The Logical Structure of Transcendental Method [1]
Otto Muck, S.J.

MANY TODAY REGARD metaphysics as outmoded. They make a strict separation between the problems of language, logic, and science and the problems of metaphysics. By so doing they presuppose a concept of metaphysics which bears little resemblance to Aristotle's "first philosophy" and they usually ignore the contemporary accounts of metaphysics which take up this metaphysical way of thinking. And yet they employ this bias in the name of critical thinking.

Joseph Maréchal began one of the most promising reinterpretations of Aristotle's "first philosophy" about fifty years ago. Because he attempted to develop metaphysics in the framework of Kant's approach to philosophy, the "Transcendental Method," a term first used by neoKantians, is often used as a name for this approach. His efforts with this methodology have been supplemented by the work of others and today the transcendental movement is making a valuable contribution to the issues of contemporary philosophy.[2]

The purpose of this article is to indicate the logical structure of the transcendental method and to show its philosophical usefulness. With this purpose in mind, 1 will discuss the way in which the transcendental method deals with the problem of the antinomies which arise in human consciousness.

S.343 From its beginning occidental philosophy had to face the perplexities which are evident in our thinking. One of the earliest problem areas dealt with the different ways in which we speak and think about changing things. Heraclitus emphasizes the variability of all things. Parmenides and the other side excludes change and multiplicity from being. Aristotle tries to give a solution to this problem within the framework of his philosophy by employing the distinction of act and potency in changing things. In modern philosophy Kant demonstrates the antinomies which arise in our conscious life and uses them in the method-ology of his philosophy. He regards as an antinomy any pair of opposed sentences, which cannot both be true, but which nevertheless seem to be consequences of valid arguments. The Critique of Pure Reason explains the occurrence of such antinomies and seeks to resolve them. In contemporary times Linguistic Analysis finds the task of philosophy to be solely the resolution of the dilemmas in which we find ourselves caught through the clarification of the use of our language.

Operative analysis and retorsion, two essential elements of the transcendental method, resolve an antinomy or dilemma by reconstructing the meaning of the pair of terms which are seemingly opposed and by expressing and evaluating the implicit assumptions involved in the antinomy. In dealing with the application of operative analysis and retorsion, the pragmatical function of metaphysics-that is, the search for the solution of philosophical antinomies-will also be shown to contain the ontological Import required for a tenable metaphysics.

TRANSCENDENTAL ANALYSIS AND ANTINOMIES

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[1] I want to express my gratitude to Mr. Gerald Wallulis, at present a student of philosophy at the University of Innsbruck, for helping to ease the transition from German to English and his suggestive comments for the content of the paper.

[2] A survey of this movement is given in: O. Muck, The Transcendental Method (New York: Herder & Herder, 1968). An example for applying transcendental method can be found in: E. Coreth, Metaphysics, condensed English version by Joseph Donceel, with a Critique by Bernard Lonergan (New York: Herder & Herder, 1968).

Transcendental analysis is usually considered to be the inquiry into the a priori conditions for the possibility of acts of knowledge. It has two essential phases: transcendental reduction and transcendental deduction.

But why do we ask for the a priori conditions of an act? There is often the suspicion that such an inquiry necessarily rests upon at least one of two questionable presuppositions: (1) a subjective theory of knowledge or (2) the assumption of a principle of sufficient reason.

A subjective theory of knowledge would presuppose the distinction between subject and object and would accent the determinations of the conscious content due to the subject in Opposition to determinations of the object itself, if these are admitted at all. Although Kant held this theory, it is not necessary to the transcendental approach. The transcendental method in our sense of the term is beyond this **S.344** position; it views thinking or speaking as always being our activity, but an activity which claims to reveal to us its object. subjectivistic, or for that matter objectivistic, theories presuppose a special framework in which a subject-object distinction is made. The transcendental method does not make this assumption and reflects critically upon its occurrence. Although the act is viewed by transcendentalists as an intentional act, emphasis is laid not upon the intentionality but upon the act itself. If it is necessary to assume conditions for the possibility of the act, then these conditions are conditions for the act as it actually occurs in a subject. If these conditions are evaluated as only affecting the subject of the act without any relevance to the object intended by the act, this would have to be demonstrated and not simply assumed. Such an a priori assumption would be a dogmatically accepted subjectivistic bias, in no way authorized by the transcendental method. The conclusion is that the transcendental method is "subjective" only in the sense that it reflects upon the conscious acts of a subject. In this regard there is a similarity to Analytic Philosophy which sees the task of philosophy to be the reflection upon our language-language taken so broadly that it can be viewed as a form of conscious life.

But why ask for conditions of possibility at all? Are we not assuming the principle of sufficient reason when we say that it is necessary to ask for conditions of possibility? In fact, the Problem arises concretely because we are bewildered by antinomies which arise in our conscious activity and by dilemmas which find expression in our language. We find ourselves bewildered because: 1) A conscious act is such that it makes a Claim for truth, morality, usefulness, or the like. 2) The Claim it makes is thought to be reasonable, i.e., it is in accordance with some standards that permit one to distinguish the acts which make their claims correctly from those which do not. 3) According to these same standards another conscious act correctly makes a Claim which implies that the Claim of the first act must be incorrect. 4) Such a fundamental incoherence must be ruled out for the possibility of reasonable activity.

