# Revisionary Immunity
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Truth Insulated from the World of Contingency and Uncertainty

For those who are concerned to gain a knowledge of the truth about the world it has often been a depressing fact that we are so prone to error. There are problems with perception, not the least of which include those of illusion and perspectival variation; further there are problems with generalizations which arise from the ir-remedial incompleteness of induction, the continual change and alternation of the world, and confidence-shaking differences of opinion. Experience of the sensible, physical, extramental world betrays our trust in both theory and practice and thus generates no firm conviction that what we report based on its credentials must be true. We just cannot be absolutely sure when even our best efforts are not immune from revision or repudiation.

Understandably, then, philosophers have sought true statements which could *not* be otherwise - statements which are unconditionally and universally true, which *must* be true, which cannot fail. Archimedes wished for a place to stand, a firm point from which he could move the world. Likewise, epistemologists have explored everywhere for truths of which they could be certain; since these statements, unlike the contingent character of the world as well as our experience of it, would be in some sense necessary, they would be truths immune from revision. However, when philosophers finally settled on such truths it was (they thought) at the expense of the world-moving significance which Archimedes desired. Informative power was sacrificed for certainty, the reason for this seems to be that, according to a reigning tradition in philosophy, statements which *must* be true are statements which do not depend upon empirical argumentation for their justification. Being *cut off* from any required contact with experience, such truths cannot be informative about the extramental world which is known *through* one's experience of it.

Traditionally, three classes of truths have been taken as insulated from the world's *a priori* truth, *necessary* truth, and *analytic* truth. *A priori* truth is set in contrast to *a posteriori* truth, a distinction indicating different ways of knowing true statements. A statement is knowable *a priori* when its truth, given an understanding of the terms involved, is ascertainable by a procedure which makes no reference to experience; being nonempirical, an *a priori* statement can be justified independently of experience. By contrast, an *a posteriori* truth is derived from experience; its terms cannot be fully understood and applied, nor can its validation be accomplished, apart from experience. A statement is knowable *a posteriori* when it is true, can be known, and has no nonempirical procedure of justification. Hence *a posteriori* truths are empirical and inductive in character, and as such (we are told) can only be known as probably true. To illustrate the contrast

sketched here: "All vixens are female" is knowable *a priori*, whereas "All vixens kill chickens" is, if true, knowable *a posteriori*. The latter can be justified only by information acquired through experience (beyond that needed for an understanding of the statement), but this is not so for the former.

According to the commonly endorsed outlook we are now examining, *a posteriori* truths must be contingent, for how could *experience* (which is limited, and the *particular* content of which we just happen to have) tell us something which strictly *must be* so? However, although contingent, the *a posteriori* truths are compensatingly synthetic; they extend our significant information about the world. The virtue of *a priori* truths, it is said, is that their veracity is ascertainable by examination of the statements alone; an *a priori* truth provides its own verification and thus is true in itself. Because *a priori* truths would be true in all possible worlds, they are (unlike *a posteriori* contingencies) necessary in some sense. However, according to standard doctrine, this virtue has the following drawback: *a priori* truths do not express matters of fact (since factual matters could have been otherwise than we find them in our experience) but merely relation of ideas. Accordingly, *a priori* truths are not synthetic, for if a statement gives genuine information *about* the world, how can one know that it is true except by observation *of* the world? If one does not have to resort to some specific experience of the world to validate a statement - if he can know *a priori* that it always holds true and hence is necessary - that statement must be analytic.

We turn, then, from the *a priori* distinction to a consideration of necessity and analyticity. A necessary truth, as opposed to contingent truth, is one which could not be otherwise; if a statement is necessarily true, its negation cannot be true (i.e., where "S" is a necessary truth, "It is possible that not-S" cannot possibly be true). Necessity is an older and more intuitive notion than analyticity, the latter being a technical philosophical notion introduced to account for necessity. Historically, necessity has been seen as carrying significant metaphysical baggage. Necessary truths have been accounted for in terms of essence (Aristotle), God's existence and nature (the medievals), concepts (Leibniz among others), etc. However, the perspective which has emerged dominant in the history of modern philosophy, a perspective popularized at least from the time of Hobbes, is that necessity should be accounted for in terms of *language* (or a set of concepts somehow underlying it). Here the seed was sown which would be reaped in the twentieth century when linguistic analysis came forth as the determined opponent of metaphysics. From the new linguistic slant, a statement which could not be false was one whose truth followed from the meanings of the constituent words. Accordingly, if the meanings of the words changed, what the words express (or what we are talking about) would also change. This linguistic account of necessity brings us to analyticity.

The view that there is a sharp distinction to be drawn between truths which are analytic and truths which are synthetic is the modern counterpart to the ancient distinction between essential and accidental predication. For Aristotle a necessary truth is one which is essentially true - that is, a

statement expressing the essence of an object or a principle common to all science (e.g., "All men are rational animals"; the law of excluded middle in logic). With the rejection of Aristotle's scheme of essences came the elimination of necessary truths about the extramental world; the essences were replaced with ideas or concepts, and necessity was restricted to their interrelations. Thus factual statements about the world, standing in opposition to necessary truths, had to be identified with contingent truths henceforth. The shift from essences to concepts is quite evident in the early modern period of philosophy, especially in Leibniz's distinction between truths of reason and truths of fact, and Hume's distinction between relations of ideas and matters of fact. In contrast to factual truths about the world, necessary truths (of reason, or of ideal relations) are such that their denials involve a self contradiction.

So then, necessary truths depend on the principle of contradiction. By means of *definitions* of the constituent terms, necessary truths can be reduced to the law of identity (e.g., "All vixen are female" becomes an identical proposition when "female fox" definitionally replaces "vixen" - thus, "All female foxes are female"). This appeal to definitions (or meanings) has drawn the comment of one modern logician, Willard Van Orman Quine, that meaning is what essence becomes when it is divorced from the object of reference (e.g., the living, breathing vixen in the world) and wedded to the word (e.g., "vixen"). This criterion for isolating necessary truths (a criterion which, in critic passing, has competitors, and which must in turn account for the necessity of the logical laws on which it depends) *precludes* any synthetic truth from qualifying as necessarily true, for the denial of a statement of empirical fact involves no contradiction. Consequently, the modern view of necessity *restricts* it to non-synthetic, that is, *analytic* statements (those which express relations of ideas, concepts, or meanings).

Our examination of the three classes of truths which are taken to be insulated from the world, therefore, has brought us to this conclusion: all *a priori* truths (justifiable independently of experience) are necessary truths (their denials are contradictory), which in turn are restricted to analytic truths (true in virtue of meaning relations and logical laws). The popular perspective is that there are no synthetic *a priori* (necessary) truths. And this is to say that the *only* statements which *must be true* - and thereby immune from revision - are *analytic statements*. Only analytic truths escape the epistemic dangers of experience as a path to the truth, or to put it another way, the only infallible truths are analytic truths. Thus you can gain certainty only be sacrificing the synthetic character of your statements; infallible truths tell us nothing significant about the world and do not extend our genuine information about any extramental state of affairs. The price of revisionary immunity, the philosophic salesman says, is total surrender of the informational importance of your statements. The analytic/synthetic distinction is crucial to this claim.

