \wedge q$ makes sense (4/6/15).

Returning now from the digression on the nature of logical operations to the objection with which we were concerned, although the objection is unfounded, it does point out the need for a distinction between the modes of reduction at lower, middle and higher levels of syntactic description. Accordingly, we may define the first as reduction by incorporation, the second by generalization and the third by elimination. Only the first and second proceed by way of determinate substitution; in the first case, propositional variables reduce the false grammatical disguise of names (e.g. the disguise of a definite description as a proper name) by incorporating them into systems of representative relations in which only their logical essence is retained; in the second case, the gpf cancels the specific how of facts by generalizing away

their differences, leaving only the seed or presupposition of name and form in a latent and unrepresentable form. The third case proceeds by way of indeterminate substitution; logic reduces propositions by eliminating even their most general representative relations, that is, by eliminating them as propositions, seed-presupposition and all. In each case the inessential appearance is cancelled, but only in the first two cases is anything determinate left over; in the first case, logico-pictorial forms are constructed; in the second, the presupposition of determinancy—the general logico-pictorial form, the form of representation and of reality—remains. In the third case, in which the indeterminate is substituens for the determinate, nothing remains. The first is partial holistic reduction: a wider part of the system is substituens for a narrower part. The second is holistic reduction: the generalized system as a whole is substituens. The third is trans—holistic reduction: the trans—system or transcendental is substituens.

Before continuing the exposition of these concepts, we shall briefly consider some Advaitic correlations. The reduction or sublation of the false snake-appearance by the veridical rope-cognition is a case of determinate substitution in contrast to the sublation of $m\bar{a}y\bar{a}$ by nirguna Brahman, which is a case of indeterminate substitution. The sublation by saguna Brahman of $m\bar{a}y\bar{a}$ is the substitution of the latent (avyakta) seed-presupposition of name and form for the effloresced (vyakta) multiplicity of individual names and forms. In our terminology, the rope is the partial holistic sublation of the snake; it reduces the snake-appearance by incorporating it into a broader frame of empirical reference and a more inclusive state of empirical awareness; in this case one determinate name and form is substituted for another. So also the waking state

(jagaritasthana) is the partial holistic reduction of the dream state (svapnasthana); the latter is cancelled by contextualization in the broader determinate framework of the substituted former. tal contrast in the Tractatus between reduction which preserves representativity and reduction which does not preserve representativity, that is, between determinate and indeterminate substitution, corresponds to the contrast between the modes of reduction of non-veridical by veridical perceptions (i.e. of tulāvidyā (temporary illusion of an individual) by mūlāvidyā (primeval illusion of the public empirical world)) and of $m\bar{a}y\bar{a}$ by saguna Brahman on the one hand and of $m\bar{a}y\bar{a}$ and saguna Brahman by nirguṇa Brahman on the other. The sublation of tulāvidyā by mūlāvidyā substitutes the hard illusion of name and form for the soft one; saguna Brahman substitutes the seed of name and form for names and forms; and nirguna Brahman eliminates or incinerates the very seed of name and form, never to rise again. Again, the sublation by saguna Brahman of māyā corresponds to the substitution of a more universal state of awareness, pure consciousness with seed (savikalpa samadhi) of name and form, for the less universal states of waking and dream, while the sublation of saguna Brahman by nirguna Brahman corresponds to the substitution for pure consciousness with seed of name and form of pure consciousness without seed of name and form (nirvikalpa samādhi). The unrepresentability of saguna Brahman is indicated by correlation with the state of deep sleep (susupti) which cancels the waking and dream states. The supercession of saguna Brahman in relation to māyā is what we have called holistic sublation, and the supercession of nirguna Brahman in relation to saguna Brahman and $m\bar{a}y\bar{a}$ is what we have called trans-holistic sublation. Thus, the sublation of jāgaritasthāna and svapnasthāna by

savikalpa samādhi is holistic while the sublation of savikalpa by nirvikalpa samādhi is trans-holistic. So it seems that although the *Tractatus* lacks a developed phenomenology of consciousness, it nevertheless provides a framework of parallel logical distinctions.

Continuing now with the discussion of the different modes of reduction in the Tractatus, we found that in a proposition a name contributes to the configuration of names the representative relation in which it stands to its meaning, the object for which it stands; the proposition is thus an ordered composite of its component representative relations. In a tautology each proposition contributes a form which is put into equilibrium (6121) with the forms of other propositions in such a way as to balance out and cancel even the general form of representation. Reduction in the first case is not a cancellation of the representative relation of the name to its object but rather of the name's inessential, false grammatical appearance as independently meaningful. It is the incorporation of the name's representative relation in terms of its formal relations with other names. The meaning of the name is thus incorporated within the elementary propositions which contain it; reduction by incorporation may be understood as the incorporation by an independent expression, the propositional variable, of a dependent expression, the At the middle level, where that something is so (cf. iti) is cancelled by that something is (5552), reduction is the essential (61232) generalization by the independent, a priori logic of portrayal given in the gpf of the dependent logical forms of portrayal of specific proposi-The propositions reduced depend on the gpf in the sense that how presupposes what (5552); as the gpf is the general form of logical forms, the latter could not be without the former and are hence dependent.

Again, at the highest level of reduction, where the gpf is eliminated by the constant, the gpf depends on the logical constant, i.e. on logic, for the gpf is defined in terms of the constant (6); but the constant is independent of representatives (40312) and hence is independent of the generalized representative, the gpf.

The distinction between representativity-preserving reduction, by incorporation and generalization, under determinate substitution and non-representativity-preserving reduction, by elimination, under indeterminate substitution may be formalized in terms of the distinction between the homomorphism and the non-homomorphism. 133

Def: A function $f: X \to Y$ is a homomorphism if, and only if, $f(a*b) = f(a) \circ f(b)$, for all a, b in X, where * is the binary operation in X and \circ is the binary operation in Y.

In this sense the operation '*' is carried onto the operation 'o'. A homomorphism is thus a mapping that preserves the operations and structure of the system on which it is defined. In the case of the system of propositions, we are dealing with only one set, thus X = Y and $* = \circ$, so that for our purposes a non-homomorphism is such that $f(a*b) \neq f(a) * f(b)$; that is, a non-homomorphism eliminates the operations and structure of the system on which it is defined.

Now since representativity is preserved at the lower levels of reduction through syntactic description, but not at the highest level, it may reasonably be deduced that the different modes of reduction correspond to homomorphic and non-homomorphic mappings of the system. On the basis of the theory of syntactic description and all that goes with it, it may thus be deduced that there are different morphisms in the *Tractatus* defining different modes of reduction, the homomorphism defining

representativity-preserving reduction and the non-homomorphism defining non-representativity-preserving reduction. It may further be deduced that the gpf is a homomorphism, since it preserves representativity in completely generalized or seed form and that the logical constant, i.e. the Sheffer stroke, is a non-homomorphism, since, as we have argued, it does not preserve representativity. If these deductions should be confirmed, the theory of syntactic description with its background in the distinction between determinate and indeterminate levels of language and reality would be dramatically confirmed, and a great deal of what we have said put on a very solid logical foundation.

Our question, then, is whether the gpf is a homomorphism and the logical constant a non-homomorphism. A homomorphism is ready at hand in the major proposition.

A proposition is a truth-function of elementary propositions.

What this means is that T(p*q) = T(p) * T(q), where '*' is a logical operation, such as conjunction, disjunction, etc. Thus for example, the truth of 'It is raining and it is dark' is a function of the truth of 'it is raining' and the truth of 'it is dark'. And this is all it means to say that 'T' is a homomorphism. A proposition is thus a homomorphic function of elementary propositions.

Further, the decomposition D, of any proposition into a truth-function of elementary propositions as represented by the gpf is a homomorphism: D(P*P') = D(P)*D(P'), where P and P' are propositions and '*' is any logical connective. For example, if $P = e \ v \ e'$ and $P' = e' \ v \ e''$, and the connective '*' is logical implication, then $D(P*P') = (e \ v \ e') \rightarrow (e' \ v \ e'')$ and $D(P)*D(P') = (e \ v \ e') \rightarrow (e' \ v \ e'')$. The gpf thus represents

a homomorphism of the system of propositions into the set of truthvalues according to our first explanation as well as a homomorphic decomposition of propositions into elementary propositions, according to our second explanation.

The proposition in essence is the gpf, and thus proposition 5, a major proposition, precedes the next major proposition in which the general form of a truth function is given and identified with the gpf:

The general form of a truth-function is $[\bar{p}, \bar{\xi}, N(\bar{\xi})]$. This is the general form of a proposition.

Thus, the gpf is a homomorphism, and the homomorphism is the formalization of syntactic description at the middle level and hence also of reduction by generalization. As the gpf is both the form of representativity and the general structure of a proposition, it follows that the form of representativity and the general structure of a proposition are given as a homomorphic function. The homomorphism, as a structure-preserving function, is definitive of the structure it preserves, and elimination of the homomorphism is thus elimination of the essential structure of representativity defined by the homomorphism.

Having shown that the gpf is a homomorphism we now have to show that the logical constant is a non-homomorphism. The sole logical constant is the Sheffer stroke '|'. Also written 'N(')', and read 'not p and not q', the stroke is the general form of an operation as given in the gpf (6001, 601). Clearly it corresponds in form to the Advaitic formulation of Brahman, 'Neti, neti' (na('not')+iti('this', or 'such')), read 'Not this, not that'. Showing that the stroke is a non-homomorphism is equivalent to showing that its significance is the same as that of 'Neti'. For the non-homomorphism as defined on symbolism (i.e.

on language $per\ se$) is the elimination of the essential structure of the system of representation, while 'Neti', neti' is the elimination of the entire system of name and form coordinate with nescience $(avidy\bar{a})$.

To prove that the stroke is a non-homomorphism the following must be the case: $|(a.b)\neq(a).|(b)$. If the inequality holds then the Sheffer stroke, by definition, is non-homomorphic. Developing the left side we have,

$$|(a.b)| = (a.b) | (a.b)$$

= $\sim (a.b) \cdot \sim (a.b)$
= $\sim (a.b)$

Developing the right side, we have,

$$|(a).|(b) = a|a.b|b$$

$$= (\sim a. \sim a). (\sim b. \sim b)$$

$$= \sim a. \sim b$$

Clearly the right side does not equal the left side: $\sim (a.b) \neq \sim a. \sim b$. Therefore, the Sheffer stroke, the sole logical constant, is a non-homomorphism. The Sheffer stroke thus eliminates the operations and structure of the system, the apparent logical operations and the structure of function and argument, whose general form is the gpf. The sole logical constant thus eliminatively reduces the gpf. The structure of the set of propositions, defined by means of the logical operations, 'and', 'or', 'if...then', 'not', and formally expressed by the homomorphic gpf is eliminated by the non-homomorphism as entailed by the theory of syntactic definition and reduction. Since both deductions from the theory of syntactic description and sublation proved to be correct in a rather dramatic way, it may be concluded that the theory is on a very solid logical footing.

What has been said about morphisms and reduction makes sense of the notion that the limit of what can be said (the gpf) signifies the limit

of what cannot be said (4114, 4115). It is clear that the gpf, $[\bar{p}, \bar{\xi}, N(\bar{\xi})]$, shows or signifies 'N()', but it is prima facie less clear how the limit (i.e. the gpf) of what can be said is limited by the limit (i.e. 'N()') of what cannot be said. Clarification is provided by the concept of a non-homomorphism which we have been to be the elimination of the homomorphic structure of the system of propositions. The logical constant as the non-homomorphic limit of what cannot be said eliminates the homomorphic limit of language (the gpf). This is the syntactic counterpart of the elimination of saguna Brahman (\bar{I} svara)--the limit, bank or boundary of $m\bar{a}y\bar{a}$:

...the Lord...is a bank and boundary so that these words may not be confounded. 130

The Lord, O Arjuma, is seated in the region of the heart of all beings, turning round all beings, (as though) mounted on a machine, by his delusion $(m\bar{a}yay\bar{a}).131$

--by its limit, namely Brahman:

...as a bank dams back the water and marks the boundary of contiguous fields, so the Self supports the world and its boundaries.132

The non-homomorphism as the formal description of the gpf defines what the propositions of logic show about the world in accordance with the principles of syntactic description:

The fact that the propositions of logic are tautologies *shows* the formal--logical--properties of language and the world.

The description of the gpf (5472) gives the essence of what is shown by the essence of what can be said. Thus, what logic shows about the world is given as the formalization of the trans-holistic cancellation by the logical constant of all representative relations, i.e. as the non-homomorphic function, expressing the unthinkable (sinnlos) silence (7) about

which nothing can be said.

We said above that the non-homomorphism is a function that does not preserve the structure and operations of the system on which it is defined and that it thus eliminates the system. That this is the case is fairly obvious, it seems, to the mathematician; for the operations that are eliminated by the non-homomorphism express the natural and inevitable nature of the elements of the system, so that their elimination is the elimination of the elements themselves. That Wittgenstein thought as much is shown by the following propositions:

- 5.2 The structures of propositions stand in internal relations to one another.
- In order to give prominence to these internal relations we can adopt the following mode of expression: we can represent a proposition as the result of an operation that produces it out of other propositions (which are the bases of the operation).
- An operation is the expression of a relation between the structures of its result and of its bases.
- 5.23 The operation is what has to be done to the one proposition in order to make the other out of it.
- 5.231 And that will, of course, depend on their formal properties, on the internal similarity of their forms.

From these propositions it is clear that operations express the internal properties of propositions, where an internal property is the essence of its object:

4123(1) A property is internal if it is unthinkable that its object should not possess it.

The internal properties of a proposition are the properties without which it could not express its sense:

3341(1) So what is essential in a proposition is what all propositions that can express the same sense have in common.

So that the elimination of the operations is the elimination of the properties that enable a proposition to express its sense. And the generalization of the operations is the generalization of the properties that enable symbols to express their sense.