Therefore the inquiry into the conditions of possibility becomes the inquiry into the standards for reasonable acts, and the reasons for our bewilderment in the face of an antinomy are the reasons which lead us to inquire into the conditions of possibility of our conscious acts: How is it possible that these acts are reasonable by means of standards for reasonableness? How is it possible to evaluate standards of reasonableness critically and to apply them to conscious acts? In this sense the question which begins the transcendental analysis does not make any new, unfounded assumptions, but only the assump- **S.345** tion operative in our difficulty with the antinomy: that the incompatibility of the Claims of the members of the antinomy must be ruled out for the possibility of reasonable activity.

TRANSCENDENTAL REDUCTION AND OPERATIVE ANALYSIS

Not just any condition for an object-orientated conscious act is regarded as a transcendental condition. A psychological investigation may find many factors necessary for the occurrence of a certain kind of act. But the factors found would not be transcendental conditions, for they Gould not be regarded as constitutive of the reasonableness of the Claim that the act makes. Logical rules are constitutive of this Claim but are also not considered to be transcendental conditions. They are conditions which make explicit the rules which must be fulfilled by the act of reasoning in Order to be an act of correct reasoning. But the transcendental philosopher not only asks whether an act is correctly reasoned, but primarily seeks the Standards by which the proposition makes the Claim of reasonableness that it does. These Standards are comparable to the understanding exhibited in a language game which may be formulated in the rules of that game. So we can contrast the transcendental condition with a purely logical condition as well as with a psychological condition.

It is important to recognize that the transcendental conditions are not to be viewed merely as some derived or basic laws of the particular language in which the antinomy is formulated. The occurrence of an antinomy would then only show the inconsistency of such a language. But many antinomies which are relevant for philosophy do not presuppose a formal reconstructed language but occur in ordinary language. The occurrence of the antinomy in ordinary language implies that the attempt to take the sentences of the antinomy to be sentences of a Single formalized language is bound to fail. A successful reformulation of the arguments into a formal language would necessarily lead to more precise expressions and distinctions which would cause the antinomy to arise no longer. Philosophically this is satisfying only if it can be shown that the new formulation in the formal language is an adequate reconstruction in terms of the Standards applied to the original formulation in ordinary language. But in general this is not to be expected, because the Standards operative in ordinary language apply to other uses of language in addition to those which can be handled in any particular formal reconstructed language. Therefore another way has to be sought to articulate the Standards involved **S.346** in an antinomy occurring in ordinary language and to evaluate them.

Is there a way to give a precise account of standards for our use of language without making a restriction to a special language, which would be too narrow ? Is it possible to see, e.g., a logical law in a special language as an application of a more general pattern that can be used in different languages ? If this should be possible we would say that this law is an application or an objective explicitation of this more general pattern.

Paul Lorenzen, a logician at the University of Erlangen, is dealing with such a problem in his operative approach to logic.[3] A semantic foundation of logic presupposes a metalanguage. This metalanguage uses again similar logical laws. If we want to give an account of these similarities and if we want to avoid the problems involved in an infinite series of presupposed meta- and meta-metalanguages, we need an account of the logical laws which does not presuppose a metalanguage but rather introduces the required metalanguage in so far as a metalanguage is required to speak about logical laws and rules.

The decisive point of this operative approach to logic is the fact that we do not always need a presupposed language in order to learn a pattern-governed way of operating-otherwise we would never have been able to learn any language. A language which we use in order to speak about this way of operating is understood as being dependent upon this way of operating which we have already learned to perform. Statements of this language state some features of this way of operating and can be checked against the results of actually performing these operations. Along the Same line a metalanguage for this language may be introduced and checked by procedures in the language referred to.

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[3] P. Lorenzen, *Operative Logik*. In: R. Klibanski, *Contemporary Philosophy* (Florence: La Nuova Italia, 1968) I, 135-140, gives an account of the publications dealing with this approach.

This way of introducing languages to speak about pattern-governed operating may be applied to the rule-obeying operations of a calculus which is determined by a set of basic rules. Like Lorenzen, we designate a rule as admissible into this calculus if its application would yield no new results which Gould not be inferred from the original set of basic rules. The proof for the admissibility of a rule consists in the indication of a procedure showing how the use of the rule in question can be eliminated, i.e., replaced by the application of the basic rules of the calculus. The investigation of patterns of such elimination pro- **S.347** cedures is the field of the so-called "proto-logic." The patterns may be generalized for different calculi with their respective basic rules. In general, a rule for some calculus is called hypothetically admissible if some other rules, considered to be the hypothesis, are admissible or basic to the calculus; and it is called generally admissible if the hypothesis is empty, i.e., if it is admissible for any calculus, no matter how the basic rules are formulated. This holds, e.g., for the calculus of sequences, interpreted as consisting of meta-meta-rules.