A Popular Philosophical Prejudice and its Consequences

A sharp distinction between analytic statements (whose truth-value can be determined by an analysis of the statement itself) and synthetic statements (whose truth-value must be determined extralinguistically, through empirical confirmation) has been advanced in the twentieth century by many philosophers and their schools (not excluding some evangelical apologists) - most conspicuously by linguistic conventionalists and positivistic reductionists. That the *a priori* truths are *coextensive* with the *analytic* truths has gained widespread agreement and has almost attained the status of a popular platitude; it is unwittingly imbibed and authoritatively pontificated by students and professors of philosophy, amateur and professional.

*A priori* truths, being independent of any particular experience, are not thought to be absolute in character but rather a matter of linguistic *convention* (about how we choose to speak of the world), from which we drive the *necessity* of such statements. The truth of an *a priori* statement derives solely from language; when the language is known, the truth of the *a priori* statement is simultaneously known. Thus *a priori* truths (distinguished from *a posteriori* truths in terms of the way of knowing) are known independently of experience because they are analytic (distinguished from synthetic truths in terms of the grounds for determining truth). *Like Kant*, it is held that the fixed order we associate with the world is not independent of the thinker (or today, speaker), but *unlike Kant*, there are no synthetic *a priori* truths. The other side of this modern coin is the insistence that all meaningful assertions which are not analytically vacuous of information about the extramental (extralinguistic) world must be verified, if at all, empirically. Anything that is to count as evidence for a statement - (the possibility of there being such evidence constitutes the statement as synthetic in character) - must be a matter of observation or sense experience.

A rather straightforward declaration of the modern prejudice is found in chapter III *of An Analysis of Knowledge and Valuation* (Illinois: Open Court, 1946) by C.I. Lewis:

Every statement we know to be true is so known either by reason of experience or by reason of what the statement itself means. There are no other sources of knowledge than on the one hand data of sense and on the other hand our own intended meanings. Empirical knowledge constitutes the one class; all that is knowable independently of sense experience - the *a priori* and the analytic - constitutes the other, and is determinable as true by reference to our meanings.

Traditionally a statement which can be certified by reference exclusively to defined or definable meanings is called *analytic*; what is non-analytic being called *synthetic*. And traditionally that knowledge whose correctness can be assured without reference to any particular experience of sense is called *a priori*; that which requires to be determined by sense experience being called *a posteriori*. . . . The thesis here put forward, that the *a priori* and the analytic coincide, has come to be a matter of fairly wide agreement. . . . There are no synthetic statements which can be known

true *a priori*. . . . Apart from what is thus logically necessary, we know facts of existence only by experience and through induction.

Holding to the analytic/synthetic distinction in the manner described above is not a neutral or impartial conviction with which all philosophical positions need to agree. Indeed, it commits one to an extensive, substantive, philosophical position in its own right - an outlook and method which have notable consequences.

To treat some statements as "analytic" and others as "synthetic" is: (a) to discriminate between the statements of your belief-system and treat them separately (judging each claim one by one, in isolation of the others) rather than to consider and test the corporate system as a whole; (b) to hold that some statements are such that their denial can be ridiculed as a failure of understanding, and thus that these statements are immune from revision; (c) to hold that such statements are not only unfalsifiable but also non-informative, make no difference to what is true about the world, or are trivial; (d) to "flatten out" all the other statements of your system - the informative ones - so that each is treated as on the same footing as all the rest of the significant claims of the system, thus recognizing no privileged status for any statement (or any degrees of basicness, importance, centrality, immunity, etc.) but rather feigning both willingness to abandon any claim as easily as any other and impartiality in subjecting each and every statement to the same procedures and standards; (e) to hold that the meaningful, informative, and impartially judged statements of your system have been justified in an empirical manner (experience being the test for truth-claims); and (f) to use the preceding epistemological convictions and standards to govern and critically determine what substantive beliefs about reality you endorse - that is, "philosophic methodism" (or decreeing the priority of *criteria* over the determination of *all* accepted beliefs about the world, instead of the priority of *some beliefs* over the determination of the criteria to be used in accepting further beliefs).

Implications for Apologetics

What are we to make of the analytic/synthetic distinction? Is it acceptable? I believe not, and I believe that it is far from innocuous in relation to Christian apologetics. As a weapon of philosophic discussion, this distinction will consistently mislead people. It is a pernicious idea that every truth that is significant is exclusively determined by empirical (observational) procedure, consigning the remainder of the truths (as well as all necessity) to the conventions of language. To hold such an opinion is well concealed ax-grinding.

That it is wrong to draw the distinction in the common fashion is evident from what philosophers have done with it, namely, to oppose the infallible truth of God's revelation in Scripture. If what

the Bible says is to be genuinely informative (if it is to make a difference to experience), then we are told that it must be verified by the privileged standards of empiricism - which means Scripture cannot have *all* of its claims confirmed (leaving the believer to leap from history to metaphysics), and even those which might pass scrutiny cannot be taken as infallibly true but at best *probable*. On the other hand, if what the Bible claims in the realm of metaphysics and not only history is to be taken as immune from revision, then we are told that it cannot be genuinely informative about reality (i.e., synthetically true), or cognitively meaningful and significant, or anything but an arbitrary and trivial convention. The Christian is impaled on the horns of a (false) dilemma: choose to abandon an infallible metaphysic or accept a trivial religious opinion. If the Christian faith is to be intellectually respectable it must abandon the claim to revisionary immunity, become subservient to an ultimate authority outside the system, and be willing to have its claims divided up and judged one by one.

With so much at stake it is only natural that the apologist ask the philosopher for the exact nature and rationale of the analytic/synthetic distinction. How are statements to be isolated as analytic? What is it precisely to say that some statement is analytic? Is there a distinct class of such truths? What point is there to having such a separate class of statements? We shall soon see that the analytic/synthetic distinction has been *obscurely* drawn and is itself an insupportable *dogma* which is accepted in advance of, and is in fact used to navigate, the important questions of philosophy.

Therefore, it behooves the Christian apologist to examine the analytic/synthetic distinction as it has been used (or abused) in philosophy. In so doing he will also gain an important insight into the character of belief-systems, the testing of statements within such systems, and the realistic place of empirical procedures in the resolution of conflicting claims or systems. Moreover, a study of the analytic/synthetic distinction will enable the believer to understand the essential infirmities and confusions that undergird the two central philosophical polemics against the faith in this century: (1) verificationalism, and (2) the absence of falsification conditions. Hence a study of the analytic/synthetic distinction will (positively) indicate important features of argumentation between conflicting viewpoints, and (negatively) it will help the Christian to see the *faux pas* committed by the cultured despisers of the faith in this century.

The Challenge and Prerequisites of a Satisfactory Answer

The clarity and genuineness of the analytic/synthetic distinction is crucial to the philosophic perspective and method which has been sketched above. The infirmity of the former spells the failure of the latter. Thus what we need to do at this point is simply ask for an explanation of the analytic/synthetic distinction. Can this distinction be plausibly drawn and clearly laid out?