That the operations are identifiable with the logical syntax of symbols, i.e. with what enables symbols to signify, is also stated in

Once a notation has been established, there will be in it a rule governing the construction of all propositions that negate p, a rule governing the construction of all propositions that affirm p, and a rule governing the construction of all propositions that affirm p or q; and so on. These rules are equivalent to the symbols; and in them their sense is mirrored.

The rules referred to in this proposition are the operations; for, according to 523, the operation is the route from one proposition to another, and according to 521 it is an operation that would govern the construction of all propositions of a given kind. Thus, the operation is equivalent to the symbols of the system on which it is defined, that is, it is the natural and inevitable expression of the nature of the signs. Logical syntax is just what the symbols themselves express. Therefore, the elimination of the operations is the elimination of the symbols and the generalization of the operations is the generalization of the symbols. The non-homomorphic logical constant is thus the elimination of the system of symbols, as stated above, and the homomorphic gpf, as the most general form of transition (601) from one proposition to another, i.e. as the most general form of an operation, is the generalization of the logical operations. Now it might seem strange to say that the operation 'N()' eliminates the logical operations and with them the system of symbols, for N() is itself an operation and would

seem to be 'left over' after the elimination of the logical operations; so that there would seem to be some representational symbolic structure remaining of which 'N()' is the expression. The answer to this line of objection is that the logical constant 'N()' is the natural expression of the quasi-propositions of logic and as such, eliminates the internal features of symbols which enable them to have sense; the propositions of logic are without sense and thus 'N()' is the natural expression of the transcendental or non-representational essence of symbolism. There is thus nothing 'left over' in the way of semantic potential ($\hat{s}akti$), that is, in the way of representativity, after the non-homomorphic logical constant has eliminatively reduced the apparent logical operations and with them all representational relations.

In reply to a possible objection that the notion of the cancellation or reduction of operations is foreign to Wittgenstein's thought it may be said that he held that one operation can cancel another (5253), that operations are merely apparent (5441), do not exist (54), can vanish (5254) and can be generalized (601).

Wittgenstein's method of arguing that there are no logical operations, that they are merely apparent, is based not on the concept of morphisms, but on their interdefineability and nonrepresentativity. Since in the adequate conceptual notation forming the standard of philosophical activity signs are neither ambiguously nor unnecessarily duplicated, the interchangeability of the constants could only be viewed as a logical defect. It is manifest that there are no logical operations (in Frege's and Russell's sense) (54) because:

If logic has primitive ideas, they must be independent of one another.

The logical constants or operations are interdependent since, for example, $p \vee q = (p \wedge q)$, $p \rightarrow q = (p \wedge q)$, etc.

542(2) The interdefinability of Frege's and Russell's 'primitive signs' of logic is enough to show that they are not primitive signs....

Wittgenstein argues that there cannot be a multiplicity of constants on the grounds that they are not representatives:

Truth-functions are not material functions. For example, an affirmation can be produced by double negation: in such a case does it follow that in some sense negation is contained in affirmation? Does ' $\sim p$ ' negate $\sim p$, or does it affirm p--or both?

The proposition ' $\sim p$ ' is not about negation, as if negation were an object: on the other hand, the possibility of negation is already written into affirmation.

And if there were an object called '~', it would follow that '~p' said something different from what 'p' said, just because the one proposition would then be about ~ and the other would not.

The logical constants must, therefore, be merely apparent. The fact that the propositions of logic all say nothing, i.e. are not representatives, shows that the logical signs cannot be used in the definition of primitive propositions:

Even at first sight it seems scarcely credible that there should follow from one fact p infinitely many others, namely $\sim p$, $\sim \sim \sim p$, etc. And it is no less remarkable that the infinite number of propositions of logic (mathematics) follow from half a dozen 'primitive propositions'.

But in fact all the propositions of logic say the same thing, to wit nothing.

In these ways Wittgenstein argues that the logical operations (in Frege's and Russell's sense), like the identity sign (5533), are not essential constituents of conceptual notation, are therefore merely apparent and do not exist. He therefore affirms (consistent with the theory of logic

as an inessential process of calculation equivalent to its result) what we have seen to be the case under the non-homomorphism in the system, namely the elimination of the logical operations. The morphisms which we have shown to exist and to express the different modes of syntactic sublation or reduction thus definitely reinforce the basic trend of Wittgenstein's thought.

Wittgenstein's argument against the reality of the logical constants may be seen against the broad background of his system in the following way. The principles of syntactic precedent and holism, by appealing to the unique essence of the multiplicity of individual symbols, imply that what is not unique is merely apparent and does not exist as an essential constituent of conceptual notation. But unique status is ascribed only to the propositions of logic (6112); therefore only what the propositions of logic show about language and the world is unique and essential. Since the propositions of logic show that they say nothing, it follows that the multiplicity of logical constants must be merely apparent; that is, since the propositions of logic say nothing about a multiplicity of constants, the multiplicity of constants is not an essential constituent of conceptual notation. This reasoning is behind the rejection of the primitiveness of the constants, and is expressed by the fact that the Sheffer stroke, the sole logical constant, is a non-homomorphic operation that eliminates the multiplicity of logical operations.

Once again, therefore, it is evidently impossible to identify the gpf with the sole logical constant in any straightforward way. For the former is a homomorphism while the latter is a non-homomorphism, and these certainly cannot be equated. The illegitimacy of such an identi-

fication also emerges in the related fact that a truth-function of elementary propositions (the gpf) cannot be equated to a non-truth-functional proposition (tautology, as expressive of the Sheffer stroke). The non-truth-functionality of tautology is seen in the fact that the truth of tautology is independent of the truth of its constituents. propositions of logic are recognizable as true from the sign alone, simply because they are not truth-functions of elementary propositions, which is to say that they are recognizable as true because they express a non-homomorphism. The unique status of the propositions of logic consisting in their saying nothing is due to the fact that they express the cancellation of the internal representational properties of their constituents by non-homomorphicly cancelling the logical operations that express these internal representational properties. Thus the gpf, and with it the entire world of representation, is eliminated by logic through precisely the route indicated by the elimination of the apparent logical operations by the non-homomorphic logical operation. The elimination of the homomorphism on elementary propositions by the tautology is the elimination of the essential structure of representativity which the homomorphism expresses in a generalized form. It is this transholistic reduction of even the faintest, most generalized vestiges of the system of representational relations which is indicated by the identification (547) of the gpf and the sole logical constant.

It is also clear that the cancellation of the logical operations by the non-homomorphic Sheffer stroke is the cancellation of the compositeness of propositions. For (547) the logical operations are invariable concomitants of compositeness, and thus their cancellation is the cancellation of compositeness. In saying that the logical operations given with compositeness are merely apparent, Wittgenstein implies that compositeness and what amounts to the same, that elementary propositions are also merely apparent. Logic thus signifies the non-dual reality.

Let us now consider the role of the Sheffer stroke in the gpf more closely. It is well-known that the Sheffer stroke defines all the logical operations. For example, $\sim p = p|p$; $p \vee q = (\sim p|\sim q)|(\sim p|\sim q) = \sim (\sim p \wedge q) = p \vee q$, etc. One immediately wonders how the Sheffer stroke can at once eliminate the constants and define them.

We hasten to point out, therefore, that the Sheffer stroke has two roles, one in propositions and another in quasi-propositions. are the informative propositions of everyday language and science, while the latter are the sinnlos propositions of logic and mathematics. Quasipropositions constitute the null-class of values of the gpf, because they are not proper truth-functions of elementary propositions and because, in contrast to the gpf, which is the form of representation, they cancel all representational relations. The null-class of the gpf is the constant limiting case of values of the gpf, and therefore (3313; et supra) the null method is used to describe syntactically the logical properties of the non-null values of the gpf. The Sheffer stroke in non-null values, i.e. in *sinnvoll* propositions, redefines the constants through reductive generalization; in null values, i.e. in sinnlos propositions, it reductively eliminates them. In the gpf's non-null sinnvoll values, the logical constant thus signifies the form of representation that is common to all thought and language; and in this role it defines the immanent pure consciousness (cit or caitanya) in terms of which Śamkara defines knowledge $(j\tilde{n}\bar{a}na)$. In null-propositions, that is, independently of its role in thought and communicative language, the Sheffer stroke is beyond thought.

The logical constant's two roles do not clash because they do not overlap (cf. 5557). The stroke's role in redefining the logical operations is the mere appearance of its role in cancelling them, i.e. in the tautology. In the tautology the stroke is not the most general mode of transition because, where nothing can be represented, no termini of transition exist. Tautology transcends transitions and hence operations. In logic there are no operations to define. The use of the stroke in generating the proper values of the gpf is its informal use, while its use in the propositions of logic is its formal use. The formal use supercedes the informal use, in accordance with the principle of appeal to syntax through which the propositions of logic achieve a unique status. But logic must be in contact with its application (5557), and therefore it is natural and necessary that the stroke should have a subsidiary and reducible role in the definition of the apparent logical operations, so that basically we are saying that the Sheffer stroke in the propositions of logic corresponds to nirguna Brahman, while in the gpf it corresponds to saguna Brahman. The role of the stroke in redefining the constants would thus correspond to the role of saguna Brahman in producing the multiplicity of phenomena, while the non-homomorphic role in eliminating the constants would correspond to the role of nirguna Brahman in eliminating $m\bar{a}y\bar{a}$.

Now again one might object that we have defined the gpf, a homomorphism, in terms of a non-homomorphism, the Sheffer stroke. It is true that the gpf, namely $[\bar{p}, \bar{\xi}, N(\bar{\xi})]$ is a homomorphism defined in terms of of the non-homomorphic stroke, namely $N(\cdot)$, but there is no contradiction or incongruity here because, as argued above, the gpf merely shows,

but does not *describe* the stroke. The formal use of the stroke does not come into play in the gpf; the formal and informal uses of the stroke do not overlap. The gpf is thus still a superimposition $(adhy\bar{a}sa)$ or disguise of the non-dual constant incorporated in the appearance of representativity.

To recapitulate, this section has established that the sublation by Brahman of $m\bar{a}y\bar{a}$ is the corresponding counterpart of (a) the disintegration (4466(4)) or dissolution (3/6/15(8)) by tautology of its constituent propositions, (b) the cancellation by tautology of all representational relations (4462), (c) the reduction by the sinnlos of the sinnvoll (4661), (d) the syntactic description via the zero, null or tautology method of propositions, and (e) the cancellation by the non-representativity of the sole logical constant or operation of the representativity of the merely apparent (54) logical constants or operations. We conclude this section by observing that the elimination by the sole logical constant of the gpf eliminates sublation by determinate substitution (or 'transfiguration') and thereby excludes Ramanuja's qualified Non-Dualism (višistādvaita) as a possible reading of the Tractatus.

CHAPTER IV

THE LIMIT

"...as a bank dams back the water and marks the boundary of contiguous fields, so the Self supports the world and its boundaries."

--Śamkara (BSS, III, 2, 32)

1. The Limit: Logical Analysis

Wittgenstein's prefatory statement of his aims makes it clear that without an adequate definition of a limit the *Tractatus* cannot be well-understood.

Thus the aim of the book is to set a limit to thought, or rather--not to thought, but to the expression of thought: for in order to set a limit of thought, we should have to find both sides of the limit thinkable (i.e. we should have to think what cannot be thought).

It will therefore only be in language that the limit can be set, and what lies on the other side of the limit will simply be nonsense.

The purpose of this section is to define the notion of a limit, so fundamental in Wittgenstein's thought, and to relate it to the Advaitic position.

An adequate definition of a limit must express the principles of philosophical description, for in Wittgenstein's view philosophy is both descriptive and directed towards setting a limit. Further, the definition must unify the basic theses of the *Tractatus*, for the limit concept is integral both to the technical logical apparatus (3313, 4466, 4113, 4114, 451, 56) and to the metaphysical conclusions (5632, 64311, 645) of

the book. Fortunately, in spite of Wittgenstein's mathematical laconism in the matter of limits, a clear definition may be extracted by taking his relatively few pronouncements on limits in the broad context of his thought.

Wittgenstein states that philosophy

4114 ...must set limits to what can be thought; and in so doing, to what cannot be thought.

It must set limits to what cannot be thought by working outwards through what can be thought.

The purpose of philosophy is thus not only to set limits to what can be thought, as might be expected, but also to set limits to what cannot be thought by setting the limit of what can be thought. In the next proposition Wittgenstein reinforces his statement of the method by which philosophy will proceed:

It will signify what cannot be said, by presenting clearly what can be said.

Since 'thinking' and 'saying' are interchangeable here without distortion of meaning, it may be gathered from 4114 and 4115 that by presenting clearly what can be said, the limit of what can, and thereby of what cannot be said is set. Thus, the symbol for what can be clearly said sets the limit of what can be said and thereby of what cannot be said. Understanding how the limit is set must, therefore, in large part amount to understanding how one presents or describes what can be clearly said and, more generally, how one presents or describes any expression. In this connection the following proposition, which played an important role in the formulation of the theory of syntactic description, is important:

Thus an expression is presented by means of a variable whose values are the propositions that contain the expression.

(In the limiting case the variable becomes

a constant, the expression becomes a proposition.)
I call such a variable a 'propositional variable'.

An expression is formally described or presented by means of a variable which becomes a constant in the limiting case. The description or presentation of the values of the variable is of three kinds according to Wittgenstein (5501): (1) direct enumeration; (2) specification of a function; and (3) specification of an operation or formal law for the construction of a series of forms. Each way of specifying the variable by describing its values is a method of setting a limit. Thus a limit is set by the method of direct enumeration and by the methods of indirect enumeration, namely specifying a function and specifying a law or operation for the construction of a series of forms (i.e. specifying the general term of a series of forms), as consideration of the following propositions shows:

- Suppose that I am given *all* elementary propositions: then I can simply ask what propositions I can construct out of them. And there I have *all* propositions, and *that* fixes their limits.
- 55561(1) Empirical reality is limited by the totality of objects. The limit also makes itself manifest in the totality of elementary propositions.