Now we can understand how the operative approach to logic, which uses proto-logic, analyzes logical constants. Let us consider an example: The use of "and" may be determined by a pattern of deduction which can be expressed by the rule:

(1) If "A" is a formula of the calculus C and if "B" is a formula of the calculus C, then "A and B" is a formula of the calculus C'; that is, of the calculus C which has been extended by introducing the sign "and."

Not the formulation of the rule but the pattern of operating expressed by this rule is decisive for the introduction of the term "and." This pattern may be learned in different ways and determines the use of "and." Wherever we can apply this pattern, we can use "and" with this meaning.

After having introduced the word "and" and thus determined its meaning by means of a pattern for using it, we may find that after this introduction, and dependent upon it, some other rules which describe the use of "and" are admissible in any calculus into which "and" has been introduced in the way indicated above. Using procedures for elimination, it may be shown that the following rules are admissible in C .

(2) If "A and B" is a formula of C, then also "A" is a formula of C.

(3) If "A and B" is a formula of C, then also "B" is a formula of C.

A comparison with the calculus of natural deduction may serve to clarify the Situation. In this calculus there are no basic formulas but only rules. Tlie laws of propositional calculus are the application of the basic; rules of this calculus. Among these rules are the three rules (1), (2), (3), concerning the use of "and," mentioned above. However a difference lies in the fact that the calculus of natural deduction requires all of these three rules as basic rules. According to the operative approach of Lorenzen only the first rule (1) is required. It serves for **S.348** an introduction of "and." After this introduction the other two rules (2) and (3) are shown to be admissible. Thus the conventional element of logical expressions appears more clearly. When "and" is used in the way we have indicated by the operational pattern of the rule introducing "and," it is a convention-though a convention based upon the effort to give an adequate reconstruction of the use of the word "and" in its many instances of ordinary and scientific language. It is not conventional, however, that after this introduction some other rules are admissible. Rather it is the case that these rules are necessary consequences of the operational pattern used for introducing "and."

Several features of this approach, which can be only briefly indicated here, are of special philosophical interest:

1) This approach exemplifies how expressions in a language can be said to be the result of an application of operational rules and how sentences can be said to be an explicitation of the operational structure which is governed by the rules.

2) It is a way of dealing with structural elements of operations without being limited to one language or a limited set of languages, especially without excluding the operational features of the metalanguage.

3) If the meaning or the use of an expression is interpreted by the rules governing the introduction of this sign, then some sentences using this expression may be justified as applications of rules admissible after this introduction, i.e., they are hypothetically admissible to the introduction rules.

Transcendental conditions in this context would be the rules for the introduction of expressions into our discourse. Because they introduce an expression into a language by circumscribing its use, we may speak of an operative definition in regard to these expressions. To use the traditional terminology, the function of the transcendental reduction would be to ascertain the introduction rules of a language and to provide operative definitions for the expressions in that language.

Kant inquired into the a priori conditions for the constitution of objective contents in consciousness. We are more concerned about language than he was. We, like recent philosophers in Analytic Philosophy, are looking for the constitution of meaningful expressions in terms of their use-which may be accounted for by rules. Our inquiry into the a priori conditions, then, is an inquiry into the introduction rules of expressions in a language which provide the patterns for the operative definitions of the expressions within that language.

In the case of an antinomy, this involves making explicit the uses of the expressions of the elements of the antinomy. Like any account **S.349** of a given sentence in a language whose structure is not known a priori, the procedure is hypothetical a posteriori. The consequences obtained from an operative definition therefore have the general form: "If we may understand the expression as introduced by these rules, then it necessarily follows that...." A priori conditions therefore are not to be understood as knowable in a way that is purely a priori.

Transcendental conditions are a priori in the Sense that any expression introduced by the rules which constitute its operative definition is to be used in accordance with the applications of the Set of rules admissible to the system. No a posteriori refutation of the use of the expression is possible within the language. A certain language might be judged to be impractical, but then it is advisable, first, to validate the Standards of practicality operative in this judgment and then, if these Standards call f or it, to reject the language.

Presuppositions that are strictly logical differ from transcendental conditions in the following ways:

1) In most Gases logical assumptions are not viewed as applications of rules which are admissible dependent only upon the rules introducing these expressions.

2) Our treatment of transcendental conditions is concerned with rules not only for the introduction of logical Symbols but also for a wide variety of other expressions. Along these lines Lorenzen has proposed not only an account of basic concepts of logic but also of arithmetic, geometry, and physics.

As is to be expected, philosophers using the transcendental method have interpreted the a priori conditions in different ways. Common to all of them, however, is the viewpoint that these conditions are constitutive of the content of some act and are co-affirmed in the performance of the act, but that this knowledge is implicit in character and must be made explicit. The analysis of this process of making the constitutive knowledge explicit leads hopefully to the resolution of the paradoxical antinomies in philosophy. For Marechal the act of judgment is examined and its dynamic nature in the subject is shown to be constitutive; for Emerich Coreth the act of questioning shows the necessity of a pre-knowledge operative in its performance; and for Bernard Lonergan the desire for knowledge in science, mathematics, and common Sense exemplifies a recurrent, dynamic

heuristic structure that is constitutive of its possibility. These conditions, each considered constitutive of the consciousness of objects by its respective philosopher, are used to give operative definitions to basic concepts of philosophy, especially the central metaphysical concepts.