Distinction ought to be made where they are called for, and indeed this is a great part of the task of philosophy: to split significant hairs. But we ought to avoid making unnecessary, unfounded, or confused distinctions which, due to the consequences they have for decisions we make, can lead us into arbitrariness and mistake. It is another great task of philosophy, where unwarranted distinctions have been pontificated and unwittingly endorsed, not to let sleeping dogmatists lie. What good is a distinction that is not *distinct*? If an alleged distinction does not clearly distinguish one thing from another, the "distinction" is hardly justified and, indeed, may carry latent dangers if we unwittingly trust it to be doing the task it pseudo-confidently claims to do.

Is the analytic/synthetic distinction clear? Is there a class of truths which are exclusively and uniquely "synthetic" (or "analytic") in nature? Supposedly, analytic truths are those whose truth or falsity depends solely on the meanings of the words with which it is expressed; an analytic truth, as distinguished from a synthetic truth, is one whose truth *derives from language* alone and thus can be determined simply by consideration and analysis of meanings in the light of logical laws. Such statements which are true *ex vi terminorum* ("by virtue of the terms") are insulated from the world of experience; they would hold true of every possible world and thus impose no limitation on what we hold to be actually the case. An analytic truth is independent of all particular experiences. Therefore, while we can know a class of statements with absolute certainty, they do not tell us anything interesting about the world. Revisionary immunity can be found for some statements of your belief-system, namely, the "trifling propositions" (as Locke called them). Is this perspective lucid and defensible?

What we should see is that the analytic/synthetic distinction is not really understood by its proponents. The cleavage between these alleged kinds of truth is ill-founded and does not make sense. We ought to maintain that there is no unique and discernable class of statements such that everybody must endorse them since they are true in virtue of language alone and independently of fact. To exhibit this I shall begin by asking, how we are to conceive of, characterize, or define the analytic truths? We need to have a satisfactory answer to this question in order to be able to identify the truths which are analytic. For instance, I do not know whether the statement, "Nothing can be red and green all over at the same time in the same respect" is analytic or synthetic, and this indecision does not very plausibly point to an inadequate understanding of the meanings of "red" and "green" on my part. The trouble, instead, is in understanding "analytic." And thus the proponent of the distinction needs to explicate the notion of analyticity.

There are certain definite requirements placed on any attempt to explicate analyticity which is to be adequate for the present purposes. Proposed ways for drawing the analytic/synthetic distinction should *not be empty*, that is offering no analysis whatsoever but, in effect, merely restating the distinction. A proposal should *not be question-begging* or circular, appealing to that which analyticity is designed to explain in order (in turn) to explicate analyticity itself; thus a proposal should in effect provide a further, independent account of necessity (and a statement should be

identifiable as analytic independently of accepting it as necessary). Moreover, the proposal should not assume notions which themselves ought to be analyzed, which are in the same need for explanation as analyticity, or which depend on analyticity for their explication.

An acceptable proposal must also allow us to *identify in advance* the analytic statements, not waiting for a complete enumeration of them by some philosophical pope. Involved here is the obvious requirement that a proposal *teach* us to isolate clearly and successfully *all* of the analytic truths (not just a portion of them); that is, the proposal should not be metaphorical or intuitive in nature, nor should it be a mere stipulation, but rather it ought to provide an effective means of empirically justifying any attribution of analyticity to a statement. This requirement further specifies that a non-formal or non-stipulative explication will be testable in *natural language*, the same language in which the distinction is philosophically utilized. Furthermore, when any proposal effectively demarcates a well-defined class of analytic truths from truths in general, it must both *include* the commonly accepted, paradigmatic, *preconceived illustrations* of analytic truths (e.g., "All bachelors are unmarried males," etc.) and *exclude* accepted "synthetic" statements in order that it avoid *ad hoc* arbitrariness and qualification.

Then again, an adequate proposal in the present situation will have to be one which is devised in the *context of conventionalism's claim* that all necessary truths are analytic; the proposal must not allow for synthetic *a priori* truths. The proposal must draw the analytic/synthetic distinction *absolutely* and not leave it a matter of degree. The proposal should render analytic truths *unrevisable* and unreasonable to reject (irrespective of a man's beliefs, except about meanings of words). Finally, and most obviously, any satisfactory proposal for distinguishing synthetic from analytic truths must *not appeal to groundless or false claims*.

Keeping these minimal requirements in mind, we will see that the dichotomy between analytic and synthetic truths is an unwarranted and infelicitous one. We will do this by means of the following consideration of the main proposals which have been advanced for defending the analytic/synthetic distinction.

1. *Examples and linguistic competence*. Some philosophers have hoped to support the analytic/synthetic distinction by citing (allegedly) clear examples of the contrasting kinds of truths and pointing to the general agreement of those who appear to use the distinction competently. It is supposed that where there is general agreement regarding the application of a classification (viz., "analytic") to an open reference class, that classification must be grounded in a genuine distinction. But of course this proposal falters over the untestable assumption that its examples are indeed clear and that the users of the distinction to whom it alludes are indeed competent ones. Moreover, it is at bottom an appeal to intuition; if no warrant for the intuitions of analyticity is forthcoming, the

fact that there are these "intuitions" or that a few clear examples can be produced is suitable only for the philosopher's autobiography (telling us something about him, but not about the distinction in question).

How does one learn this maneuver of distinguishing analytic from synthetic truths if it is not immediately obvious to him? Could the student ever conceivably refute his teacher's identification? Can some people be more competent than others in this distinguishing procedure? Such questions as these uncover the inadequacies of the present unexplicated appeal to a genuine distinction. But its central problem is its failure to actually clarify the analytic/synthetic distinction, which is what the original challenge asked to be done. One convincing way to show that something exists is to exhibit it - give a clear and usable account of what it is and how to recognize it. The current consideration of examples and linguistic competence does not do this. We are still left asking, just what is the *nature* of the analytic/synthetic distinction?

2. *Conceptual containment*. Kant taught that analytic truths are those where the predicate is already conceptually contained in the subject. This was Kant's psychological account, which was supplemented by his logical account (or criterion) listed below. For Kant an analytic judgment is such that "what is thought in the predicate-concept" has already been "thought in the subject-concept." The statements in quotation in the previous sentence are unclear (for instance, how do we identify and individuate them?), and Kant does not discuss them. Further, Kant leaves the notion of conceptual "containment" at the metaphorical level. Yet even *if* Kant had clarified the notion of one thing-which-is-thought being contained in another thing-which-is-thought, we would have to observe that Kant's account of analyticity is restricted to truths of the subject-predicate form; as such it excludes applied logical truths (e.g., "Jam is seedless or is not seedless") and relational sentences (e.g., "A father is older than his son"). Thus Kant's proposal was intuitive at base and incomplete at best.

Based on his account, Kant maintained that synthetic judgments could not be reduced to analytic judgments (the distinction must be absolute). However, he based his claim on the fact that synthetic judgments contain predicates which we know apply to the world, *but* such a fact would be insufficient to guarantee the distinction. For why should such a predicate not also be "contained in the subject-concept" of the proposition in which it appears (that is, why shouldn't it form an analytic judgment)? To say that a certain predicate has application to the world is a semantical comment which tells us nothing as to whether the predicate has certain syntactical relations to other concepts. Thus Kant has not adequately insured that the analytic/synthetic distinction is tight.