Giving all objects or elementary propositions fixes the limits of empirical reality. But each of the three methods of description is a means by which all elementary propositions are given. Therefore the three methods of description are means by which the limits of empirical reality are fixed. Given all elementary propositions, the limits of all propositions and thereby of empirical reality are fixed by a method of constructing all propositions from elementary propositions. But the

method of constructing all propositions from elementary propositions is given in the gpf, the limit of what can be said, which is the general term in a series of forms (52522). Therefore the third method of description, the method of specifying the general term in a series of forms fixes a limit. All three methods of description are means by which the limits of reality are fixed. The correctness of this understanding of limits in terms of descriptions is thus confirmed by the fact that holistic methods of description fix the limits of empirical reality. Whether the limit is specified by enumeration or by some other mode of description is not important:

How the description of the terms of the bracketed expression is produced is not essential.

What *is* essential for understanding the limit concept is that the limit is set by syntactic description and that philosophy in the *Tractatus* is the specification of logical limits through syntactic description.

We have seen that the gpf is the limit of the process of working outwards through what can be said in the expanding circles of syntactic description, but there is another method of description that qualifies all descriptions provided by the gpf, namely description by logical propositions, which, as in the case of the zero-method of syntactic description, also sets a limit. Tautology is the limiting case of the combination of signs (4466). Thus the logical properties of propositions are described (6121) by plugging them into the limiting case of the combination of their signs, the limit of the combination of signs in this fashion providing a description. Further, proposition 3313 states that the presentation or description of a proposition by a constant occurs in the limiting case. It is thus clear that every limit provides

some form of description, that description is basically a process of setting a limit and that Wittgenstein's aim of setting the limit of thought and thereby of what cannot be thought is integral to his conception of philosophy as description. Since syntactic description is a method of sublation or reduction, where A reduces B if, and only if, A presents the formal properties of B, but not vice versa, we may define a limit as follows: A limits B if, and only if, A reduces B. Thus, if A sublates or reduces B, A is the limit of B.

That the limit reduces or sublates the limited need not be deduced solely from the nature of description as reductive, (though the fact that it can be deduced confirms the interpretation), for we have seen that the properties of the limiting case are the opposite of those of the case limited. The limiting case of the *combinations* of signs is the *dissolution* of the combination of signs (4466); and the limiting case of the *variable* that presents an expression is a *constant* (3313(2)). Thus, the limit of the combination of signs is the disintegration of signs, that is, the limit of representativity is non-representativity; and the limit of a propositional variable is a logical constant.

If we were dealing with syntactic limits alone, the limit might have been defined in terms of syntactic description rather than in terms of reduction. However, it will be noted that non-syntactic objects can also have formal properties (for a formal or internal property is just the essence of the thing, i.e. that without which the thing could not be what it is) and hence (according to our definitions) that they can also have limits (e.g., the world is a limited whole (645)):

In a certain sense we can talk about formal properties of objects and states of affairs, or in the case of facts, about structural prop-

erties...

(Instead of 'structural property' I also say 'internal property'...)

4123(1) A property is internal if it is unthinkable that its object should not possess it.

Since a definition in terms of syntactic description might appear to exclude the possibility of non-syntactic counterparts of syntactic objects serving as limits, whereas the Self is also a limit, a metaphysical rather than a syntactic limit, the definition of limit was stated in terms of reduction rather than in terms of description. Thus we can speak of the Self as limiting the world, if it stands in some reductive relation to the world, and of eternity as limiting time, if it reduces time. Our definition of a limit constitutes a development of the notion of a limit found in the Tractatus rather than a straightforward exposition of the concept because it includes the notion of a relative limit, which is merely implicit in the Tractatus. Wittgenstein did not mention limits in connection with descriptions corresponding to partial holistic reduction because he was interested in holistic description, totality, essential generality and absolute limits, and only secondarily in the inessential process (6126, 61261) of working outwards through the relative limits of what can be said.

A is the relative limit of B if, and only if, there is a C such that C limits A. A is the holistic limit of B if, and only if, A reduces B through essential generalization. A is the trans-holistic limit of B if, and only if, A reduces B through elimination. The holistic limit in the Tractatus is its homomorphism while its trans-holistic limit is its non-homomorphism. For the homomorphism defined by the gpf reduces propositions by essential generalization while the non-homomorphic Sheffer stroke reduces propositions by eliminating them. The holistic limit

limits other relative limits by presenting the general essence of language, namely the form of representativity common to all propositions, the form which enables a proposition to be a picture of a fact. The trans-holistic limit in turn limits the holistic limit by cancelling all representational relations. In Advaita, the rope is the relative limit of the snake-illusion, saguna Brahman is the holistic limit of māyā and nirguna Brahman is the trans-holistic limit of saguna Brahman, for the rope reduces the snake, saguna Brahman reduces all particulars, and nirguna Brahman reduces saguna Brahman.

Number in the *Tractatus* is not said to be a limit, but it must be. For number is the exponent of an operation (6021) and

Operations cannot make their appearance before the point at which one proposition is generated out of another in a logically meaningful way; i.e. the point at which the logical construction of propositions begins.

But the point at which propositions are generated one out of another in a logically meaningful way is given in the gpf. The gpf is the general form of a truth-function and therefore the point at which the logical construction of propositions begins. Number thus emerges with the gpf, that is, with the general form of representation and is thus, like the gpf, a holistic limit of the world. The—formal essence of the empirical world is thus inseparable from number. Thus, in the *Tractatus* as in Advaita, multiplicity characterizes the riddle of māyā. At the level of the gpf or saguṇa Brahman however, number is what is common to all numbers and, like the gpf, is expressed by the general term in a series of forms:

The general form of an integer is $[0, \xi, \xi+1]$.

603

As with the gpf, so also with number, essential generality is involved:

6031 The theory of classes is completely superfluous in mathematics. (my italics)

This is connected with the fact that the generality required in mathematics is not accidental generality.

Thus the holistic limits, the gpf and number, cannot be reduced to empirical conditions, such as classes, any more than saguna Brahman.

Since the gpf is the limit of what can be said, it will signify the limit of what cannot be said. The gpf itself, as the form of representation and the symbol for the internal properties of language and the world, is ineffable and cannot be said (2172, 4124 et al.). Thus the trans-holistic limit of what cannot be said, namely the Sheffer stroke, will limit the ineffable gpf by which it is signified or shown. Similarly, nirguna Brahman is the trans-holistic limit of the inscrutable māyā and of the transcendental saguna Brahman.

2. The Limit: Metaphysical Analysis

We maintain that Wittgenstein's logical theory of limits is the syntactic basis of his metaphysics, and we shall attempt to show that the use of the limit concept in the exposition of the mystical (or metaphysical) supports our analysis of Wittgenstein's logical theory of limits, with its roots in the theory of syntactic description, by recapitulating syntactic relationships in metaphysical terms, as is required by the definition of philosophy as consisting of logic and metaphysics, with the former as its basis. Consider, as an example of such supportive recapitulation, the relation between the metaphysical Self and the psychological self. From our technical logical analysis of a limit

it follows that the Self as the limit of the world (5632) stands in some reductive relation to the world the disguise of which it sublates. If it can be shown independently of the logical apparatus that Wittgenstein viewed the Self in this way, then the analysis of the limit concept in terms of reductive logical description will have been confirmed by a parallel metaphysical analysis. In fact, Wittgenstein did view the Self in this typically Advaitic fashion.

The metaphysical or philosophical Self of the Tractatus is the corresponding coordinate of the Advaitic $\bar{a}tman$. Black admits that the 'metaphysical subject...might as plausibly be identified with God as with my very self." Compare Sankara's statement in $\bar{a}tmabodha$ (Self-Knowledge) with Wittgenstein's:

- [17] Realize Atman to be distinct from the body, sense-organs, mind, buddhi (intellect), and non-differentiated Prakṛti, but the Witness of their functions, comparable to a king.
- 5641(3) The philosophical self is not the human being, not the human body, or the human soul, with which psychology deals, but rather the metaphysical subject, the limit of the worldnot a part of it.

The Self contrasts with the composite empirical self that is the corresponding coordinate of the Advaitic ahamkāra or asmitā, the illusory ego.

- or it is no such thing as the soul--the subject, etc.--as it is conceived in the superficial psychology of the present day.

 Indeed a composite soul would no longer be a soul.
- 5/8/16 The thinking subject is surely mere illusion.
- 4/8/16 Isn't the thinking subject to the last resort mere superstition?

Empirical psychology is thus based on the misidentification of the Self with empirical facts. The supposition that there is a self in the world

is a result of misidentifying the Self with or superimposing the Self on the objects of experience:

5631

There is no such thing as the subject that thinks or entertains ideas.

If I wrote a book called *The World as I* found it, I should have to include a report on my body, and should have to say which parts were subordinate to my will, and which were not, etc., this being a method of isolating the subject, or rather of showing that in an important sense there is no subject; for it alone could not be mentioned in that book.

According to the above passage, the philosophical Self cannot be isolated *in* the world because it cannot logically be an object for itself. In the opening lines of his *Brahmasūtrabhāṣya* Śaṁkara makes fundamentally the same point:

It is a matter not requiring any proof that the object and the subject whose respective spheres are the notion of the 'Thou' (the Non-Ego) and the 'Ego', and which are opposed to each other as much as darkness and light are, cannot be identified. 137

It is clear that Wittgenstein and Śamkara share the same conception:

7/8/16 The I is not an object.

11/8/16

I objectively confront every object. But not the $\ensuremath{\text{I}}$.

So there really is a way in which there can and must be mention of the I in a non-psy-chological sense in philosophy. (cf. 5641)

The Self as the limit of the world is the metaphysical reality that sublates the illusory psychological self. The logic of limits, according to which the limit reduces or sublates the limited, is thus recapitulated in the metaphysics of limits, according to which the Self as the limit of the world reduces or sublates the illusory psychological self in terms of which the world is misconceived. Our analysis of the former is thus confirmed by independent development of the latter.

Further consideration of the metaphysics of the *Tractatus* in connection with the limit concept, and there is hardly a metaphysical concept in it that does not have some connection with the limit concept, will reveal the extent to which Wittgenstein was a non-dualist. We shall begin following out the metaphysical implications of his logical analysis by attempting to shed some new light on the controversial propositions concerning solipsism:

562 ...what the solipist means is quite correct; only it cannot be said, but makes itself manifest.

The world is my world: this is manifest in the fact that the limits of language (of that language which alone I understand) mean the limits of my world.

Here it can be seen that solipsism, when its implications are followed out strictly, coincides with pure realism. The self of solipsism shrinks to a point without extension, and there remains the reality coordinated with it.

It is most important to recognize that in these propositions there are two incompatible conceptions of solipsism at work. Otherwise, there is no reconciling Wittgenstein's so-called ambivalent remarks noticed but not explained by commentators. The self of solipsism (mentioned in 564) which shrinks to a dimensionless point is the psychological self which Wittgenstein (in propositions immediately preceding 564) is at pains to expunge as a mere illusion that does not in an important sense exist (5631, 5633). This dimensionless self is what remains of the psychological self after an empirical search for it has been conducted (5631(2)). The implications of the version of solipsism based on this confused notion of the self as an empirical object eliminate the very contrast on which solipsism is based, namely the distinction between solipsism and realism. Therefore, it is argued that both the concept of

solipsism and the notion of the empirical self on which it is based are nonsensical. On the other hand, the truth that solipsism intends to express concerns the metaphysical Self rather than the psychological self. While 564 states the self-defeating result of following out the strict implications of solipsism insofar as it is based on the philosophical confusion that posits the existence of an empirical self, 562 states that solipsism is true and correct insofar as it intends to give voice to the reality of the metaphysical Self. The correctness of the adequate notion of solipsism is shown by the nature of the limits of language. There are thus two distinct contrasting notions of solipsism at work in the *Tractatus*, the philosophically confused notion of 564 and the adequate though ineffable notion of 562. The former is the notion of the one empirical soul (*vide* 55421), the latter of the one metaphysical soul.

Our explanation of proposition 562 is that it maintains that the truth of solipsism lies in its attempt to intimate the non-duality of the Self. "The world is my world" means "Reality is my reality". For (2063 et al.) the world is reality. "Reality is my reality" means "Reality is the reality of my Self." But "the limit of language...is the limit of my world" means that the essence of language is the essence of my world, that is, of my reality and hence, of my Self. Therefore, as the essence of language and reality is the unrepresentable, non-dual, unique transcendental logic, and as there is no possibility of philosophical monism, dualism, etc. (4128), it follows that the essence of my Self is non-dual, unique and transcendental. 'My Self" is thus synonymous with "the Self" and the unsayable truth of solipsism is the non-duality of the Self. This truth may be expressed by saying that the Self is the limit of the world, for we have already seen that the limit

of the world is its unrepresentable, non-dual logic. Wittgenstein emphasizes the truth of solipsism in the following propositions:

The subject does not belong to the world; rather, it is a limit of the world.

The philosophical self is...the limit of the world--not a part of it.

Our understanding of 562 interprets the ambiguity of the parenthesized clause as intentional (i.e. as deliberate). It is neutral with respect to the following suggested translations: "of that language which alone I understand". 139 "of that language which only I understand" and "of the only language which I understand". 141 Nor does it make a difference to our interpretation whether we render "the limits of language" as in the Pears and McGuiness translation of the Tractatus, or "the limits of the language", enthusiasticly championed by Favrholdt. 142 For the intended meaning of 'language', namely what is common to all languages, can as easily be expressed by 'the language'. This notion of language as the common essence of all possible languages parallels the notion of the world as what is common to all possible worlds. Since there is no doubt that 'world' is used in the sense of the form of all possible worlds (2022), since language is the model of the world and since the essence of language (the gpf) is the essence of the world (54711), there can be no doubt that 'language' is also used in the nonpsychological sense of an essential or universal language.