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TRANSCENDENTAL DEDUCTION AND RETORSION

Transcendental analysis for Kant culminates in the stage of deduction which shows that an a priori condition is necessary for the constitution of any conscious content. In his transcendental deduction Kant tries to justify some synthetic a priori judgments concerning the realm of objects of possible experience by showing that they are the consequence of factors deduced to be necessary for the constitution of any act referring to the objects of experience. We want to vary this procedure in accordance with the observations we made above.

Expressions of a more or less special kind characteristic of speaking of a special realm of objects may be assumed to be introduced by the rules which determine their operative definitions. By means of elimination procedures, it may be shown that other rules are admissible to this hypothesis. Therefore we can conclude that the statements which can be obtained by the application of these admissible rules to the language of this realm of objects are to be regarded as valid. This is merely a result of the fact that these statements are the objective expression of operations necessary for any content which refers to this special realm of objects.

But are not the rules through which the operative definitions are obtained at most the sufficient conditions, and not the necessary conditions, f or making the use of the expressions explicit ? Could not another operative definition yield the same or different results? Transcendental deduction, however, is supposed to Show the necessity of the conditions in question. Only if the operative definition or at least its consequences are necessary must we accept the rules admissible under this hypothesis as holding for any language about objects of this realm.

The objection is valid if we were concerned with interpreting only languages that were hypothetically given and withheld from considering our own language. But if in our own language we want to put questions precisely and give answers clearly, we are liable for an ac-count of the expressions we use. Here we do not have the possibility of putting forward an account of the use of our expressions which is hypothetically sufficient but in no way necessary. We are forced to find out what we mean when we put forth a question or give an answer: we are forced to seek the rules for these activities. A partner in a discussion or an Opponent in a debate would have the right to know exactly what we mean when we pose a question or give an answer. And after making our decision we would be bound to follow the consequences.   **S. 351**

If we consider a given expression and try to find out its use, we try to find out how hypothetically assumed rules for its use are a workable Interpretation. In this case we are not bound to accept this use and its consequences. We are free to change the rules if we do not like to accept the consequences. We are no longer free to do so if we are speaking ourselves and have explained the rules of our language. As long as we do not renounce this use, we are bound to accept the consequences. Therefore statements justifiable by this kind of transcendental deduction have the form: 'Tor everything referred to by the expressions determined by the agreed-upon introduction rules, anything that is an application of rules admissible to the introduction rules is valid."

The argumentation employed by Aristotle to justify the principle of contradiction exemplifies the essential logical structure of transcendental deduction as we have explained it. This type of indirect justification has been called "retorsion." It consists

in a reductio ad absurdum, not by establishing a contradiction of concepts, but by show-ing a fundamental inconsistency in the attempt to deny or even to doubt the principle in question. It is therefore a "contradiction" between what is said by denying or doubting the principle and what is done by this very act of denial or doubt.

Let us consider the case in which the negation is introduced by a pattern of deduction according to which a contradiction, i.e., the affirmability of a sentence and the affirmability of the negation of this sentence, permits the deduction of any formula (e (also quodlibet). Then it is a necessary condition for the possibility of reasonable activity to rule out contradictions. There occurs an incoherence between saying that a contradiction may be admitted and what is done in saying this. This is the case because the act of saying this presents itself as claiming to be a rational activity and what it says rules out the possibility of rational activity. Admittedly the procedure presupposes the possi-bility of comparing the operation of the denial with the content of the denial, but this possibility is provided for by operative definition precisely because the content is determined by an operation-in this case the operation of denying.

A sentence is justified then if the sentence is shown to be based upon the application of the introduction rules of the language. The justification becomes apparent when it can be shown that the activity of denying the sentence or affirming any doubt about it involves rules that are incompatible with the introduction rules for expressions of the language in which the sentence is formulated. The key to a justifiable formulation of a sentence lies then in the correct application of the introduction rules which make explicit the use and hence the mean- **S.352** ing of the expression employed in the sentence. The procedure of justification we have outlined can be denied, of course, simply by the refusal to follow the operational pattern expressed by the introduction rules of the language-especially by refusing to use expressions in accordance with these rules. But there are Statements like the principle of contradiction whose denial involves the refusal to acknowledge any standard which would permit one to distinguish a proper performance of any human activity from an improper performance. Aristotle points out that such a refusal amounts to the refusal to use language, for it necessarily results in the impossibility of communication. Indeed a person who strictly adheres to such a position Gould neither affirm nor object to a Statement made by someone else; he Gould not even Claim that the principle of contradiction is invalid.