Moreover, since Kant said that an empirical concept could not be defined (giving it a real essence) but only given its conventional signification (which is liable to change with increased knowledge

or changed interests), he could not consistently teach (as he attempted to do elsewhere) that "All bodies are extended" must be analytic, while "All bodies have weight" must be synthetic. Instead, the analytic/synthetic distinction at this point would have to be merely conventional and arbitrary, not absolute. The relativity of what will count as an analytic truth is also evident from the fact that Kant sought to determine them by the connection between concepts-which-are-thought, for a *shift* can take place in people's conception of things; conceptual connections will hold only relative to a given system of thought.

3. *Self-contradictory denials*. As mentioned above, Kant had a dual account of analyticity; his second or logical approach has been advanced by many other notable philosophers (e.g., Leibniz). It lays down the criterion that an analytic statement is one whose denial is self-contradictory. However, in the *broad* sense needed to explicate analyticity, the notion of self-contradictoriness is just as much in need of clarification as that which it supposedly explains; as Quine puts it, "the two notions are the two sides of a single dubious coin." For example, consider "It is *not* the case that all men are rational animals" (i.e., the denial of a commonly accepted instance of essential predication or conceptual containment). Is the statement self-contradictory? It is not clear how we should answer, for syntactical inspection of the specimen shows us nothing like "A and not-A".

It might be thought, then, that at least this criterion of self-contradictoriness applies to the logical truths expressed in our language (that is, statements which are true under all reinterpretations of their constituent parts other than the logical particles: "and," "or," "if, then," "not" and other syncategormatic terms). Obvious examples come to mind: "no unloaded gun is loaded." But just as obvious are many infelicitous examples. Two psychologists might well argue (and empirically justify) different responses to: "No unhappy man is happy." The fact is that natural languages have sentences, like "Business is business," whose denials produce a contradiction in symbolic logic ("A and not-A") but not in ordinary use; thus these sentences must also be tested empirically and not merely in virtue of the conditions established by their terms. The logical truths cannot be adequately translated from any natural language, although it is easy enough (or rather, there is a clear enough procedure directing us) to find them in formal systems. This is to say the criterion presently under consideration will not help us to isolate successfully all and only the analytic truths in English (or any other natural language). In ordinary discourse you cannot read a contradiction right off the verbal symbols, and thus there are not truths which are independent of fact (true simply in consideration of the statement itself). You cannot decide which statements are those whose denials are contradictory without just begging the question.

But the advocate of the analytic/synthetic distinction might reply that the criterion (that self-contradiction characterizes the denial of an analytic statement) is satisfactory if we will but take consideration of "the sense" of the words in specimen sentences. Thus the sense of "man" in "Every man is a rational animal," the possible double sense of "happy" in "No unhappy man is happy." etc. are such as to indicate whether a denial of the statements is contradictory or not - and thus

whether the statements are analytic or synthetic. But this recourse involves reference to notions like sense, definition, and synonymy - which, as we will see below, is question - begging as an explication of analyticity.

The only response that would then be open to the advocate of the present proposal would be to take self-contradiction in a psychological rather than strictly logical sense. That is, when "analytic" statements are denied by someone, other speakers of the language have a feeling of oddity or bewilderment or humor (etc.). However, this approach is inadequate since: (1) not all speakers in a community will in fact have the same reaction to such denials, and you can only choose the trustworthy ones by question-begging; (2) this approach does not distinguish the feeling had when *firmly believed* "*synthetic*" statements are denied, from the feeling produced by the denial of an "analytic" statement (thus rendering the analytic/synthetic distinction obscure); and (3) since there will be *degrees* of discomfort produced at the denial of various analytic statements and various synthetic statements, a radical distinction cannot be maintained.

4. *True by virtue of meaning and independently of fact* (three suggestions). Kant's views about conceptual containment have been restated, trying to make his point somewhat more acceptable. His intention we are told is captured by saying that in an analytic judgment, what we mean by the predicate is already included in the meaning of the subject. The meaning of the words used to express a statement make an analytic statement true without further recourse to the facts of experience.

This proposal leads us to ask about the nature of meanings then. How are they individuated? When do two expressions have the same meanings then. How are they individuated? When do two expressions have the same meaning or different meanings? Just here it is important to remember that two nominal expressions can denote (or name) the same thing but differ in meaning (e.g., "the morning star" and "the evening star"; "four" and "the number of the gospel"), and two predicates (general terms) can have the same extension (the class of all entities of which the general term is true) while yet differing in meaning (e.g., "creature with a heart" and "creature with kidneys"). Thus the meaning of terms cannot be identified with their referents. We need to separate the theory of meaning from the theory of reference. So then we again ask, what are meanings? Given an Aristotelian bent, we might suggest that, although meanings pertain to linguistic forms and not entitles, still the meaning of a term names *the essence* of the entity (or entitles) referred to by the term. However, things have essences *only relative to a particular kind of description*. Notice that for the class of things referred to by "rational animal" is *identical* with the class of things referred to by "featherless biped", and yet we do *not* say these previous two expressions have the *same* meaning. Therefore, the notion of essence assumes meaning (via descriptions, or how things are spoken of) and cannot then give the latter its foundation.

It will turn out that when we engage in giving the *meaning* of some utterance we are simply presenting a *synonym* for the term in question. Thus theory of meaning might be concentrated on the study of the synonymy of linguistic expressions. Even here, though, the proposal that analytic statements are true in virtue of meaning will be unsatisfactory since the notion of synonymy is just as much in need of clarification as that of analyticity. The attempt to supply this deficiency will be deferred until the next proposal for consideration.

At present we might turn to another attempt to utilize the previously suggested characterization of analytic truths which emphasizes, not the true-by-meaning aspect of it, but rather the independence-of-fact side of it. In recent years Rudolf Carnap has suggested that analytic truths are those which are true under *every particular state-description* (i.e., under every exhaustive assignment of truth-values to the noncompound statements of a language, thus enabling us to establish the truth-values of any complex statement by accepted logical laws). However, this attempt to specify analyticity is unsuccessful in natural languages since they contain (extralogical) synonym-pairs (such as, "bachelor" and "unmarried man"; "vixen" and "female fox"; etc.). Because the terms, say, "bachelor" and "married" are semantically dependent on each other, the state-description approach will undoubtably fail to pick out the class of analytic statements. The reason for this is that there will be a *particular* state-description which assigns the truth-value of "true" to the noncompound statement, "Harry is married," *as well as* to the statement, "Harry is a bachelor." Under this state-description it is *not true* then, that "All bachelors are unmarried men"; and because the previous statement is not true under every particular state-description, it cannot be analytic. However, this statement is commonly taken as a superb illustration of an analytic truth. The present approach must thus be dropped for it too stumbles over the problem of synonymy.