Language as such is the form of representation which any proposition, of whatever form, must have in common with the world in order to be able to represent it (218) and is the form of reality (218) which all possible worlds and all possible languages have in common. It follows that the identity of the limit of the language, in the specified sense, as the limit of my

world is as indifferent to whether I am Jones or Devadatta, as to whether I speak English or Sanskrit. So that the essence of language (and, what comes to the same, of thought,) as the essence of my Self is actually the essence of the Self; language universalized universalizes the speaker. Therefore, "of the language which only I understand" is an acceptable translation of Wittgenstein's ambiguous statement, insofar as it expresses the non-duality or uniqueness of the universalized I. Of course, since the universal language is necessarily the only language of its kind, it makes sense to render "of the only language I understand"; and finally, since "of that language which alone I understand" is itself ambiguous with respect to the relation in which 'alone' modifies, it is also acceptable and indeed perhaps the most faithful to Wittgenstein's intentions.

By interpreting 'language' as the non-dual logical essence of language and 'my' as a universalized or metaphysical possessive pronoun, 143 this interpretation of 562 eschews all psychological considerations relative to what manifests or shows itself in language in connection with the thesis of solipsism and entails a complementary reading of 'understands' as the mode of intuition in which the 'experience' necessary to understand logic (5552) is apprehended. That is, the mode in which the Self alone understands the language alone is the intuitive mode in which it 'experiences' logic.

This mode is the intuition of the whatness (quidditas) or objective selfhood (ipseitas) of language through which the Self knows and manifests its own existence. Atman is also the existence-essence or ipseitas of reality. According to Max Müller, atman is etymologically similar to ipse in that "it meant self, like the Latin ipse, and it was

after it meant ipse that it was used to express the ipseitas of man, the essence of the soul of man, and likewise of God." We thus conclude that the truth of what solipsism means to say is manifested in the fact that the whatness or ipseitas of language is the Self of the world, or equivalently, that the Self is the metaphysical counterpart of the logical ipseitas of language.

It is this conclusion which Wittgenstein strives to present by emphasizing the equivalence of the limits of language and the limits of the world:

- 56 The limits of my language mean the limits of my world.
- 562(3) The world is my world: this is manifest in the fact that the limits of language (of that language which alone I understand) mean the limits of my world.

For, taking these two propositions in conjunction with the two emphasized propositions (5632, 5641, quoted above) in which the Self is said to be the limit of the world, it is evident that Wittgenstein wanted to emphasize the proposition that the limit of language as the limit of my (the) world is the Self. Emphasis on the limits of language as the limits of the world is thus emphasis on the limits of language as the Self and on the Self as the metaphysical counterpart of the logical *ipseitas* or limit of language.

The Self however, is not merely an empty formal limit or Kantian noumenon in the negative sense, for the Self is both the life and consciousness of non-duality. The Self as the essence of the world is transcendental life:

24/7/16 The World and Life are one.
Physiological life is of course not "Life".
And neither is psychological life. Life

is the World.

Life in this sense, beyond space and time, beyond the riddle of $m\bar{a}y\bar{a}$ and beyond the problem of life at the psycho-physical level is the consciousness of the uniqueness of reality:

The world and life are one.

1/18/16 How things stand, is God.
God is, how things stand.
Only from the consciousness of the
uniqueness of my life arises religion-science--and art.

22/18/16 And this consciousness is life itself.

One is reminded of Schopenhauer's Upanişadic influence on Wittgenstein:

...will objectifies itself as life, as existence, in such endless succession and variety...But if we had to convey...in a word...their inner nature, it would be best for us to use the Sanskrit formula...called Mahāvākya, i.e. the great word: "Tat tvam asi", which means "This living thing art thou". 146

Again we see that the Self is the metaphysical counterpart of the logical *ipseitas* of language, for Wittgenstein's remark on the uniqueness of life cannot but recall statements such as:

The correct explanation of the propositions of logic must assign to them a unique status among all propositions.

The uniqueness of logic as a limit of the world is the counterpart of the uniqueness of the Self as the consciousness of non-duality. Consciousness of the uniqueness of life is consciousness of the non-duality of the one world soul or will that constitutes the truth of solipsism:

23/5/15 The limits of my language stand for the limits of my world. [5.6]

There really is only one world soul, which I for preference call my soul...and as which alone I conceive what I call the souls of others.

The above remark gives the key for deciding the way in which solipsism is a truth [see 5.62].

17/10/16 ...I can also speak of a will that is common to the whole world. But this will is in a sense my will.

...my will is the world-will.

The above passages echo Schopenhauer and the Upanisads:

Now whoever has, ... become so absorbed and lost in the perception of nature that he exists only as purely knowing subject, becomes...immediately aware that...he is the condition, and hence the supporter, of the world and of all objective existence, for this now shows itself as dependent on his existence. He therefore draws nature into himself, so that he feels it to be only an accident of his own being. In this sense Byron says:

Are not the mountains waves, and skies, a part Of me and of my soul, as I of them?

But how could the person who feels this regard himself as absolutely perishable in contrast to imperishable nature? Rather he will be moved by the consciousness of what the *Upanishad* of the Veda expresses: *Hae omnes creaturae in totum ego sum*, et praeter me aliud (ens) non est. ("I am all this creation collectively, and besides me there exists no other being.)"147

Śamkara expresses the doctrine of the one eternal world-soul in Self-

Knowledge:

- [35] I fill all things inside and out, like the ether. Changeless and the same in all, I am pure, unattached, stainless and immutable.
- [39] The wise should intelligently merge the entire objective world in *Ātman* alone...
- [47] The Yogi endowed with complete enlightenment sees, through the eye of knowledge, the entire universe in his own Self and regards everything as the Self and nothing else.

Thus Wittgenstein's entirely Adviatic view of the Self as the nondual limit implies that the limit of language and the world is also nondual, as was demonstrated in our discussion of the logic of limits.

3. The Limit: Logico-Metaphysical Analysis

It is clear that the uniqueness of logic (6112) is the syntactic counterpart of the uniqueness of the Self and that the one world-soul or will is the metaphysical counterpart of the sole logical constant as the trans-holistic limit of what cannot be said manifesting itself as the holistic limit of what can be said (i.e. as the gpf). It is natural now to extrapolate from the illusory ontological status of the psychological pseudo-self as limited, to the status of the world as limited, and in this way to confirm what has been said all along, namely that in logic, where all representational relations are cancelled (4462), the world does not appear. In greater logical detail, along these lines, one can compare the status as appearance of apparent logical form (40031) and of apparent logical operations or constants (54, 5441) with the status of the psychological self as appearance. The latter is the appearance of the Self, while the former are appearances of the sole logical constant. Indeed, the parallel between them is most exact, for the constants, like the self, "in an important sense" do not exist (5631).

Since the constants mark the internal properties of propositions, their non-existence is the non-existence of the internal properties of propositions and of the corresponding properties in the world. The limit of both constants and logical forms is the gpf, for the common essence of propositions is defined by the gpf by means of the sole logical constant, the Sheffer stroke, that defines the constants in terms of their common essence; that is, the common essence of the constants, namely the stroke, defines the common essence of propositions, namely the form of representation. Hence, it is natural to compare the status of the logical forms of everyday language and of constants as appear-

ances of their logical limit with the status of the illusory self as an appearance of its metaphysical limit, the Self. Through these comparisons a common form in the logical and metaphysical use of the limit notion is discerned. Wittgenstein's definition of philosophy as consisting of logic and metaphysics, the former its basis, is thereby shown to be instantiated in the *Tractatus*' use of the limit concept.

The supposition that the representable psychological self is a philosophical reality is an illusion on a par with the suppositions that the apparent logical constants are primitive representatives and that the logic of the world can be represented. These suppositions negate the *Grundgedanke* (40312) and its metaphysical counterparts, for just as logic cannot be represented because it is the limit of the world, not a part of it, the Self is similarly a limit of the world, not a part of it, and hence is unrepresentable, and just as the multiplicity of the logical operations must be illusory, since, where nothing can be represented, there can be no numerical distinctions, so also the multiplicity of selves must be illusory. A multiplicity of selves as sets of representable facts is as illusory as a multiplicity of limits, wrongly supposed to be represented by the so-called logical constants.

The great metaphysical error pointed out in the *Grundgedanke* (40312) therefore consists in conceiving the representable world as if it were the Self or essence of reality. There is no form or essence of reality in the world--the logic of facts is unrepresentable--and no part of our experience is a priori (5634). The error consists in implicitly supposing that the empirical world of the application of logic overlaps (5557) the transcendental logic and that the limiting form of reality is therefore representable in the world. The supposition that the logic of

facts is representable, (i.e. that the constants are representatives) is as we have shown, equivalent to the supposition that the Self is isolable in the world. Hence, the error pointed out in the *Grundgedanke* is formulable as the proposition that the Self and the self do not overlap. In Advaitic terms we would say that the $\bar{A}tman$ and $ahamk\bar{a}ra$ (ego) are superimposed only through $avidy\bar{a}$ and that in themselves they are as diametrically opposed as subject and object, light and darkness. 148

The error of superimposing or overlapping the Self and the non-Self, of confusing the representable and its unrepresentable limit, results in the universally held instinctive belief that the representable forms are and belong to the Self. For Wittgenstein, the form of this superstition (51361) is the illusion that there is a causal nexus; this superstition results in the deification of science as the universal explanans:

- The whole modern conception of the world is founded on the illusion that the so-called laws of nature are the explanations of natural phenomena.
- Thus people today stop at the laws of nature, treating them as something inviolable, just as God and Fate were treated in past ages.

 ...the view of the ancients is clearer in so far as they have a clear and acknowledged terminus, while the modern system tries to make it look as if everything were explained.

Samkara saw the error of superimposing the Self and the non-Self as the root of $avidy\bar{a}$. Due to this natural error $(naisargikalokavyavah\bar{a}ra)^{149}$ of empirical life the Self is cognized in terms of name and form, and in thinking of himself as one self $(j\bar{\imath}va)$ among many man thinks "I am this" and "This is mine".

Conceived as belonging to the Self, the representable facts appear to have value and necessity and, as a result, the will appears to be indissolubly bound up through its wishes with the world. Under the influence of the superstition arising out of the error of attempting to picture logic, the necessity of logic is transferred to the world, and the relation of will and world is taken as a necessary or causal relation.

Against this illusion Wittgenstein points out that the will is independent of the world, 150 and that the world is without value:

The world is independent of my will.

6374 ...there is no *logical* connection between the will and the world...

64 All propositions are of equal value.

of it must lie outside...the world.

Thus, Wittgenstein hastens to point out in the culminating propositions of the *Tractatus* that when the metaphysical error parallel to the logical error adverted to in the *Grundgedanke* is cancelled through the desuperimposition (apavāda) or de-overlapping (5557) of Self and world, of logic and its application in representation, then the false appearance of value, will and Self withdraw from the field of representation, leaving the world as a recognizably limited whole. At the time of the intuitive insight of the world sub specie aetermitatis logic is 'experienced' (5552) as the limit of language, eternity as the limit of time and mortality (64311), the unthinkable as the limit of the thinkable and the Self as the limit of the self. But these limits, logic, eternity, and the Self, which show the world of facts to be a finite or limited whole, are not multiple any more than Brahman is multiple in being spoken of as sat (existence), cit (consciousness) and ānanda (bliss). The difficulty of specifying the metaphysical limit as singular or

plural (cf. 5632 and 5641c) parallels the difficulty of specifying the logical limit as singular or plural; Wittgenstein wrote to Ogden in comment on 4464:

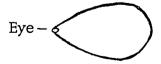
Here as in the preceding proposition there is a great difficulty about the use of "the". I would rather leave it out altogether before "tautology" and "contradiction". So 4.464 would be: "The truth of tautology is certain, of propositions possible, of contradiction impossible." Here I have put "tautology" and "contradiction" in the SINGULAR and "propositions" in the plural deliberately because there are in fact no contradictions but there is only contradiction, for they all mean the same, i.e. nothing. And the same applies to tautology. 151

Thus, we say that logic is tautology rather than tautologies. Similarly there can be no multiplicity of limits where nothing can be represented, so that the limits, eternity, Self and will are non-dual in logic as are sat, cit and ānanda in Brahman.

An aspect of the $m\bar{a}y\bar{a}$ or false appearance of empirical language and the world is their seeming illimitability. Like the visual field and life itself our representative mode of discourse appears to be without limit.

64311(3) Our life has no end in just the way in which our visual field has no limits.

Our visual field has no limits in the sense that (56331) the form of the visual field is not like this



The visual field is not as represented because no experience is a priori (5634). Whatever we see, including the so-called form of the visual field, could be other than it is (5634). Since the form or limit of the

visual field, which is actually the form of representation or reality (2173, 218), cannot be represented *in* (2172) the field, the field appears limitless. Similarly, since death is not an event in life (64311), but rather a limit of life in counterpart relationship with the syntactic form of the facts, and as such is unpicturable, empirical life appears unlimited. Hence Wittgenstein states that life has no end in the same way in which the visual field has no limits (64311).

Death as a limit of the world is an aspect of eternity (on a par with the other aspects such as will, Self and eternity) under which the mystical may be felt. It is the existential counterpart of the cancellation by the logical constant of the variable (the gpf) in which the former manifests (524) itself. The cancellation of the variable (the gpf) in which logic manifests itself as a general mode of transition (601) is the break of logic with the sense of its application, the break between the transcendental and the world that constitutes the cessation (6431) of the facts. The break between Brahman and $m\bar{a}y\bar{a}$ through the sublation or cancellation of the latter by the former is expressed syntactically in the cancellation by logic of the form of its manifestation and is confusedly represented in the (unsinnig) concept of death as an event in life. Death, as what is shown but unsayable is the mystical intuition or illumination that transcends all events. Death as illumination is the limit of empirical life and psycho-physical death. Metaphysical death as a realization that alters the limits of the world, rather than as the absurdity of an experienced cessation of experience, is the revelation of the metaphysical will's independence of the facts (643, 6431). In death the limit of the world manifests itself in the cessation of the facts. In that cessation is the cancellation of the

illusion of the dependence of the will on the representational limits of time and space.