The merit of the justification given by transcendental deduction lies not only in its forcefulness, but also in its function of showing how a statement that is assumed to be a first principle must be interpreted in Order to actually be a first principle. It is of great importance for philosophical understanding not to be satisfied with the acceptance of first principles but to give a well-founded account of their precise meaning. An operative definition of the terms of a first principle, which is a prerequisite for the justification by retorsion, fulfills this requirement. If it is argued that such a definition is not precise because it is not given within an established language but in terms of operational patterns which are only indicated-though of course by using language one would have to answer that it is the aim of transcendental analysis to reduce operational definitions to a minimum, but not to rule out the possibility of their occurrence. Furthermore, such a procedure would needlessly eliminate a means of inquiry into a series of philosophically relevant questions which are answered most precisely by such definitions.

The logical structure of retorsion when applied to resolve an antinomy can be seen in the following way. If an antinomy arises, then transcendental analysis investigates not only the possibility of different languages being used to express the conflicting elements of the antinomy, but also general assumptions common to both the elements of the antinomy. Such common elements are present, if a comparison between the elements of the antinomy and with it the antinomy itself should be possible. Retorsion Checks if these assumptions, when inter-preted in the way they are used in the antinomy, may be justified as generally valid or if

they must be considered as incompatible with the necessarily assumed introduction rules of the language and therefore rejected.   **S.353**

If the common assumptions are justified by retorsion, then the consequences have to be recognized. The antinomy should have been resolved by the clarification through operational definition of the meanings of the elements of the antinomy, which is preliminary to retorsion and necessary for its application. If that is not the case, then the unresolved antinomy indicates that there has been a mistake in the analysis or that it is incomplete.

If the assumption is not validated by retorsion, then it and the formulation of the elements of the antinomy based upon it are normally rejected and another expression based upon suitable assumptions must be made. However, it may also be the case that the assumption is shown to be the application of a general assumption which is justifiable by retorsion within a certain field of application but in this case is used outside of that field. In this way the antinomy is resolved by distinguishing the authorized application of an assumption from an unauthorized application. Transcendental analysis in this case justifies the assumption in question but at the same time gives precise limits to its applicability. In the same way Kant tried to justify by his transcendental deduction the value of synthetic a priori judgments but limited their validity to being necessary assumptions for natural science and mathematics.

We distinguish a priori conditions which can be shown to be necessary for all intentional acts from a priori conditions which are necessary only for special kinds of acts. Following the distinction made by the neo-Kantian H. Rickert between "*constitutive categories*" and "*methodological forms*," we call the former "*pure*" a priori conditions and the latter "*methodological*" a priori conditions. Coreth, for example, distinguishes between the pure pre-knowledge required for any question and the pre-knowledge required for the understanding of a specific question. In general, transcendental philosophers make the Claim that the pure a priori conditions express not merely a subjective necessity to ascribe some certain features to objects, but an objective necessity which reveals the ontological structure of the object. In Order to understand and appreciate the Import of this assertion, it is necessary to explain the relation between an a priori and being.

THE A PRIORI AND BEING

Marechal, Coreth, Lonergan, and other philosophers who use the transcendental method to give a foundation to metaphysics in the Aristotelian sense of "first philosophy" introduce being through the **S.354** operation of judging or of questioning or of striving to know. When basic affirmations about being are attained, it is through the investigation of the consequences of anything being the object of an act of passing judgment or of posing a question or of striving for knowledge. The concept "being" itself is given an operative definition in terms of one of these acts: thus it is stated that any judgment or question or desire for knowledge refers to being. We shall attempt to clarify the meaning of this Statement.

lt is our common experience that when a stick is partly submerged in water it appears as though it were bent. Thus an observer of the stick, after taking perhaps only a quick glance at it, might say: "The stick is bent." There are two possible ways of evaluating this statement critically. We can say that the Statement is false because the stick is not bent after all but only appears to be bent. But it is also possible to defend the Statement by pointing out that the observer made a justified Statement if he only wanted to state what the stick looked like-in other words, the Statement can be interpreted as presupposing some restrictions. Thus the sentence is interpreted as playing a role in a very restricted language game which is only concerned with the viewpoint of visual appearance and has no concern for other

viewpoints and the questions they put forth. If we transfer the given sentence into a more general language which considers these other viewpoints, we must indicate the special, originally restricted viewpoint in the new formulation. Perhaps we Gould say: "It appears to the observer as if the stick were bent." Thus we have restricted the meaning of the Statement and made explicit our Intention of prescinding from other possible viewpoints.

Is there a difference in regard to the use of Statements without such an explicit or implicit qualification and Statements needing a qualification of some sort? Yes, there is a difference in relation to the scope of relevant questions that can be brought forth concerning the statement; that is, the scope of questions whose answers have an effect upon the assertibility of the statement. For the first type of Statement, questions from any viewpoint may be shown to be relevant; for the qualified statement, on the other hand, only questions belonging to the viewpoint expressed in the qualification can be relevant. What effect does this distinction between qualified and unqualified Statements have upon our discussion about being ? The statement which is qualified by a restricted viewpoint must give an account of the way the state of affairs appears within this viewpoint, not necessarily the way it is from another viewpoint. The statement which is understood as not being confined by such a qualification but open **S.355** to relevant questions from any viewpoint then intends to deal with the state of affairs as it is from any viewpoint. And this is expressed by simply stating what there is and by not restricting it to affirm only how it appears to be. An unqualified statement must therefore be regarded as having the Intention to refer to the state of affairs which actually is. And because the unqualified statement claims to have this ontological value, being may be operationally defined as the object referred to by statements which Claim to be valid apart from a restriction to any special viewpoint. Statements which describe only the appearance within a limited viewpoint then do not intend to have this ontological value but only a relative value, unless the restriction is made explicit in regard to the other viewpoints which would make the new complex, qualified statement valid without further restrictions. lt is in this Sense that Johannes Lotz, using Marechal's beginning point of the act of judgment, can refer to this act as claiming to have absolute value which "holds for any field" and as "referring to being" when this is explicitly understood.