A final way in which the original idea expressed at the beginning of this section has been set forth is as follows: analytic truths are such that they can be translated into logical truths (or, to put it another way, they can be reduced to logical truths *by definition*). We are told here that when definitional equivalents are replaced in an analytic statement, it will turn out a logical truism. Again, there are serious problems with this. *First*, this account will suffer from the same infirmities as that which said analytic truths can be identified by the self-contradictory nature of their denials; these are discussed above. *Second*, even forgetting the previous difficulties, the proposal at hand makes the truth of analytic statements depend, not simply on the meaning of the terms involved (as claimed), but also on the validity of the laws of logic. This raises the question of how to resolve conflicts over these laws, and even further it forces us to ask about the status of (firmly accepted) logical laws. Clearly, they too cannot be taken as "analytic" since the position now considered has undertaken *to characterize analyticity* in a way which itself involves reference to these laws of logic; circularity was to be avoided. Yet if they are synthetic, analytic truths cannot be discerned (as claimed) independently of fact (i.e., matters which form the substance of synthetic statements). And yet, if they are neither analytic nor synthetic, the needed rigidity of the distinction breaks down.

*Third*, what is the source of the necessity of logical truths? We must ask this because, if such truths are contingent after all, then "analytic" truths cannot be explicated in terms of logical truths and in the long run remain necessary or independent of empirical investigation. So then, what is a logical truth, and how is it necessary? In the earlier phase of his philosophic career Wittgenstein tried to give a criterion of logical truth in terms of the notion of tautology (viz., a proposition true under all truth-values of its constituent statements as well as under every truth condition revealed in the truth tables.) This, along with Carnap's notion of L-truth, is a refined version of Leibniz' notion of "true in all possible worlds." The difficulty is that Leibniz was speaking of all "*logically* possible" worlds here, and to know what is logically possible one must already understand the notion of logical truth. Thus the characterization offered is circular and has little explanatory value. Quine has elucidated a truth of logic as one whose truth depends only on the logical constants (particles) employed; it remains true on every reinterpretation of the statement's constituent terms aside from these logical constants. Descriptive terms, then, are inessential to logical truths. But what counts as a logical constant? Without a general account (which we have not been given) we must depend on someone's enumeration of them - which, to the advocates of the analytic/synthetic distinction, would unacceptably reduce logic to a matter of (perhaps linguistic) convention. Gilbert Ryle suggested that logical constants are topic-neutral concepts (neutral, that is, for any and all subject matters). The logical powers of these are the sole support of truths of logic, where logical powers are discerned by the entailments advanced by such topic-neutral concepts. Obviously, then, since the notion of entailment *presupposes* logical necessity, reference to the logical powers of topic-neutral concepts cannot serve to *explain* logical necessity.

Moreover, an account of the necessity of logical truths would have to manifest plausibility in the face of disagreements over the logical laws which are to be accepted: For instance, intuitionist logicians are suspicious of the law of double negation and the law of excluded middle. The law of excluded middle has been rejected by the ancient Epicureans (in arguing with Stoic logicians), some medieval scholastics (in dealing with the question of statements which express future contingencies), and modern physicists (who concern themselves with the philosophical aspects of quantum mechanics). It is subject to challenge on the basis of some metaphysical positions, such as an element of Aristotle's philosophy (viz., a thing can be both potentially red and potentially not-red) and of Hegel's philosophy (viz., defining things in terms of their negations). Further, there is the whole question of many-valued logics; for instance, three-valued logic (true, false, indeterminate) turns out true to form, yet rejecting classical negation and excluded middle (bivalence). Then again, we can note that ontological interest attaches to deviations in standard quantification theory (as found in the intuitionists). Therefore, given the unsettled questions of how to identify the genuine logical laws and account for their necessity, the suggestion that analytic truths can be isolated by definitional reduction to logical laws cannot be smugly accepted. It is not at all clear that this procedure would enable us to demarcate the analytic truths after all, or to do so by analysis of statements themselves, or do so in such a way that no "reasonable" man would dissent.

As a *fourth* problem with the current suggestion that analytic truths are those true by definition, we can consider the (implicit, if not explicit) inference that anyone who rejects such definitional truths forfeits his claim to reasonableness. "Kinetic energy is one half the product of mass and velocity squared" is the kind of statement currently accounted in physical theory as a definition. Yet without changing the extension of the term "kinetic energy," scientists after Einstein reasonably rejected the definition held by scientists prior to Einstein. Both groups talked about the same thing (forms of energy and its behavior), but one group revised the definitions of the other group in a nontrivial sense. It thus appears that definitions are revisable in principle without sacrificing reasonableness, with the result that two reasonable men can derive different sets of analytic truths. The only way to salvage the absolute distinction between analytic and synthetic truths would be to somehow qualify the type of definition to which reference is made - and in a way which accords with the requirements previously elaborated for the advocates of the distinction (e.g., proposals must not be *ad hoc* or question-begging).

A *fifth* and final infirmity afflicts the suggestion to pick out the analytic truths by seeing which statements can be reduced to logical truths by definition of constituent terms. How is the translation to be accomplished? How do we find, for example, that "bachelor" is defined as "unmarried male"? One might think it a simple matter to consult the dictionary. But a lexicographer must *already* know what counts as a correct translation (definition), and he then determines what should be entered in his dictionary on the basis of his observation of a natural language. That is, dictionary entries are observed synonymies; they have been glossed because someone believes that a relation of synonymy holds between a term and another expression. It goes without saying, then, that such (fallible) observational beliefs about particular synonymies cannot serve as the *ground* of synonymy in general. We still need to be told what it is for two expressions to be synonymous if the present proposal for explicating the analytic/synthetic distinction is to accomplish its goal. We need to know *on what basis* dictionary entries are satisfactory. Thus, what interconnections are necessary and sufficient in order for two linguistic utterances to be properly taken as synonymous? Just as with the first suggestion (dealing with meanings) and the second suggestion (dealing with state-descriptions) which were discussed in this section of our study, so also the third suggestion drives us to inquire about the notion of synonymy. Can it rescue the analytic/synthetic distinction?

5. *Synonymy as interchangeability salva veritate*. The chain of steps used to explicate the analytic/synthetic distinction now brings one to explain likeness of meaning or definitional equivalence in terms of the *synonymy* of two expressions. This, it is next maintained, can be accounted for as the interchangeability of two expressions (e.g., "bachelor" and "unmarried man") in statements which make use of them, such that there is no change of truth-value (*salva veritate*, as Leibniz said).

Now in order for this criterion to work we need to stipulate some qualifications. We shall not here be concerned to deal with the interchangeability of two alleged synonyms in statements which are

about one of the expressions itself (e.g., how many letters long it is) nor interchangeability of the two expressions in psychological associations, poetic quality, etc. Our attention is rather focused on direct use of undivided linguistic units (not fragmentary occurrences within an expression) and sameness of meaning or objective information (import). Synonyms need not be alike in accidental or incidental matters (e.g., whatever just happens to be the length, sound or other stylistic feature of an expression; or whatever just happens to be the attitude, beliefs, or feeling someone has about the expression). That is, what is presently relevant for our consideration is the *cognitive* synonymy of *unfragmented* expressions. At this point we might quarrel that it is unclear as to what constitutes the indivisible identity of an expression (wordhood, propositionality), and that there is no evident rule for separating the informational and immaterial features of an expression. But let us ride along on our intuitions or rough and ready understanding. The main point at hand is the claim that analytic truths can be identified as those which can be turned into logical truths by exchanging synonyms for synonyms in the specimen statements. In turn, cognitive synonymy is allegedly accounted for as interchangeability *salva veritate*.