Wittgenstein emphasizes that the futility of the wished for endlessness of empirical life is revealed by the complete failure of the assumption of temporal immortality "to accomplish the purpose for which it has
always been intended" (64312). The Self is not the human being, not the
body and not the psyche (5641); it is not what lies in space and time
(64312). Thus Wittgenstein asked in the *Notebooks*:

- 6/7/16(4) But is it possible for one to live so that life stops being problematic? That one is *living* in eternity and not in time?
- 64311(2) If we take eternity to mean not infinite temporal duration but timelessness, then eternal life belongs to those who live in the present.

Through discrimination between the ternal and the non-eternal (nityānityavastuviveka) Advaita also intends to stop the will's tenacious clinging to life (abhiniveṣa) and durational immortality, with its resultant transmigratory suffering (duḥkha). In line with Wittgenstein's statement that

12/8/16(11) The only life that is happy is the life that can renounce the amenities of the world.

Advaitic discipline involves making the will independent of $m\bar{a}y\bar{a}$ through detachment ($vair\bar{a}gya$). Through detachment and discrimination the Self is realized as different from the body, mind, speech and their actions. Schopenhauer's writings, much admired by Wittgenstein, inevitably spring to mind:

It [the will] then reaches the point where the phenomenon, the veil of $M\bar{a}y\bar{a}$, no longer deceives it. It sees through the form of the phenomenon, the *principium individuationis*; the egoism resting on this ex-

pires with it. The *motives* which were previously so powerful now lose their force, and instead of them, the complete knowledge of the nature of the world, acting as a *quieter* of the will, produces resignation, the giving up not merely of life, but of the will-to-live itself. 152

Wittgenstein states that the will

643(1) ...can alter only the limits of the world, not the facts--not what can be expressed by means of language.

Of great importance is the notion that

643(2) ...the effect must be that it becomes an altogether different world. It must, so to speak, wax and wane as a whole.

In direct consecutive amplification of this notion of the holistic alteration of the world Wittgenstein states:

So too at death the world does not alter, but comes to an end.

Let us first take up the question of the meaning of the alteration of the limits of the world by the will. The alteration of the limits of the world by the Self, whose will is an act of intuition, is the 'experience' (5557) that nothing can harm, annihilate or limit the Self. Wittgenstein said:

I will mention another experience straight away which I also know...: it is...the experience of feeling absolutely safe. I mean the state of mind in which one is inclined to say "I am safe, nothing can injure me whatever happens". 153

Since the Self or limit of the world is not a part of the world the Self is entirely safe and cannot be harmed by anything in the world. As the Bhagavadgītā so beautifully says:

- 19 He who takes the Self to be the slayer and he who takes It to be slain, neither of them knows, It slays not, nor is It slain.
- 23 Weapons cut It not, fire burns It not, water wets It

not, wind dries It not.

24 ...It is eternal, all-pervading, stable, immovable and ancient. 154

The alteration of the limit is the cancellation of the limit imagined as representable (as in the world) by the limit as it is in itself, transcendental and independent. The alteration of the limit by the will is the mystical intuition or 'experience' of the cancellation of the false representable appearance of the limit by the real, unrepresentable, inexpressible limit. Hence the world waxes and wanes as a whole: transholistic cancellation erases the illusion of empirical existence completely, or not at all. The non-homomorphic limit of the world eliminates completely the structure of representation, and the homomorphic limit (the gpf) is completely unrepresentable. The altogether different world of enlightenment is without the empirical limits of the phenomenal will and, as such, illimitable by time and action, enjoys freedom (moksa).

The limit of the world is the solution of the problem of life, that is, of the riddle ($R\ddot{a}tsel$) of $m\bar{a}y\bar{a}$. For the limit of the world is the sublation or cancellation of the facts of time and space and of the objects that compose them. Wittgenstein therefore, declares it his aim in the Preface to show the transcendental limit of the world and defines the mystical as seeing the world as a limited whole. Defined in this way, the mystical solution of the riddle of $m\bar{a}y\bar{a}$ is the sublation of the empirical world, will, self, death and value.

4. The Limit: Its Mystical Incommunicability

As we have seen, the Sheffer stroke, which is the sole primitive sign in logic according to Wittgenstein, is a non-homomorphism, and as such eliminates the structure of the set of propositions. But since the stroke defines the logical operations by means of which truth-functions of elementary propositions are formed, it is the single condition of the possibility of propositions. Thus the stroke at once defines the possibility and demise of propositional structure. Logic is both the conditioning holistic limit and the eliminative trans-holistic limit of its application.

The logical constant manifested in its application in the gpf is the logical form equivalent to the homomorphism (i.e. to the identity of structure) of picture and pictured. But Wittgenstein's point is just that language rests on what cannot be communicated within the structure of the communicable. The limit of thought is the basis and essence of language that emerges in our analysis as the non-homomorphic logical constant that forms the absolute limit of its application. The incommunicability of the logical form of language may be explained in terms of the unrepresentability in language which must be homomorphic to what it represents of a non-homomorphism. One simply cannot represent a nonhomomorphism by means of a structure that depends for its meaningfulness on a homomorphic relation to reality. In other words, as all language is homomorphic to what it represents, language representing a non-homomorphism would have to be homomorphic to a non-homomorphism and hence would either be meaningful (sinnvoll) and fail to represent the nonhomomorphism or would 'represent' the non-homomorphism and be senseless (sinnlos) or would appear to represent the unrepresentable and be nonsensical (unsinnig). The limit of language is thus explained as the categorical negation or cancellation of the logical conditions of representation.

But if its trans-holistic limit is too little a part of language to be representable, its holistic limit, the gpf, is too much a part of language to be representable. The constant is unrepresentably transcendent, while the gpf is unrepresentably immanent. Any picture of the homomorphic immanent limit would merely repeat or embody the relation of homomorphism rather than externalizing it, as a picture must in order to project its sense. Saguna Brahman is thus the form of the projection of māyā rather than its manifested projection and is therefore, like nirguṇa Brahman, realized only in superconsciousness (samādhi). The limits of the world, both homomorphic and non-homomorphic are understood only through mystical intuition.

FOOTNOTES

1 e.g. B. F. McGuinness, "The Mysticism of the Tractatus," Philosophical Review, LXXV (July, 1966), pp. 305-328;

Eddy Zemach, 'Wittgenstein's Philosophy of the Mystical," Review

of Metaphysics, XVIII (September, 1964), pp. 38-57;
Newton Garver, 'Wittgenstein's Pantheism," Essays on Wittgenstein, edited by E.D. Klemke (Urbana: University of Illinois Press, 1971), pp. 123-137.

- ² Paul Engelmann, Letters from Ludwig Wittgenstein, With a Memoir, edited by B. F. McGuinness and trans. by L. Furtmüller (Oxford: Basil Blackwell, 1967).
- ³ Allan Janik and Stephen Toulman. Wittgenstein's Vienna (New York:

Simon & Schuster, 1973);
Stephen Toulman, "Ludwig Wittgenstein," Encounter, XXXII, No. 1 (January, 1969), pp. 58-71.

- ⁴ Janik and Toulman, Wittgenstein's Vienna, pp. 169, 191.
- 5 Numbered references are to the propositions of the Tractatus.
- ⁶ References of this form refer to this work by chapter and section; thus 'vide infra, II, 6' refers to chapter II, section 6 of this work.
- ⁷ Heinrich Hertz, The Principles of Mechanics Presented in a New Form, trans. by D. E. Jones and J. T. Walley, with Preface by H. von Helmholtz and Introduction by Robert S. Cohen (New York: Dover, 1956), p. 175.
 - *Ibid.*. corollary 3 of "Dynamical Models." p. 176.
- ⁹ Benedict de Spinoza, *The Chief Works of Benedict de Spinoza*, with an introduction by R. H. M. Elwes (New York: Dover, 1955), Vol. 2, Letter LXXIV, p. 416.
- 10 Max F. Muller, The Vedanta Philosophy (Calcutta: Susil Gupta, 1950), p. 40.
- 11 Allan S. Janik, "Schopenhauer and the Early Wittgenstein," Phi-

losophical Studies, XV (1966), pp. 76-95; Stephen Toulman, "Ludwig Wittgenstein," Encounter, XXXII, No. 1 (January, 1969), pp. 58-71;

Janik and Toulman, Wittgenstein's Vienna;

Erik Stenius, Wittgenstein's Tractatus: A Critical Exposition of its Main Lines of Thought (Ithaca, New York: Cornell University Press,

- 1964), pp. 214-215, (et infra, II, 1);
- G. E. M. Anscombe, An Introduction to Wittgenstein's 'Tractatus' (Cambridge: Cambridge University Press, 1964), pp. 11-12, pp. 168-169; Patrick Gardiner, Schopenhauer (Baltimore: Penguin Books, 1963).
- Georg Henrik von Wright, "Ludwig Wittgenstein, a Biographical Sketch," Philosophical Review, LXIV (October 1955), p. 5, p. 9;
 Zemach, "Wittgenstein's Philosophy of the Mystical," p. 52;
 Morris S. Engel, Wittgenstein's Doctrine of the Tyranny of Language: An Historical and Critical Examination of His Blue Book (The Hague: Martinus Nijhoff, 1971), ch. 4; etc.
- 12 P. T. Geach, "Review of G. Colombo's Translation of the *Tractatus* into Italian," *Philosophical Review*, LXVI (December, 1957), p. 538.
- 13 Arthur Schopenhauer, The World as Will and Representation, trans. by E. F. J. Payne (New York: Dover, 1966), p. 412.
 - 14 Will and Representation, Vol. 1, pp. xv-xvi.
- 15 Ralph Barton Perry, *A Defense of Philosophy* (Cambridge, Mass.: Harvard University Press, 1931), p. 9.
 - 16 Principles of Mechanics, p. 175 ff.
- 17 Cf. James Griffin, Wittgenstein's Logical Atomism (Oxford: Oxford University Press, 1965), pp. 99-102; cf. also, Janik and Toulman, Wittgenstein's Vienna, pp. 139-141, pp. 179-185.
- 18 Ludwig Wittgenstein, 'Notes on Logic', Preliminary, Notebooks 1914-1916, edited by G. H. von Wright and G. E. M. Anscombe, trans. by G. E. M. Anscombe (Oxford: Basil Blackwell, 1961), p. 98.
 - ¹⁹ Śamkara. *Brahmasūtraśamkarabhāsua*, part III, 2, 22; part II, p.168.
 - 20 neti = na + iti = noi + this
- Ludwig Wittgenstein, Letters to C. K. Ogden with Comments on the English Translation of the Tractatus Logico-Philosophicus, edited by G. H. von Wright (Oxford: Basil Blackwell, 1973), p. 29.
- Ludwig Wittgenstein, 'Wittgenstein's Lecture on Ethics," Philosophical Review, LXXIV (January, 1965), p. 8.
 - 23 *Ibid.*, p. 11.
 - 24 *Ibid.*, p. 9.
 - ²⁵ Cf. Spinoza's causa sui.
- 26 Ludwig Wittgenstein, Philosophical Investigations, edited by G. H. von Wright and G. E. M. Anscombe, trans. by G. E. M. Anscombe (Oxford: Basil Blackwell, 1953), §97; et infra, III, 4.

- 27 BSS, III, 2, 22; part II, p. 167.
- Wittgenstein, "Lecture on Ethics," p. 11; cf. also 654 on non-sense.
- ²⁹ Śamkara, Gita Bhasya xiii-12, as quoted by S. N. L. Shrivastava, Samkara and Bradley (Delhi: Motilal Banarsidass, 1968), pp. 130-131.
 - 30 Wittgenstein, Letters to Ogden, p. 50.
 - 31 *Ibid.*, p. 61.
 - 32 *Ibid.*, p. 26.
 - 33 *Ibid.*, p. 61.
 - ³⁴ BSS, II, 1, 14; part II, pp. 328-329.
 - 35 Cf. Hertz, Principles of Mechanics, chapter 1.
- 36 Ludwig Wittgenstein, *Prototractatus*, edited by B. F. McGuinness, T. Nyberg and G. H. von Wright, trans. by D. F. Pears and B. F. McGuinness (New York: Cornell University Press, 1971), p. 239.
 - ³⁷ BSS, I, 1, 11; part I, p. 62.
- ³⁸ Śamkara, Kathopanisadbhāṣya, II, 2, xii; quoted from Shrivastava, Samkara and Bradley, p. 132.
 - McGuinness, "Mysticism of the *Tractatus*," p. 323.
 - ⁴⁰ *Ibid.*, p. 314.
 - ⁴¹ *Ibid.*, p. 316.
- 42 Leo Tolstoy, My Confession: The Complete Works of Lyof Tolstoi, trans. anonymous (New York: Crowell, 1889), Vol. ix, p. 51.
 - 43 *Ibid.*, p. 52.
 - ⁴⁴ *Ibid.*, p. 53.
 - 45 "Lecture on Ethics," p. 9.
 - 46 McGuinness, 'Mysticism of the *Tractatus*," p. 316.
- 47 A similar criticism also applies to Zemach's position in his 'Wittgenstein's Philosophy of the Mystical.''
 - ⁴⁸ Kathopanisad, VII, 24, 1; BSS, II, 1, 14; part 1, p. 329.
- ⁴⁹ Engelmann, *Letters from Wittgenstein*, quoted from a letter to Ficker, p. 143.