Up to now we have only considered that a statement which is understood as being made from the most comprehensive viewpoint is at the Same time understood as intending to say what there is. This has yielded the operative definition for being.

We have not assumed that a certain statement which claims to be made from a most general viewpoint makes this Claim correctly. For our purpose it is sufficient that such a statement is open to falsification from answers to relevant questions from any viewpoint. And if it becomes actually falsified we are again in the same Situation as we have been with regard to the statement, "The stick is bent." Either we admit then that it was not made from a most general viewpoint and thus does not refer to being but only to a special aspect of the thing or we admit that the statement was wrong. But this falsification would not haue taken place if the statement had been isolated a priori from the viewpoint which brought about the falsification, i.e., if the statement had not had the Intention to refer to being and thus not to leave out of consideration any special viewpoint. Therefore this type of falsification presupposes an understanding of being as it has been explained by the operative definition of being.

So far we have only clarified the concept of being and the way in which statements refer to being. We have not yet shown that it is possible to justify conclusively that a given statement is correctly claiming a reference to being or that it is possible at all to find a language which permits the formulation of such statements. Let us therefore consider the following case: There is a sentence in a language and this **S.356** sentence is justified as being an application of rules determined admissible to the rules f or the introduction of the terms used in this sentence. If these terms can also be introduced by the same rules or operational

patterns into other languages with a more general viewpoint, then what has been affirmed by this sentence can be shown to be valid also in regard to any more general viewpoint. Thus it is shown that it is valid not only for a restricted viewpoint, that it is therefore ontologically valid.

The fact that the method of retorsion as it is used in transcendental analysis relies an an account of the meaning of the terms by means of operational patterns, so that it is not dependent upon a special language, is therefore very important. If it shows that some rule, e.g., the principle of contradiction, is admissible to any coherent language whatsoever and therefore that the negation of this rule is inadmissible and its application in any language incoherent, then a statement which is the application of a generally admissible rule to a special language takes into account relevant questions from any viewpoint. The pure a priori character of the rule is separated from the methodological a priori character of a rule that is not generally admissible precisely because the transcendental method through retorsion shows it to be necessary for the linguistic expression of any knowledge whatsoever and therefore also in a most general language which would take into account any viewpoint. Its necessity is not shown in the givenness of a special language but in the possibility of the coherency of such a language or of any language.

When the pure a priori condition is interpreted solely from linguistic systematic considerations as we have done, it must be viewed as a necessity that is not merely subjective but ontologically valid, that is, irrespective of whoever might be using it. Rules are a priori when they are admissible in any language-which does not rule out the possibility of special restrictions in their application in that language but does, however, require that these restrictions be expressed. Statements which are the application of these generally admissible rules are open to any relevant question and are shown by retorsion to be valid. In this way ontological validity receives its definition operatively, and not intentionally, i.e., from systematic a prioris based upon an objective Operation and not from the intentionality of inner subjective acts toward the objects of reality. Here we see the authorization for our earlier assertion that transcendental analysis is interested in intentional acts as "acts" and not primarily in regard to their intentionality.   **S. 357**

At the same time it would be a mistaken conclusion to say that the intentional account of assertibility, a form of the correspondence theory of truth, is rejected or even omitted in the position we have given. In the operative account of assertibility, which indeed resembles the coherence theory of truth, we are interested in the reliability of answers to our questions in Order to give valid answers to the questions and to eliminate error in our judgment. But how do we experience error? We conclude that a Statement is wrong if further investigation leads us to accept Statements which are incompatible with the Statement which we had believed to be assertible. The previously accepted statement has been shown to be mistaken by finding answers to pertinent questions which show that the Statement cannot be validly asserted. A question then is relevant to the Statement if one of the possible answers to the question can falsify the statement. Questions which Gould falsify the statement but which remain unanswered in our inquiry can be designated as open questions. The operative criterion of assertibility therefore states that a statement is assertible if, and only if, no relevant question is open. Different procedures employed in our attempt to close relevant questions can be used to distinguish operationally different kinds of assertibility.

The standard objection made by an adherent of the correspondence theory of truth against the operational account of assertibility which we have briefly described above is that there is no guarantee that Statements which fulfill the operational criterion of assertibility actually correspond to the state of affairs which is affirmed in these statements. lt should rather be the case that a statement is assertible if, and only if, we know that what is to be asserted in the statement is, in fact, the actual state of affairs.