It is crucial that the account of cognitive synonymy allow us to pick out all and only the analytic truths. Again, cognitive synonymy must be understood apart from prior appeal to analyticity itself (i.e., the account of cognitive synonymy cannot presuppose analyticity). Moreover, used as a criterion for selecting analytic truths, the present proposal must not only show specimen statements to be true (in a general sense), but true in the special sense of "analytically true". Remembering these things, we will not be far from seeing the inadequacy of the present proposal for delineating analytic from synthetic statements. That proposal tells us that the truth-values of statements in which two synonymous expressions occur are left unchanged when these expressions are substituted for each other; in analytic statements this exchange of synonyms allows the statements to become truths of logic. For instance, we find that "bachelor" can replace "unmarried man" (and *vice versa*) in any sentence without altering that sentence's truth or falsity; thus the two expressions are synonymous. This indicates in turn that "All bachelors are unmarried men" is an analytic truth because "unmarried men" can be replaced with "bachelors", thus resulting in the logical truth that "All bachelors are bachelors."

But imagine now that we are using the *extensional language* of elementary, first-order logic; it contains predicates (general terms for attributes and classes of entities, as well as transitive verbs), nominal expressions (singular terms), descriptions, and syncategormatic logical terminology (for quantification and connecting atomic statements), but it excludes counterfactual (subjunctive) conditionals and modal adverbs. In such an extensional language any two predicates will be interchangeable *salva veritate* just in case they are true of the same objects (i.e., extensionally agree). This fact exposes the inability of the present proposal to distinguish analytic from synthetic truths, for many synthetic statements are not failed by this test. For instance, "creature with a heart" and "creature with kidneys" will preserve truth when exchange for each other in sentences where they occur; hence we are driven to say that "All creatures with a heart are creatures with kidneys" is an analytic truth - contrary to preconceived illustrations. Moreover, we have no assurance that the extensional agreement of "bachelor" and "unmarried man" rests upon *meaning* instead of a

mere accidental matter of *fact* (as with heart-kidneys creatures). "All bachelors are unmarried men" is true, but is it an analytic or synthetic truth? The present criterion cannot tell us. Therefore, in an extensional language interchangeablility *salva veritate* fails to provide us with a sufficient condition of cognitive synonymy of the sort needed to derive the analytic truths.

The analytic/synthetic advocate will, of course, protest at this point that his criterion has been forced to fail by the restrictions we placed on the kind of language we would use (viz., extensional). The advocate will note that when our language is enriched to include the modal adverb, "necessarily", then interchangeability *salva veritate does* provide an adequate criterion of cognitive synonymy and thus completes the identification of analytic truths. In the enriched language any analytic truth is such that it can be prefaced with the adverb, "necessarily". Hence "Necessarily all bachelors are unmarried men" passes the test of analyticity (as we would expect in advance), and "Necessarily all creatures with a heart are creatures with kidneys" does not qualify as analytic (again, as we would suspect). The latter is still a truth when "necessarily" is dropped from it, but it is accordingly a synthetic truth.

However, this response by the advocate will simply not do. His success in drawing the analytic/synthetic distinction depends wholly on the availability of the adverb, "necessarily". But does that adverb really make sense? Is it intelligible and clear in its import? Just here the reader must remember the overall history of our present discussion! The notion of analyticity was originally introduced, we should recall, precisely in order to explicate the notion of necessity. *Now* we are being told that analyticity can be explicated by reference to necessity. The whole affair has degenerated to question-begging. The advocate of the analytic/synthetic distinction has given us an account of cognitive synonymy in terms of the effects of interchanging expressions in certain contexts (with the aim of thereby delineating analytic truths); however, he has insisted on making these contexts those which are characterized by the modal adverb, "necessarily". But since analyticity was intended to explicate necessity, it turns out that the previously mentioned test-contexts cannot be specified without a prior understanding of analyticity. And if we already understand the notion of analyticity, why are we striving so diligently to make clear a criterion for it? Do we really understand the notion after all? If so, where is the noncircular account of it? Necessity and analyticity have been impoverished through paying each other's bills but drawing on one single account. The clarity of neither has been redeemed.

The preceding criticism can be put another way. The obscurity of the analytic/synthetic distinction can be (delusively) removed only if circularity is introduced into the account. Analytic truths are explicated in reference to cognitive synonymy and logical laws; synonymy is then explicated by reference to interchangeability *salva veritate* - recognizing that the only language where this criterion will work is one in which first order classical logic has been expanded to include the adverb, "necessarily". Thus cognitive synonymy actually takes as its criterion, interchangeability preserving necessity. But if the notion of necessity can be explained only by reference to

analyticity, then the criterion becomes interchangeability *salva* analyticity. So we are left with a procedure for identifying analytic truth such that it includes a criterion of synonymy, which in turn already depends on our ability to identify the analytic truths!

The present proposal can be satisfactory only if the necessary statements are identified in advance of the analytic statements, and yet this independent criterion of necessary truth must so happen to pick out the analytic truths as well. That is, when analyticity and necessity are independently explicated, the class of analytic truths must nevertheless turn out to be the same as the class of necessary truths. If the class of necessary truths happens to be in actuality larger than the class of analytic truths, then the criterion of interchangeability *salva veritate* (where "necessarily" is prefaced) will pick out *too many* truths as analytic; should it be smaller, it would pick out *too few* truths as analytic. Thus only if the class of necessary truths is restricted to the class of analytic truths will the proposed test identify all and only the analytic truths in the long run. Hence you must *assume* the two classes to be identical, and you must *characterize* necessary truths in such a way that you do not *automatically* characterize analytic truths at the same time. Otherwise we would be left wondering just what is the separate property of necessity by which analyticity is found.

However, the assumption just mentioned will always jeopardize the autonomy of the characterization just mentioned. The restriction implicit in that assumption precludes there being *necessary synthetic* statements. But consider this case: "Necessarily all colored objects are extended," and "Necessarily all objects reflecting light between specified wave lengths are colored"; *therefore*, "Necessarily all things reflecting light between the specified wave lengths are extended." The negation of this conclusion cannot be true, and yet the conclusion seems to be a synthetic truth which is not true merely in virtue of meanings or synonymies (i.e., "extended" does not mean "reflecting light between specific wave lengths"). *Prima facie* we have a necessary synthetic truth. One could know to disqualify this example as a *synthetic* truth only if he was previously committed to the *assumption* that all necessary truths are analytic. Thus one would be able to shore up the current proposal for distinguishing analytic from synthetic truths (with its dependence on interchangeability preserving necessity) only by having a previous understanding of the distinction being clarified. In effect he would be relying on what is supposed to be proved. On the other hand, the advocate could know to disqualify the preceding example as a *necessary* truth only if he previously saw how necessary truths were distinctly characterized from the characterization of analytic truths. What then is the characteristic of necessity which sets it apart from analyticity? If there is none, then the project of picking out a unique class of analytic truths would be accomplished by the present methodological proposal merely by subterfuge.