- ⁵⁰ Cf. Schopenhauer, Will and Representation, Vol. 1, pp. 427-428.
- ⁵¹ BSS, I, 328; part I, p. 203.
- Belonging to the Self, as it were, of the omniscient Lord (saguna Brahman), there are name and form...(BSS, II, 1, 14; part I, p. 329).
- 53 Wittgenstein, Letters to Ogden, comment on 4464, quoted infra, p. 186.
 - ⁵⁴ Śamkara, *Brhadaranyakopanisadbhasya*, II, i, 20.
- 55 Ludwig Wittgenstein, Letters to Russell, Keynes and Moore edited by G. H. von Wright (New York: Cornell University Press, 1974), p. 71.
 - 56 Loc. cit.
 - 57 See footnote #1.
- 58 Some form of the Kantian interpretation has been supported by A. Maslow, *A Study in Wittgenstein's Tractatus* (Berkeley: University of California Press, 1961), pp. xiii-xiv;

California Press, 1961), pp. xiii-xiv;

David Schwayder, "Review of Wittgenstein's Tractatus: A Critical Exposition of its Main Lines of Thought," Mind, LXXII (April, 1963), p. 228; and Morris Engel, Wittgenstein's Doctrine, ch. III.

- 59 Stenius, Wittgenstein's Tractatus, p. 214.
- 60 *Ibid.*, pp. 214-215.
- 61 *Ibid.*, p. 215.
- 62 *Ibid.*, p. 222.
- 63 *Ibid.*, p. 216
- 64 *Ibid.*, pp. 223, 225
- 65 *Ibid.*, p. 223.
- 66 *Ibid.*, p. 225.
- 67 Loc. cit.
- 68 *Ibid.*, p. 224.
- 69 Loc cit.
- ⁷⁰ *Ibid.*, p. 223.

- 71 Immanuel Kant, Critique of Practical Reason: and Other Works, trans. by Thomas Kingsmill Abbott (London: Longmans, 1963), p. 219.
 - 72 Loc. cit.
 - 73 Philosophical Investigations, §97.
 - ⁷⁴ Spinoza uses a similar example in *Ethics*, prop. LXVII, Note, p. 119.
 - 75 Tractatus, Preface.
 - 76 Engelmann, Letters from Wittgenstein, p. 97.
 - ⁷⁷ BSS, I, 1, 1; part I, p. 11.
- ⁷⁸ Vide Suryanarayana Sastri, "Akhandārtha," Collected Papers of Professor S. S. Suryanarayana Sastri, Madras University Philosophical Series No. 8 (Madras: University of Madras, 1961), pp. 186-190.
 - 79 Taittirīyopanisad, II, 9.
 - 80 Letters to Russell, Keynes and Moore, p. 82.
 - 81 Preface to the *Tractatus*.
 - 82 BSS, I, 1, 4; part I, p. 32.
 - 83 *Ibid.*, p. 29.
- 84 N. K. Devaraja, An Introduction to Samkara's Theory of Knowledge (Delhi: Motilal Banarsidass, 1972), p. 67.
- 85 Karl H. Potter, *Presuppositions of India's Philosophy* (Englewood Cliffs, New Jersey: Prentice-Hall, 1963), pp. 181-182.
 - ⁸⁶ BSS, II, 1, 14; part I, p. 324.
- 87 Eliot Deutsch, *Advaita Vedānta* (Honolulu: University Press of Hawaii, 1973), p. 32, n. 11.
- 88 Max Black, A Companion to Wittgenstein's 'Tractatus' (Cambridge: Cambridge University Press, 1964), p. 381.
 - ⁸⁹ *Ibid.*, p. 382.
 - ⁹⁰ *Ibid.*, p. 381.
 - 91 Loc. cit.
 - 92 Loc. cit.
 - 93 *Ibid.*, p. 232

- 94 *Ibid.*, pp. 232-233.
- 95 'Notes on Logic,' Notebooks, p. 94.
- 96 Cf. G. B. Sefler, Language and the World (New Jersey: Humanities Press, 1974), p. 122, n. 134;

also cf. Richard C. Jeffrey, Formal Logic, Its Scope and Limits (New York: McGraw-Hill, 1967), pp. 30-31, for a statement of agreement on the part of a contemporary logician with this understanding of the nature of tautology.

- 97 A Companion, p. 232.
- 98 Notebooks, p. 84.
- Bertrand Russell, *Introduction to the Tractatus*, in *Tractatus Logico-Philosophicus*, trans. by D. F. Pears and B. F. McGuinness (London: Routledge & Kegan Paul, 1961), p. xxi.
- 100 Frank P. Ramsey, Foundations of Mathematics and Other Logical Essays (London: Kegan Paul, Trench, Trübner, 1931), p. 263, as quoted in Black's A Companion, p. 379.
 - 101 A Companion, p. 381.
- 102 Cf. the natural (naisargikalokavyavahāra) error of superimposition in terms of which Śamkara defines avidyā in his introduction to his commentary on the Brahmasūtras (BSS, I, 1; part I, pp. 2-3).
 - 103 Preface of the Tractatus.
 - 104 BSS, II, 1, 14; part I, p. 324.
 - 105 Loc. cit.
 - 106 Loc. cit.
- 107 T. M. P. Mahadevan, The Pañcadaśi of Bhāratītīrtha-Vidyāranya: An Interpretative Exposition (Madras: University of Madras, 1969), p. 149.
 - ¹⁰⁸ BSS, I, 1; part I, p. 5.
 - ¹⁰⁹ BSS, I, 4, 23; part I, p. 282.
- 110 It might be profitable to apply the concept of sublation to the analysis of learning. For in the attainment of insight and a new gestalt characteristic of revolutionary advances in understanding, as opposed to the accumulation of knowledge, what seems to be involved is the overthrow, rejection or sublation of at least some of the fundamentals of the previously attained stage of understanding.
 - ¹¹¹ Vol. 1, p. 447.

- 112 Vide Russell's Preface to the Tractatus.
- Norman Malcolm, Ludwig Wittgenstein: A Memoir (London: Oxford University Press, 1958, p. 86.
 - 114 Ethics, part II, prop. XLIII, note.
- 115 Vide Wittgenstein's "Notes on Logic," section I, for the bipolarity of propositions, and Notebooks, 26/11/14 for the supra-polarity of the gpf.
 - 116 Letters to Ogden, p. 36.
- 117 David Favrholdt, An Interpretation and Critique of Wittgenstein's Tractatus (Copenhagen: Munksgaard, 1964), p. 10.
- 118 Sachindranath Ganguly, Wittgenstein's Tractatus (Visva-Bharati Santiniketan: Centre of Advanced Study in Philosophy, 1968), p. 116.
 - 119 Loc. cit.
 - 120 Will and Representation, p. 178.
 - 121 *Ibid.*, p. 379.
 - 122 Notebooks, p. 93.
 - 123 Loc. cit.
 - 124 Loc. cit.
 - 125 BSS, I, 1, 4; part I, p. 44.
 - \overline{A} tmabodha (Self-Knowledge).
 - 127 Letters to Russell, Keynes and Moore, p. 71.
- Wilfrid Sellars, "Naming and Saying," *Philosophy of Science*, Vol. 29 (1962), pp. 7-26.
 - 129 A Companion, p. 224.
- Brhadaranyakopanisad, IV, 4, 22; quoted from BSS, II, 1, 15; Part I, p. 330.
- 131 Bhagavadgītā, XVIII, 61; quoted from BSS, II, 1, 15; part I, p. 330.
 - ¹³² BSS, III, 2, 32; part II, pp. 176-177.
- 133 Cf. the role of morphisms in 'The Algebra of the I Ching and Its Philosophical Implications," by Daniel S. Goldenberg, *Journal of Chinese Philosophy*, Vol. 2, No. 2 (March, 1975), pp. 149-179.

- 134 Devaraja, Śańkara's Theory of Knowledge, ch. III.
- "Notes on Logic," Notebooks, p. 93.
- 136 A Companion, pp. 308-309.
- 137 BSS, I, 1; part I, p. 3.
- 138 Black, A Companion, p. 309.
- 139 As in the Pears-McGuinness translation of the *Tractatus*.
- Anscombe, Introduction to Wittgenstein's Tractatus, p. 167, n. 1.
- Jaakko Hintikka, "On Wittgenstein's Solipsism," Mind, LXVII (January, 1958), p. 88;
 Stenius, Wittgenstein's Tractatus, p. 221;
 Black, A Companion, p. 309;
 Russell, "Introduction" to the Tractatus, p. xviii.
 - 142 Interpretation and Critique of Wittgenstein's Tractatus, p. 151.
- 143 This use of 'my' is completely different from the use of 'my' in 'this is my money'.
 - Wittgenstein, "Lecture on Ethics," p. 11; cf. 644.
 - 145 The Vedanta Philosophy, p. 14.
 - 146 Will and Representation, Vol. 1, p. 220.
 - 147 *Ibid.*, p. 181.
 - ¹⁴⁸ BSS, I, 1; part I, p. 2.
 - 149 *Ibid.*, p. 3.
- 150 Śamkara, umlike Wittgenstein, accepted the causal relation in general at face value, that is, as involving necessity, however this difference does not vitiate the claim that the mysticism of the *Tractatus* is a form of Non-Dualism.
 - 151 Letters to Ogden, p. 30.
 - Will and Representation, Vol. 1, p. 253.
 - 153 "Lecture on Ethics," p. 8.
- 154 Sri Swami Sivananda, trans., *The Bhagavad Gita* (Himalayas: Divine Life Society, 1969), chapter 2.
 - 155 Cf. Deutsch, Advaita Vedanta, p. 17, n. 1.

BIBLIOGRAPHY

I. Primary Sources

- A. Śańkara in English Translation
 - Apte, V. M., trans. Brahma-Sūtra-Shānkara-Bhāshya. Bombay: Popular Book Depot, 1960.
 - Chatterjee, Mohini M., trans. Viveka-cūdāmani, or Crest-Jewel of Wisdom of Śrī Śamkarācārya. Adyar, Madras: Theosophical Publishing House, 1947.
 - Date, Vinayak Hari, trans. Vedānta Explained, Śamkara's Commentary on the Brahma-Sūtras. 2 vols. Delhi: Munshiram Manoharlal, 1973.
 - Gambhirananda, Swāmī, trans. Brahma-Sūtra-Bhāsya of Śrī Śaṅka-rācārya. Mayavati, Almora, Himalayas: Advaita Ashrama, 1972.
 - ______, trans. Eight Upanishads: with the Commentary of Sankarācārya. Calcutta: Advaita Ashrama, 1957, 1958.
 - Jagadānānda, Swāmī (sic!), trans. *Upadeshasāhasrī of Śrī Śaṅkarāchārya (A Thousand Teachings)*. Mylapore, Madras: Sri Ramakrishna Math, 1970.
 - , trans. Vakyavritti and Atmajnanopadeshavidhi of Sri Sankaracharya. Mylapore, Madras: Sri Ramakrishna Math, 1967.
 - Mādhavānanda, Swāmī (sic!), ţrans. The Brhadāranyaka Upanisad: with the Commentary of Sankarācārya. Mayavati, Almora, Himalayas: Advaita Ashrama, 1965.
 - Nikhilananda, Swamī, trans. The Mandūkhyopanisad with Gaudapāda's Kārikā and Śankara's Commentary. Mysore: Sri Ramakrishnan Asrama, 1955.
 - , trans. Self-Knowledge of Śrī Śankarācārya. Mylapore, Madras: Sri Ramakrishna Math, 1967.
 - Sastry, A. Mahadeva, trans. The Bhagavad-Gita: with the Commentary of Sri Sankaracharya. Madras: V. Ramaswamy Sastrulu & Sons, 1961.

- Sharma, H. D., trans. Brahmasūtra-Catuhsūtrī; with Śankarācārya's Commentary. Poona: Oriental Book Agency, 1967.
- Thibaut, George, trans. The Vedanta-sutras with the Commentary of Śankarācārya. The Sacred Books of the East, vols. 34, 38. Edited by Max Müller. Delhi: Motilal Banarsidass, 1973.

b. Works by Wittgenstein

- Wittgenstein, Ludwig. The Blue and Brown Books. New York: Harper & Row, 1965. __, Briefe an Ludwig von Ficker. Edited by G. H. von Wright in collaboration with Walter Methlagl. Brenner Studien Vol. I. Salzburg: Otto Müller, 1969. _, Lectures and Conversations on Aesthetics: Psychology and Religious Belief. Berkeley: University of California Press, 1967. __, Letters from Ludwig Wittgenstein, with a memoir by Paul Engelmann. Edited by B. F. McGuinness, trans. by L. Fürtmuller. Oxford: Basil Blackwell, 1967. __. Letters to C. K. Ogden with Comments on the English Translation of the Tractatus Logico-Philosophicus. Edited by G. H. von Wright. Oxford: Basil Blackwell, 1973. _, Letters to Russell, Keynes and Moore. Edited by G. H. von Wright. New York: Cornell University Press, 1974. , Notebooks 1914-1916. Edited by G. H. von Wright and G. E. M. Anscombe, trans. by G. E. M. Anscombe. Oxford: Basil Blackwell, 1961. __, Philosophical Investigations. Edited by G. H. von Wright and G. E. M. Anscombe, trans. by G. E. M. Anscombe. Oxford: Basil Blackwell, 1953. __, Prototractatus. Edited by B. F. McGuinness, T. Nyberg and G. H. von Wright, trans. by D. F. Pears and B. F. McGuinness. New York: Cornell University Press, 1971.
 - __, Tractatus Logico-Philosophicus. Trans. by D. F. Pears and B. F. McGuinness, with the introduction by Bertrand Russell. London: Routledge & Kegan Paul, 1961.

Aristotelian Society, Supplementary Vol. 9 (1929).

-, "Some Remarks on Logical Form," Proceedings of the

- _____, 'Wittgenstein's Lecture on Ethics," *Philosophical Review*, LXXIV (January, 1965), pp. 3-27.
- Wright, trans. by G. E. M. Anscombe and G. H. von Sity of California Press, 1970.