This objection assumes what we have not had to assume in forming the operative criterion of assertibility. It assumes that the viewpoint in which the correspondence between the statement and the state of affairs is checked is the most general viewpoint and a Basis of judgment which is absolute in regard to the content of the statement. It assumes, moreover, that the operations taken into account by the operative approach to assertibility are only a Part of the totality of operations and therefore that the operational viewpoint is restricted because it takes a selective approach to the problem and because it excludes in this way the viewpoint of the adherent to the correspondence theory of truth. The first assumption is necessary to establish the correspondence theory of truth; the second, to rule out the applicability of the operative criterion by denoting it as "only subjective." **S. 358** However we did not make these assumptions, especially not the second one. We too were concerned with attaining the most general viewpoint for making a statement, but the emphasis was upon the conditions which such a viewpoint must meet and upon the operations through which a statement from the language expressing the most general viewpoint can be made. For our operative approach to assertibility the knowledge of the state of affairs and the knowledge of the language expressing the most general viewpoint are obtained through operations, if they are obtainable at all. Furthermore, the operative criterion requires that even the questions based an the assumptions made by the correspondence theory of truth-these questions are relevant, as the objection Shows-must be closed in Order that a statement can be assertible according to the operative criterion. But this can be done implicitly, i.e., without explicitly referring to these questions, e.g., by using a procedure which Shows that a statement is valid with regard to any viewpoint. In our discussion of unrestricted Statements which take into account all relevant questions we found that such Statements necessarily refer to being and have ontological validity. This is, perhaps, the best indication that the first assumption made by the correspondence theory is true, but only in the Sense that we have clarified. The fact that the first assumption finds a basis for understanding in the operative criterion is at the same time the most potent disproof of the second assumption, that the operative criterion is only subjective. Indeed the operative criterion is a more general theory because it provides a foundation for the conditions specified by the correspondence theory of truth.

But is this methodology of transcendental analysis which we have outlined above adequate for the function ascribed to it by the philosophers who have used transcendental analysis to give a new account of metaphysics ?

THE USE OF TRANSCENDENTAL ANALYSIS

We have shown how transcendental analysis can be understood to be a method of dealing with problems which can be formulated as antinomies and which arise in ordinary language. The usual philosophical issues can easily find a formulation in such a way. Therefore the resolution of such antinomies can be considered to be the aim of philosophy, and transcendental analysis may be seen as a method that does just that.   **S.359**
Does this Interpretation, however, restrict philosophy to a mere analysis of language instead of a clarification and synthesis of our knowledge of what is? This question must be answered in a way analogous to the response we gave to the objection against operative analysis. It is precisely the reflection about our language which clarifies the knowledge contained in this language. And the language we use is not set apart from our life but intrinsically linked to the whole of our activity in the world.
Metaphysics then must be founded in a reflection upon language. The function of metaphysics is to analyze our relation to the language which expresses our world-view. We are beings who use language and who have to make choices in our lives, and in making these choices we use a symbolic representation that unifies the different realms of our activity. A world-view

(Weltanschauung) is precisely that outlook toward the world by which a man's choices can be understood to be reasonable. The world-view may be more or less explicit, but in any case it embodies an evaluation of the different fields of human activity. A person's world-view is naturally selective and limited anal usually the subject of change during his lifetime because of his varied experiences. Our effort to understand other people often requires us to infer that they have a world-view other than ours. Hence the question arises as to whether our world-view is a reasonable one, and we begin the process of reflecting upon our world-view and its language and making it explicit. In order to give an over-all evaluation of the different realms of objects and the different kinds of objects in each respective realm that we encounter, the world-view that we make explicit has to fulfill at least the following four criteria:[4]

1) It must be consistent: that is, it cannot contain a contradiction, because then any course of action Gould be inferred from it.

2) It must be coherent: that is, if it provides not only one principle but a set of principles, then the relationship among these principles must be made explicit and explained. Otherwise the question of the preference of a certain principle or a certain relationship would arise again.   **S.360**

3) It must be directly related to the activities in our life because our decisions in the different realms of activity can only find their reasonableness through our world-view.

4) It should not dogmatically exclude any realm of human experience. Otherwise it could not be the basis which directs our preference in a given situation toward some activity rather than another, but only something consequent to that basis. It is not to be expected that we be able to deduce an optimal worldview philosophically. But we may be able to Show some structures to be necessary conditions for any world-view in order that it fulfill the pragmatic criteria we have given above. To investigate these structures would be the task of metaphysics. The difficulties and confusions of hasty and unjustified generalizations for which metaphysics is noted can only be avoided by a firm awareness of the conditions immanent in our reasonable activity which are responsible for such an enterprise. In order to make decisions in all branches of activity, we have a need to give an over-all interpretation to the various realms of our activity. Metaphysical inquiry then corresponds to this need and not to the transferral of the interpretation of a single realm of activity to all others. In the saure way a prejudice against the possibility of metaphysics itself would be a world-view that Gould be metaphysically analyzed. As of yet we have not spoken of the ontological validity of a metaphysics such as we have explained. We can ask if our explanation is not just a pragmatic account, completely void of ontological value. And once again we answer: in so far as statements about the necessary conditions of a world-view are shown by transcendental deduction to leave no relevant question open, the ontological value of these statements is guaranteed through the operative definition of being. That such statements are attainable can be attested to by the attempts to develop a metaphysics by the philosophers using the transcendental method. Furthermore it must be acknowledged that statements which serve to resolve the difficulties of antinomies that arise in our language are certainly not trivial, if triviality would imply that one Gould neglect them.