6. *Stipulation and linguistic convention*. The previous attempts to account for an analytic/synthetic distinction have rested on the notions of logical truths, conceptual containment, meaning, definition, and synonymy. Aware of the inadequacies of these approaches, we can turn to a

different direction of explanation. Someone might say that we must pretend that natural languages are like artificial (or formal) languages in which the status of analyticity is clearly understood as that of a convention or explicit rule about the use of expressions. (Of course, artificial languages are such that their "rules" can be arbitrarily reversed, thus making no expression inherently analytic; this fact is conveniently de-emphasized.) Although there are no set "rule books" at hand in a natural language, people still behave *as if* there were such a rule book, or as if the formalized rule book that would be constructed by ordinary people is the same as the rational reconstruction offered of the natural language by scientists and philosophers.

But, after all, we must be skeptical here. Is this "explanation" of analyticity in natural language really plausible? How could we *establish* when people act *as if* they had (or did) something which in fact they do not have (or have not done)? The notion of analyticity in a formal language cannot establish the presence of an analogous notion in an informal language; the possibility of the notion might just be created by the very character of the formal language - a character *not* shared by natural languages. In a formal model, moreover, analytic truths are those which are true by actual stipulation; in carrying this notion over into natural languages, one is immediately thwarted by the fact that analytic statements in them are not literally made true by some stipulation. In this regard the analytic/synthetic distinction fares no better than the imaginary "social contract" story.

Furthermore, even when some statements are actually stipulated as true in a natural language, these truths do not always retain a conventional character but come to have systematic import like other truths which happen to be discovered (e.g., Einstein's stipulation that simultaneity in a reference system should be defined by the constancy of the light velocity). That is, not every stipulation produces an analytic statement on a par with "All vixens are female." Sometimes the same stipulated definition will function as an arbitrary point in one period, only to become a truth treated in the same manner as experimentally derived conclusions in a later period. Hence to explain analytic truths as those which are stipulated as true is of questionable interpretation, application, and value.

Some logical positivists were tempted to hold that analytic truths are actually empirical propositions about the way in which words are used. However, while analytic statements might have this revelatory effect, it is hardly plausible that this is the main function or intended use of them by speakers who mention them. Analytic truths cannot be used to *make clear* the meanings of their constituent terms if, as suggested previously, the truth of an analytic statement *depends solely* on the meanings of its constituent words. This would be an equivocal use of analytic truths. As linguistic observations or as indicative statements of any sort, the truth of alleged analytic statements is important; this truth, we are told, can be discerned by considering the meanings of words in the statement. But that will not lead us to a well grounded decision as to the statement's truth or falsity if in fact the statement *itself is needed in order to clarify* the meanings which we are to consider.

Likewise analytic truths cannot be veiled rules for linguistic use. Rules cannot be true or false (in the sense of imperatives). So also, if an analytic truth is made true in virtue of linguistic rules, it cannot itself be the expression of those rules. And it is hardly plausible to revise the position and say that analytic truths are actually veiled statements of obligation. Similar comments to those made about the views that analytic truths are about words, or are rules, are to be made about the view that analytic truths are about concepts. They cannot be *about* concepts and, as well, be true *in virtue of* the nature of the concepts involved.

It might then be thought that analytic truths are such that each one has "behind it" another proposition which states a convention for the use of the terms in the analytic truth; such statements about linguistic conventions would supposedly explain the necessity of analytic statements. It must be noted, however, that such "background" statements would only serve to *determine whether* some specimen statement is analytic; they would not as yet explain what it *means* for a statement to be "analytic". Further, much more has to be said about the unique relation holding between these "background" statements and the analytic statements, for as yet no sharp distinction has been drawn between analytic and synthetic statements. Supposedly, even synthetic statements are such that they have "behind them" other statements which express a convention for the terms utilized in the synthetic statement. Admittedly, they are not determined to be true solely in terms of these expression of linguistic convention, but they are not independent of them either; on the other hand, analytic truths are not determined to be true *solely* in terms of these expressions of linguistic convention either, for they rest upon the truths of logic as well.

Moreover, any truth whatsoever can be said to have an expression of linguistic convention backing it up (e.g., "This society's terminology does not conventionally allow it to be said that flowers bloom anytime but in Spring" is the expression of a convention which grantees the truth of the statement "Flowers bloom in Spring"). When the advocate of explicating analyticity in terms of linguistic conventionalism demurs, saying that such expressions of linguistic convention are not genuine or are observationally false, then he can be challenged to lay down the criteria for a genuinely *linguistic* convention (as opposed to the other types of convention) which are pseudo-transformed into a statement of linguistic convention) and to justify the alleged nonempirical nature of analytic truths (since it now appears that the truth of such statements depends on other statements, whose own status must be empirically confirmed as true or false).

Of course, most importantly, it can be questioned whether it is literally true that *there are* convention-expressing statements "behind" each analytic truth. To retreat to an affirmation that these background statements are "implicit" in analytic statements brings one's position exactly into the same light as the stipulation-view with which this section began. How are we to know that this is not simply an imaginary story (like the fable of the social contract again) devised to rationalized

one's prejudice for certain statements or a particular outlook over others? The affirmation of "background" statements for analytic truths, statements which are not only lying in the *background* but doing so in an "implicit" way begins to sound rather suspicious indeed. The grounds and criteria for such claims need to be scrutinized. And even if we were to be satisfied about them, the present proposal would still fail to explain the unrevisable nature of analytic truths. Finally, the present proposal will need to vindicate itself of the accusation that, in the long run, it is a vacuous account which merely disguises a restatement of the analytic/synthetic distinction.

Whatever analytic truths might be, the customary use and loose characterization of them prevents us from holding that they are stipulations, statements about word usage, rules for word usage, statements about concepts, or statements with convention-expressing backing. Such proposals only serve to increase one's conviction that the advocates of the analytic/synthetic distinction do not even themselves understand the distinction. But perhaps the fault lies not so much with these people as with the crippled notion they are trying to mobilize.

7. *Unreasonable denials*. Still another attempt to draw the analytic/synthetic distinction says that an analytic statement is any sentence for which a person's dissent is sufficient to conclude that he does not understand the sentence. It is important to observe here that it would be no good for the current proposal to maintain that a man who rejects an "analytic" sentence *is said* not to understand the relevant language used. Such a criterion could simply be taken to tell us something about the *use* of the *word* "understand," and would preclude drawing a sharp and belief-neutral distinction since it would be traced according to *personal dispositions* to use the words "analytic" and "synthetic". The present proposal is stronger than that , for it would encourage us to *conclude* that the dissenter from an "analytic" statement *does not* understand the relevant language used to express the statement. But would this stronger criterion succeed in making the analytic/synthetic distinction in the way previously prescribed? I think not, and that is because under it the confident and clear decisions could not be made which are necessary to isolating the analytic statements. *How* do we *know when* someone's dissent from a statement is muddled? To do so would require *interpreting* his rejection of the specimen statement and deciding *whether* he might not have *more insight* on this matter than you. Consequently, the current criterion is unworkable at best, arbitrary at worst.