C. Other Advaitins in English Translation

- Alston. A. J., trans. The Naiskarmya Siddhi of Śrī Sureśvara. London: Shanti Sadan, 1959.
- Bhattacharya, Vidhushekhara, ed. and trans. *The Agamaśāstra of Gaudapāda*. Calcutta: University of Calcutta, 1943.
- Devanji, Prahlad Chandrasheka, trans. Siddhantābindu by Madhusūdanasarasvatī: A Commentary on the Daśaśloki of Śaṅkarācārya. Gaekwad's Oriental Series, Vol. 64. Baroda: Oriental Institute, 1933.
 - Hiriyanna, Mysore, ed. and trans. *Vedānta-sāra by Sadānanda:* A Work on Vedānta Philosophy. Poona: Oriental Book Agency, 1929.
 - Jha, Ganganatha, trans. Advaitasiddhi of Madhusūdana Sarasvati in Indian Thought, Vol. 6, 1914 Vol. 10, 1917.
 - Karmarkar, Raghunath Damodar, ed. and trans. *Gaudapāda-kārikā*. Poona: Bhandarkar Oriental Research Institute, 1953.
 - ______, ed. and trans. *Vedāntakalpalatikā*. Poona: Bhanda-kar Oriental Research Institute, 1962.
 - Mādhavānanda, Swāmī, trans. *Vedānta-Paribhāsā of Dharmarāja Adhvarīndra*. Belur Math, Howrah: Ramakrishna Mission Saradapitha, 1972.
 - Mahadevan, T. M. P., ed. and trans. The Sambandha-Vārtika of Sureśvarācārya. Madras: University of Madras, 1958.
 - Sadananda, ed. and trans. *Vedānta-Sāra*. Poona: Oriental Book Agency, 1929.
 - Sastri, S. S. Suryanarayana, trans. Siddhanta-leśa-sangraha by Appaya Dīkṣita. Madras: University of Madras, 1935.
 - , ed. and trans. *Vedāntaparibhāsā by Dharmarāja Adhvarin*. Adyar: Adyar Library, 1942.
 - Sastri, S. S. Suryanarayana, and Kurhan C. Raja, eds. and trans. The Bhāmati of Vācaspati: on Śaṅkara's Brahmasutrabhāsya

- (Catussūtri). Adyar, Madras: Theosophical Publishing House, 1933.
- Sastri, S. S. Suryanarayana, and Saileswar Sen, trans. Vivaranaprameya-sangraha of Vidyāranya. Madras: Sri Vidya Press, 1941.
- Shastri, Hari Prasad, trans. Panchadasi: A Treatise on Advaita Metaphysics by Swami Vidyaranya. London: Shanti Sadan, 1956.
- Swāhānanda, Swāmī, trans. Pañeadaśī of Śrī Vidyāranya Swāmī. Mylapore, Madras: Sri Ramakrishna Math, 1967.
- Venis, Arthur, trans. The Vedānta Siddhāntamuktāvalī of Prakāsānanda in the Pandit. Benares: E. L. Lazaras, 1890.
- Venkararamiah, D., trans. *The Pañcapādikā of Padmapāda*. Gaekwad's Oriental Series, Vol. 107. Baroda: Oriental Institute, 1948.

II. Secondary Sources

- A. Advaita and Indian Philosophy
 - Barlingay, S. S. A Modern Introduction to Indian Logic. Delhi: National Publishing House, 1965.
 - Chari, S. M. Srivinasa. Advaita and Viśiṣṭādvaita. New York: Asia Publishing House, 1961.
 - Chatterjee, Satischandra. The Nyāya Theory of Knowledge. Calcutta: University of Calcutta, 1965.
 - Chatterjee, Satischandra and Dhirendramohan Datta. An introduction to Indian Philosophy. Calcutta: University of Calcutta, 1968.
 - Chaudhuri, Aril Kumar Ray. *The Doctrine of Māyā*. Calcutta: Das Guptra, 1950.
 - Progressive Publishers, 1955.
 - Datta, D. M. The Six Ways of Knowing. London: Allen & Unwinn, 1932.
 - Deussen, Paul. The Philosophy of the Upanishads. Trans. by Rev. A. S. Geden. Edinburgh: T. & T. Clark, 1906.
 - _____. The System of the Vedanta. Trans. by Charles Johnson. Delhi: Motilal Banarsidass, 1972.

Deutsch, Eliot. Advaita Vedanta. Honolulu: University Press of Hawaii, 1973. and J. A. B. van Buitenen. A Source Book of Advaita Vedanta. Honolulu: University Press of Hawaii, 1971. Devaraja, N. K. An Introduction to Sankara's Theory of Knowledge Delhi: Motilal Banarsidass, 1972. Hiriyanna, M. Indian Philosophical Studies. Mysore: Kavyalaya Publishers, 1957. . Outlines of Indian Philosophy. London: Allen & Unwin, 1970. Iyer, M. K. Venkatarama. Advaita Vedānta. Bombay: Asia Publishing House, 1964. Jha, Ganganatha. Pūrva-Mimāmsā Library of Indian Philosophy and Religion, I. Edited by S. Radhakrishnan. Benares Hindu University, 1942. Mahadevan, T. M. P. Gaudapāda: A Study in Early Advaita. Madras: University of Madras, 1952. The Insight of Advaita. Prasaranga: University of Mysore, 1970. The Pañcadaśi of Bhāratītīrtha-Vidyāranya: An Interpretative Exposition. Madras: University of Madras, 1969. The Philosophy of Advaita. Madras: Ganesh, 1957. Misrha, Rammurti S. Yoga Sutras. New York: Anchor Press, 1973. Moore, Charles A., ed. Essays in East-West Philosophy. Honolulu: University of Hawaii Press, 1951. Müller, F. Max. India: What Can It Teach Us. London: Longmans, Green, 1892. _. The Six Systems of Indian Philosophy. Collected Works of the Right Hon. F. Max Müller, XIX. London: Longmans, Green, 1928. ____, trans. The Upanisads, Part I and II. New York: Dover Publications, originally published in 1879, 1884. The Vedanta Philosophy. Calcutta: Susil Gupta, 1950. Naulakha, R. S. Shankara's Bramavada. Kanpur: Kitab Ghar,

1964.

- Nikhilananda, Swami, trans. *The Upanishads*, Vol. I and II. New York: Harper & Brothers, 1949, 1952.
- Potter, Karl H. Presuppositions of India's Philosophy. Englewood Cliffs, New Jersey: Prentice-Hall, 1963.
- Prabhavananda, Swami and Christopher Isherwood, trans. How to Know God. New York: New American Library, 1953.
- Radhakrishnan, S., trans. *The Bhagavadgītā*. New York: Harper & Row, 1973.
- ______, trans. The Brahma Sutra, The Philosophy of Spiritual Life. New York: Harper & Brothers, 1960.
- _____. The Hindu View of Life. New York: Macmillan, 1968.
- _____. The Vedanta. London: Allen & Unwin, 1928.
- Sastri, Gaurinath. The Philosophy of Word and Meaning, Calcutta Sanskrit College Research Series, No. V. Calcutta: Sanskrit College, 1959.
- Sastri, S. Kuppuswami. A Primer of Indian Logic. Madras: P. Varadachary, 1932.
- Sastri, S. S. Suryanarayana. Collected Papers of Professor S. S. Suryanarayana Sastri, Madras University Philosophical Series, No. 8. Madras: University of Madras, 1961.
- Satprakāshānanda, Swāmi. Methods of Knowledge. London: Allen & Unwin, 1965.
- Sengupta, B. K. A Critique on the Vivarana School. Calcutta: S. N. Sengupta, 1959.
- Sharma, B. N. K. The Brahmasūtras and Their Principal Commentaries, Bharatiya Vidya Series No. 28. Bombay: Bharatiya Vidya Bhavan, 1971.
- Sharma, Dhirendra. The Negative Dialectics of India. Publisher anonymous, 1970.
- Shrivastava, S. N. L. Śamkara and Bradley. Delhi: Motilal Banarsidass, 1968.
- Sinha, Jadunath. *Indian Epistemology of Perception*. Calcutta: Sinha Publishing House, 1969.
- ______. Indian Psychology Cognition, Vol. I. Calcutta: Sinha Publishing House, 1958.

- Sivananda, Sri Swami, trans. *The Bhagavad Gita*. Himalayas: Divine Life Society, 1969.
- Smart, Ninian. Doctrine and Argument in Indian Philosophy.
 London: Allen & Unwin, 1964.
- Srinivasachari, P. N. The Philosophy of Bhedābheda. Srinivasa Varadachari, 1934.
- _____. The Philosophy of Viśiṣṭādvaita. Madras: Theosophical Society, 1970.
- Sundaram, P. K. Advaita Epistemology. Madras: University of Madras, 1968.
- Tagore, Rabindranath, trans. *Gitanjali*. Bombay: Macmillan, 1971.
- _____. Sādhanā, the Realization of Life. Tucson, Arizona: Omen Press, 1972.
- Taimmi, I. K. The Science of Yoga. Madras: Theosophical Publishing House, 1972.
- Tripathi, Rama Kanta. Spinoza in the Light of the Vedanta. Banaras: Banaras Hindu University, 1957.
- Upadhyaya, K. N. Early Buddhism and the Bhagavadgītā. Delhi: Motilal Banarsidass, 1971.
- Upadhyaya, Veermani Prasad. *Lights on Vedanta*. Varanasi: Chowkhamba Sanskrit Series Office, 1959.
- Vivekananda, Swami. The Complete Works of Vivekananda, Vol. I. Calcutta: Advaita Ashrama, 1970.
- Warrier, A. G. Krishna. *The Concept of Mukti in Advaita Vedanta*. Madras: University of Madras, 1961.

B. Wittgenstein's Philosophy

- Ambrose, Alice and Morris Lazerowitz. Ludwig Wittgenstein:

 Philosophy and Language. London: Allen & Unwin; New York:
 Humanities Press, 1972.
- Anscombe, G. E. M. An Introduction to Wittgenstein's Tractatus. London: Hutchinson University Library, 1959.
- Black, Max. A Companion to Wittgenstein's 'Tractatus'. Cambridge: Cambridge University Press, 1964.

- Bogen, James. Wittgenstein's Philosophy of Language. New York: Humanities Press, 1972.
- Coope, Christopher, Peter Geach, Timothy Potts and Roger White, A Wittgenstein Workbook. Berkeley: University of California Press, 1972.
- Copi, Irving M. and Robert W. Beard, ed. Essays on Wittgenstein's Tractatus. London: Routledge & Kegan Paul, 1966.
- Cowan, Joseph L. 'Wittgenstein's Philosophy of Logic,' Philosophical Review, LXX (July, 1961), pp. 362-375.
- Daly, C. B. 'New Light on Wittgenstein,' Philosophical Studies, X (1960), pp. 5-48; XI (1961-1962), pp. 28-62.
- Dummett, Michael, 'Wittgenstein's Philosophy of Mathematics,' Philosophical Review, LXVIII (July, 1959), pp. 324-348.
- Engel, S. Morris. "Schopenhauer's Impact upon Wittgenstein," Journal of the History of Philosophy, VII, No. 3 (July, 1969), pp. 285-302.
- guage: An Historical and Critical Examination of His Blue Book. The Hague: Martinus Nijhoff, 1971.
- Engelmann, Paul. Letters from Ludwig Wittgenstein, with a Memoir. Edited by B. F. McGuinness, trans. by L. Fürtmuller. Oxford: Basil Blackwell, 1967.
- Fann, K. T., ed. Ludwig Wittgenstein; the Man and his Philosophy. New York: Dell, 1967.
- _____. ''A Wittgenstein Bibliography,'' International Philosophical Quarterly, VII (August, 1967), pp. 317-339.
- Favrholdt, David. An Interpretation and Critique of Wittgenstein's Tractatus. Copenhagen: Munksgaard, 1964.
- _____. ''Tractatus 5.542.'' *Mind*, LXXIII (January, 1965). pp. 557-562.
- Feibleman, James K. Inside the Great Mirror. The Hague: Martinus Nijhoff, 1958.
- Fischer, Heinrich. "The Other Austria and Karl Kraus," In Tyrannos: Four Centuries of Struggle Against Tyranny in Germany. Edited by Hans J. Rehfisch. London: Lindsay Drummond, 1944.
- Ganguly, Sachindranath. Wittgenstein's Tractatus. Visva-Bharati Santiniketan: Centre of Advanced Study in Philosophy, 1968.

- Garver, Newton. 'Wittgenstein's Pantheism," Essays on Wittgenstein. Edited by E. D. Klemke. Urbana, Illinois: University of Illinois Press, 1971.
- Geach, P. T. "Review of G. Colombo's Translation of the *Tract-atus* into Italian," *Philosophical Review*, LXVI (December, 1957), pp. 556-559.
- Griffin, James. Wittgenstein's Logical Atomism. Oxford: Oxford University Press, 1965.
- Hacker, P. M. S. Insight and Illusion: Wittgenstein on Philosophy and the Metaphysics of Experience. Oxford: Clarendon Press, 1972.
- Hall, Roland. ''Review of Schopenhauer by Patrick Gardiner,''

 Philosophical Quarterly, XIV (April, 1964), pp. 174-175.
- Hamburg, Carl. 'Whereof One Cannot Speak,' Journal of Philos-ophy, L (October 22, 1953), pp. 662-664.
- Hartnack, Justus. Wittgenstein and Modern Philosophy. Trans. by M. Cranston. Garden City, New York: Doubleday, 1965.
- Heller, Erick. "Ludwig Wittgenstein: Unphilosophical Notes," Encounter, XIII (September, 1959), pp. 40-48.
- et al. "Ludwig Wittgenstein: A Symposium, Assessments of the Man and the Philosopher," *The Listener*, LXIII (January 8 and February 4, 1964), pp. 163-165, 207-209.
- Hintikka, Jaakko. "On Wittgenstein's Solipsism," Mind, LXVII (January, 1958), pp. 88-91.
- Janik, Allan S. "Schopenhauer and the Early Wittgenstein," *Philosophical Studies*, XV (1966), pp. 76-95.
- Janik, Allan and Stephen Toulman. Wittgenstein's Vienna. New York: Simon & Schuster, 1973.
- Kenny, Anthony. Wittgenstein. London: Allen Lane, Penguin Press, 1973.
- Keyt, David. 'Wittgenstein's Notion of an Object," *Philosophi-cal Quarterly*, XIII (January, 1963), pp. 13-25.
- Klemke, E. D. Essays on Wittgenstein. Urbana: University of Illinois Press, 1971.
- Malcolm, Norman. Ludwig Wittgenstein: A Memoir. London: Oxford University Press, 1958.