CONCLUDING REMARKS

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[4] G. D. Kaufmann, "On the Meaning of God," Harvard Theological Review, 59 (1966), 105-32, 111, develops the concept of world-view as we are using it here. F. Ferre, Language, Logic and God (New York: Harper, 1961), 162f, states the four criteria which we regard as necessary conditions for any rationally defensible world-view. A comparison with similar contributions to this problem has been treated in: O. Muck, "Zur Logik der Rede von Gott," Zeitschrift für katholische Theologie, 89 (1967), 1-28.

Some final remarks. The aim of philosophy, and in particular of transcendental analysis, is to make explicit the a priori conditions of our speaking and thinking-more generally, of our reasonable activity.   **S. 361**

However, these a priori conditions are not known through an a priori method, but through transcendental reflection upon the actual experience of our factual activity. If a Statement is shown by transcendental analysis to be valid a priori, then the meaning of the Statement must be understood exactly in terms of the operative definition used, in spite of the tendency to link it with familiar associations. Statements that are established through operative definitions do not replace the results established by common Sense or by scientific method, but complement and coordinate them. An investigation of the a priori conditions must not be considered antecedent to a scientific investigation or to everyday experience as though such an a priori method were possible.

If the reader should turn to philosophers who have applied the transcendental method to develop metaphysical systems, he will often find that the logical structure of this method as outlined above is not easily recognizable in these accounts. In so far as it is not the conscious aim of the respective philosopher to give the complete logical structure of a metaphysical thesis or to make it apparent, this is understandable. One must especially pay attention to the different frameworks within which the antinomies are resolved and the a priori conditions obtained. The terms which the philosopher uses have to be understood not in their usual meanings, but in a Sense restricted to the operative definitions within his respective framework which clarify the meaning.

Often metaphysical conclusions of transcendental philosophers also meet objection. They go beyond reflection upon our activity and draw conclusions through operative analysis about the language of objects "in themselves." This "objectivation" is not superfluous but essential, because the antinomies arose in the direct intentionality of our language about objects. In Order to clarify the antinomies and prevent their re-occurrence, the distinctions elaborated in reflective analysis must be acknowledged in the realm of direct Intention. Because of the operative definition of being, objective representations of such distinctions formulated in language must be regarded as statements about the structure of being.

We want to clarify this kind of objectivation at work in the resolution of an antinomy by using as an example the explanation for change which Aristotle gives in his principles of potency and act. The problem Aristotle had to deal with was the antinomy between the views of Heraclitus and Parmenides. Reflecting upon language we may say that in describing changing things we use two Sets of statements. The one Set we may call permanent statements, the other temporal statements. The permanent statements about the changing thing, e.g., **S.362** that this thing is a clock, are valid for the state of the thing at different subsequent moments of time. The temporal statements about changing things, e.g., that this clock indicates 7:15 A.M. now, are only valid with regard to a special moment. If we do not distinguish these two Sets of statements but use them indiscriminately, we are bound to encounter difficulties. One way to prevent this is to distinguish explicitly between these two kinds of statements. But Aristotle does more. He assumes that in the changing thing there is a structure which comprises two aspects: one that is the foundation for the permanent statements and another which is the foundation for the temporal statements. The one he calls "potency," for the thing has the capacity to take on these different states independent of the actually changing states. The other one he calls "act," since it refers to a state in which the thing actually is at a certain moment. Thus he draws attention to the different sets of statements by pointing out that these statements refer either to the thing in as much as it is in potency or in as much as it is in act. So the viewpoints under which the changing thing can be described are distinguished, but in a way that represents this distinction not only in a meta-language but in a kind of object-language. Furthermore he not only distinguishes them but he also indicates to some extent how the distinguished viewpoints have to be correlated. If one does not take into account the

difference of these viewpoints and the ways through which we express them when attempting to make a statement about an object in the direct Intention, he easily finds himself trapped by the Same difficulties Aristotle tried to eliminate in his explanation of motion.

This article was intended to indicate the logical structure of transcendental method, especially operative analysis and retorsion. As a result, the problems of language analysis and of metaphysics which appeared in the article were only briefly sketched and their relation to the logical structure of transcendental analysis shown without in any way trying to resolve them completely or even give them a complete investigation. In part this has been done previously in the Works of other transcendental philosophers cited in this article; in part their complete investigation by transcendental analysis remains to be done. 1 do hope, though, that the resemblance between the transcendental method and Analytic Philosophy and the usefulness of the transcendental method for a reinterpretation of metaphysics have become apparent to the reader.