- Maslow, Alexander. A Study in Wittgenstein's Tractatus. Berkeley: University of California Press, 1961.
- McGuinness, B. F. "The Mysticism of the Tractatus," Philosophical Review, LXXV (July, 1966), pp. 305-328.
- Moran, John. Toward the World and Wisdom of Wittgenstein's 'Tractatus'. The Hague: Mouton, 1973.
- Munson, Thomas. 'Wittgenstein's Phenomenology," *Philosophy and Phenomenological Research*, XXIII (September, 1962), pp. 37-50.
- Payne, E. F. J. "Schopenhauer in English: A Critical Survey of Existing Translations," Schopenhauer Jahrfuch, XXXIII (1949-50), pp. 95-102.
- Pears, D. F. Wittgenstein. London: Fontana, 1969.
- Peursen, C. A. van. 'Edmund Husserl and Ludwig Wittgenstein,'

 Journal of Philosophy and Phenomenological Research,

 (September, 1959), pp. 181-195.
- _____. Ludwig Wittgenstein: An Introduction to his Philosophy. Trans. by Rex Ambler. London: Faber & Faber, 1969.
- Pitcher, George. The Philosophy of Wittgenstein. Englewood Cliffs, New Jersey: Prentice-Hall, 1964.
- Plochman, George Kimball. 'Review of an Introduction to Wittgenstein's Tractatus by G. E. M. Anscombe," The Modern Schoolman, XXXVII (March, 1960), pp. 242-246.
- Plochman, George Kimball and Jack B. Lawson. Terms in their Propositional Contexts in Wittgenstein's Tractatus: An Index. Carbondale, Illinois: Southern Illinois University, 1962.
- Ramsey, Frank P. Foundations of Mathematics and other Logical Essays. London: Kegan Paul, Trench, Trubner, 1931.
- Ludwig Wittgenstein," *Mind*, XXXII (October, 1923), pp. 465-478.
- Rhees, Rush. 'Miss Anscombe on the *Tractatus*," *Philosophical Quarterly*, X (January, 1960), pp. 21-31.
- Royal Institute of Philosophy Lectures, *Understanding Wittgen-stein*, Vol. VII, 1972-1973. Edited by Godfrey Vesey. New York: St. Martin's Press, 1974.

- Schwayder, David. 'Review of Wittgenstein's Tractatus: A Critical Exposition of its Main Lines of Thought," Mind, LXXII (April, 1963), pp. 275-288.
- Sefler, G. B. Language and the World. New Jersey: Humanities Press, 1974.
- Sellars, Wilfrid. 'Naming and Saying," Philosophy of Science, 29 (1962), pp. 7-26.
- Stenius, Erik. Wittgenstein's Tractatus: A Critical Exposition of Its Main Lines of Thought. Ithaca, New York: Cornell University Press, 1964.
- Toulman, Stephen. "Ludwig Wittgenstein," Encounter, XXXII, No. 1 (January, 1969), pp. 58-71.
- Von Wright, Georg Henrik. "Ludwig Wittgenstein, a Biographical Sketch," *Philosophical Review*, LXIV (October, 1955), pp. 527-544.
- Weinberg, Julius Rudolph. An Examination of Logical Positivism. London: Routledge & Kegan Paul, 1950.
- Zemach, Eddy. 'Wittgenstein's Philosophy of the Mystical,''

 Review of Metaphysics, XVIII (September, 1964), pp. 38-57.

III. General References

- Achinstein, Peter and S. F. Barker, eds. *The Legacy of Logical Positivism*. Baltimore: Johns Hopkins Press, 1969.
- Ayer, Alfred Jules. Language, Truth and Logic, 2nd ed. New York: Dover, 1946.
- Braithwaite, Richard B. Scientific Explanation. Cambridge: Cambridge University Press, 1953.
- Copleston, Frederick, S. J. A History of Philosophy, Vol. VII, Part II, Schopenhauer to Nietzsche. Garden City, New York: Doubleday Image Books, 1965.
- Curley, E. M. Spinoza's Metaphysics: An Essay in Interpretation. Cambridge: Harvard University Press, 1969.
- Frege, Gottlob. The Basic Laws of Arithmetic: Exposition of the System. Trans. and ed., with Introduction by Montgomery Furth. Berkeley: University of California Press, 1967.
- Gardiner, Patrick. Schopenhauer. Baltimore: Penguin, 1963.

- Geach, Peter and Max Black, eds. Translations from the Philosophical Writings of Gottlob Frege. Oxford: Basil Blackwell, 1970.
- Goldenberg, Daniel S. 'The Algebra of the I Ching and Its Philosophical Implications," *Journal of Chinese Philosophy*, Vol. 2, No. 2 (March, 1975), pp. 149-179.
- Hare, William Loftus. Mysticism of East and West: Studies in Mystical and Moral Philosophy, with an Introduction by J. Estlin Carpenter. New York: Harcourt, Brace, 1920.
- Hempel, Carl. Aspects of Scientific Explanation. New York: Free Press, 1965.
- Herstein, I. N. *Topics in Algebra*. Waltham, Massachusetts: Xerox College Publishing, 1964.
- Hertz, Heinrich. The Principles of Mechanics Presented in a New Form. Trans. by D. E. Jones and J. T. Walley, with Preface by H. von Helmholtz and Introduction by Robert S. Cohen. New York: Dover, 1956.
- Hesse, Hermann. Magister Ludi: The Glass Bead Game. Trans. by Richard and Clara Winston. New York: Bantam, 1969.
- Jeffrey, Richard C. Formal Logic: Its Scope and Limits. New York: McGraw-Hill, 1967.
- Kant, Immanuel. Cosmogony. Trans. by W. Hastie, with an Introduction by Gerald J. Withrow, Sources of Science, No. 133. New York: Johnson Reprint, 1970.
- _____. Critique of Practical Reason: and Other Works.

 Trans. by Thomas Kingsmill Abbott. London: Longmans, 1963.
- Smith. New York: St. Martin's Press, 1965.
- with an Introduction by Lewis White Back. New York: Bobbs-Merrill, 1959.
- _____. Groundwork of the Metaphysic of Morals. Trans. by H. J. Paton. New York: Harper & Row, 1964.
- _____. Inaugural Dissertation of 1770. Trans. with an Introduction and Discussion by William J. Eckoff. New York: Ams Press, 1970.
- _____. Prolegomena to Any Future Metaphysics, with an Introduction by Lewis White Beck. New York: Bobbs-Merrill, 1950.

- Kierkegaard, Soren. Concluding Unscientific Postscript. Trans. by David F. Swenson, and completed after his death with an Introduction and Notes by Walter Lowrie. Princeton: Princeton University Press, 1941. . Either/Or Trans. by David F. Swenson and Lillian Marvin Swenson, with revisions and a forward by Howard A. Johnson. Garden City, New York: Doubleday, 1959. The Journals of Kierkegaard. Trans. by Alexander Dru. New York: Harper & Row, 1959. The Point of View for My Work as an Author: A Report to History. Trans. with an Introduction and Notes by Walter Lowrie; newly edited with a Preface by Benjamin Nelson. New York: Harper & Row, 1962. . The Present Age and of the Difference Between a Genius and an Apostle. Trans. by Alexander Dru. New York: Harper & Row, 1962. Klemke, E. D., ed. Essays on Frege. Urbana, Chicago: University of Illinois Press, 1968. Kneale, William and Martha. The Development of Logic. Oxford: Clarendon Press, 1962. Kuhn, Thomas. The Structure of Scientific Revolutions. Chicago: University of Chicago Press, 1963. Mach, Ernst. The Analysis of Sensations and the Relation of the Physical to the Psychical. Trans. from the first German edition by C. M. Williams; revised and supplemented from the fifth German edition by Sydney Waterlow. New York: Dover, 1959. The History and Root of the Principle of Conservation of Energy. Trans. by Philip E. B. Jourdian. Chicago: Open Court Press; London: Kegan Paul, Trench, Trubner, 1911. The Science of Mechanics: A Critical and Historical Account of Its Development. Trans. by Thomas J. Mc-
- MacLane, Saunders, and Garrett Birkhoff. Algebra. New York: Macmillan, 1968.

edition. La Salle, Illinois: Open Court, 1960.

Cormack, sixth ed. with revisions through the ninth German

Matilal, Bimal Krishna. Epistemology, Logic and Grammar in Indian Philosophical Analysis. The Hague: Mouton, 1971.

- Nagel, Ernest. The Structure of Science. New York: Harcourt, Brace, 1961.
- Ogden, E. K., and I. A. Richards. *The Meaning of Meaning*. New York: Harcourt, Brace and World, 1946.
- Otto, Rudolf. *The Idea of the Holy*. Trans. by John W. Harvey. New York: Oxford University Press, 1969.
- ______. Mysticism East and West: A Comparative Analysis of the Nature of Mysticism. Trans. by Bertha L. Bracey and Richenda C. Payne. New York: Macmillan, 1932.
- Passmore, John. A Hundred Years of Philosophy. London: Gerald Duckworth, 1957.
- Perry, Ralph Barton. A Defence of Philosophy. Cambridge, Mass.: Harvard University Press, 1931.
- Quine, W. V. O. From a Logical Point of View. Cambridge, Mass.: Harvard University Press, 1961.
- Raju, P. T. Thought and Reality: Hegelianism and Advaita. London: Allen & Unwin, 1937.
- Rilke, Rainer Maria. Duino Elegies, the German text, with an English translation, Introduction, and Commentary by J. B. Leishman and Stephen Spender. New York: Norton, 1963.
- Robbin, Joel W. Mathematical Logic: A First Course. New York: Benjamin, 1969.
- Russell, Bertrand. The Autobiography of Bertrand Russell. 3 vols. Boston: Little, Brown, 1968-1970.
- _____ Introduction to Mathematical Philosophy. New York: Simon & Schuster.
- _____. Logic and Knowledge: Essays 1901-1950. Edited by Robert Charles Marsh. London: Allen & Unwin, 1964.
- _____. Mysticism and Logic. Garden City, New York: Doubleday, 1957.
- _____. Our Knowledge of the External World. London: Allen & Unwin, 1926.
- _____. Philosophical Essays. New York: Allen & Unwin.
- Portraits from Memory. London: Allen & Unwin, 1956.
- . Principles of Mathematics. New York: Norton, 1964.

Problems of Philosophy. New York: Oxford University Press, 1972. Schopenhauer, Arthur. The Basis of Morality. 2nd ed. Trans. by Arthur Broderick Bullock. London: Allen & Unwin, 1915. Essays and Aphorisms. Trans. with an Introduction by R.J. Hollingdale. Harmondsworth, Middlesex: Penguin, 1970. On the Fourfold Root of the Principle of Sufficient Reason and On the Will in Nature. Trans. by Mme. Karl Hillebrand. London: Bell and Sons, 1881. The Philosophy of Schopenhauer. Edited with an Introduction by Irwin Edman. New York: Random House, 1956. _. The Will to Live: Select Writings of Arthur Schopenhauer. Trans. by R. B. Haldane, J. Kemp et al., edited by Richard Taylor. New York: Doubleday Anchor, 1962. The World as Will and Representation. Trans. by E. G. J. Payne. 2 vols. New York: Dover, 1966. Spinoza, Benedict de. The Chief Works of Benedict de Spinoza. 2 vols. Trans. from the Latin, with an Introduction by R. H. M. Elwes. New York: Dover, 1955. Earlier Philosophical Writings: The Cartesian Principles and Thoughts on Metaphysics. Trans. by Frank A. Hayes, with an introduction by David Bidney. New York: Bobbs-Merrill, 1963. The Principles of Descartes' Philosophy. Trans. from the Latin, with an introduction by Halbert Hains Britan. La Salle, Illinois: Open Court, 1961. Stall, Frits. Exploring Mysticism: A Methodological Essay. Berkeley: University of California Press, 1975. Tolstoy, Leo. Anna Karenina. Trans. by Constance Garnett. New York: Grosset and Dunlap, 1931. . Hadji Murat: A Tale of the Caucasus. Trans. by W. G. Carey. New York: McGraw-Hill, 1965. The Kreutzer Sonata. Trans. by Isai Kamen. New York: Random House, 1957. Twenty-Three Tales. Trans. by Louise and Aylmer Maude. The World's Classics. London: Oxford University Press, 1965.

What is Art? Trans. by Aylmer Maude. Library of Liberal Arts. Indianapolis: Bobbs-Merrill, 1960. My Confession: The Complete Works of Lyof Tolstoi. Translator anonymous. New York: Thomas Y. Crowell, 1889. Urmson, J.O. Philosophical Analysis: Its Development Between the Two World Wars. Oxford: Clarendon Press, 1956. Von Helmholtz, Hermann. Popular Scientific Lectures. Edited by Morris Kline, trans. by H. W. Eve et al. New York: Dover, 1962. Warnock, G. J. English Philosophy Since 1900. London: Oxford University Press, 1958. Weiler, Gershon. "Fritz Mauthner," Encyclopedia of Philosophy. 8 vols. Edited by Paul Edwards. New York: Macmillan, Free Press, 1967. Mauthner's Critique of Language. Cambridge: Cambridge University Press, 1970. "On Fritz Mauthner's Critique of Language," Mind, LXVII (January, 1958), pp. 80-87. Weininger, Otto. Sex and Character. Translator anonymous. London: William Heinemann, 1906; New York: Putnam's Sons, 1906. Whitehead, Alfred North. The Function of Reason. Beacon Hill Boston: Beacon Press, 1962. _____. Modes of Thought. New York: Free Press, 1966. and Bertrand Russell. Principia Mathematica. Cambridge: Cambridge University Press, 1962.