A similar kind of proposal to the foregoing is that analytic statements are truths which it could never be rational to give up. Similar difficulties afflict it as well. How shall we pick out those thinkers whose reactions to statements are to be taken as "rational"? Can such selection be done without begging the main question at hand and nevertheless preserving the commonly regarded "analytic" truths? Can this approach allow analytic statements to be identified in advance of enumeration? Can the application of the criterion be taught to the untrained? If the "reasonable" thinkers are chosen ahead of time, will this test show the set of analytic truths to be well established and unrevisable? It would appear that the obvious answers to these questions, where not mere

matters of groundless speculation, point away from the credibility of the analytic/synthetic distinction as presently conceived. The reason for this is that there is no commonly recognized absolute necessity about the adoption or use of any particular conceptual scheme over that of another; intellectual history is marked by the conflict of basic paradigms in the philosophical outlook of people. Thus no isolated truth is evident from a mere grasp of the linguistic components constituting its expression - which is to say, there is no statement which inherently must be accepted by any intelligent thinker. Indeed, what people (and even communities or cultures) have taken as the most basic and sacrosanct of truths can, after theoretical revolution, come to have the same status as experimental statements which are to be abandoned under appropriate experiential conditions - if not simply relegated to the heap of anachronism.

For example, Kant thought he was saving science by exhibiting the conceptual necessity of the principles of Euclidean geometry and Newtonian physics, both of which were subsequently brought down from their privileged positions by revolutionary developments in math and science. Hence it seems rather unwise to identify an "analytic" truth as a statement that no rational scientist or philosopher can ever give up. Revisionary immunity cannot simply be elicited from statements in themselves. Which statements are taken as necessary will be relative to the body of accepted beliefs. Within a system of knowledge-claims the espoused necessary truths will be those granted a special status of immunity with little argumentation of an obvious sort. And even within the set of "necessary truths" there will be some which, for some thinker(s), are *less necessary* than others. For instance, a person might view "All cats are animals" as analytically true, as well as "All vixen are female." Yet he could still exhibit or profess *more willingness to abandon* the one rather than the other; something might look like a cat but an automaton, he says, but no male fox could be classified as a vixen. However, the opposite approach is open to us ("Apparent vixen are more likely to exhibit male characteristics than that anything which passes as a cat should fail to be an animal"). Such matters are not settled by mere analysis of the statements themselves or simple experimentation.

Hume treated the laws of Euclidean geometry as analytically true, for he thought the human mind could not conceive of their falsity. In terms of his theory of the relations between our ideas, Hume thought it was impossible to imagine straight lines not conforming to Euclidean definitions and laws; no experimentation could overthrow these claims. A new theory had to be developed before classical geometry could be challenged, and the time came when in fact Riemannian geometry was accepted as a serious rival to Euclidean. What was analytic for Hume eventually became a debatable question. And this did *not* occur because the meanings of words had been slyly changed. (Of course, anybody who is going to insist that meanings were altered will need to resolve the problems of meaning identity and difference which were raised above.) In terms of actual scientific experimentation, the Euclidean will *deny* that there is a limited number of "places" through which one could travel in space; without changing the meaning of "place" the Reimannian will *endorse* the limitation (thus disagreeing with the Euclidean). The two geometers are not talking about different things; rather, they have different theoretical beliefs. Thus some "reasonable men" have repudiated what other "reasonable men" have said is analytically or necessarily true. Similar

comments could be made respecting the shift from the Newtonian definition of kinetic energy to Einstein's revised definition (without taking the two men to have been talking about different things) or about the history of the causal principle before and after the advent of quantum mechanics. What one should conclude is that, in these and other cases, holding some statement to be analytic (or necessary) amounted to treating it with *preferred status*; it would not be allowed to be overthrown by isolated experimentation, although the advent of a new overall theoretical outlook might tempt one away from his faithfulness to the original statement. Betrayal of commonly accounted "analytic" truths is not inherently precluded; such a "truth" is just one more, albeit privileged, statement within a belief-system. Hence the present explanation of analytic truths as those whose denials are unreasonable is unacceptable.

The dogged advocate of the proposal, however, might *ad hoc* qualify his criterion such that matters of physics and geometry (among others) are excluded; that is, analytic truths must be restricted to purely linguistic and logical matters. But beyond the obvious defect that this is a prejudiced rescuing technique, the new proposal will have shifted the problem from distinguishing analytic from synthetic truths to the problem of distinguishing truths which are purely linguistic from those which are otherwise impure. This brings him right back to unanswered problems which have been examined above. The feeling that the truths of logic must somehow demand acceptance, even if all else fails to be immune from revision, is one which does not accord well with the history of the discipline. The debates between Philo and Diodorus, between the Stoics and Epicureans, among medieval scholastics, etc. must not be forgotten; the law of excluded middle, as noted previously, has not received unanimous endorsement, being repudiated, for instance, by three-valued logic (which, it must be noted, does not alter the meanings of the values "true" and "false" and still attains formal adequacy). In the case of intuitionist logic (which again does not redefine the logical connectives) we find the acceptance of a whole new network of inference which repudiates some classic cases of valid inference.

Holding on for all he's worth, the advocate of our present approach to analyticity might respond that, whatever we make of most of the truths of logic, at least the most fundamental laws of thought - identity and noncontradiction - cannot be forsworn. But even here some modern logicians have maintained that in the face of the most radical kind of chaotic and recalcitrant experience, we would have to be willing in the long run to revise these basic truths also. Pretend that personal experience refused somehow to conform to the law of noncontradiction, which we can, in a limited way, factitiously imagine: e.g., try what you will, when you look at some figure from every particular angle, the figure continually exhibits the features of both circularity and rectangularity - no matter how much you blink your eyes; or, no matter which way you look, and no matter how many empirical predictions you test, you cannot escape the fact that you are simultaneously experiencing what it is to be being *in* your car and *not* in your car - to great psychological consternation. In such situations you might not be considered unreasonable to eliminate the law of noncontradiction from your accepted truths.

"But," says the analytic/synthetic advocate in a last ditch effort, "the debates alluded to in logical theory through the centuries have all exhibited ignorance on the part of one faction or another, and the modern logicians who can imagine a context for abandoning the laws of thought are themselves in such-and-such a manner mistaken." However, this very response will refute the present proposal, for right here the advocate of the analytic/synthetic distinction will be admitting that logical truths are *in fact not* such that no "reasonable" man would deny them (or their necessity). The dispute between the advocate and the opponent of the necessity of logical truths exhibits in itself that reasonable men can disagree over them. The advocate of the analytic/synthetic distinction has only one recourse to salvage his position at this point: dismissing his opponent in a name-calling, question-begging fashion as "irrational". It is evident, though, that this description can only mean that the opponent does not endorse or insist upon the beliefs held as most basic by the advocate.

In the context of argumentation over very central or ultimate beliefs, when the philosophic chips are down, there need be no *agreed upon*, significant, and *inherent* distinction to be drawn between the various fundamental beliefs held in one system of thought or any other. No statement has in itself the power to guarantee its general acceptance with revisionary immunity. Men who differ in their basic beliefs will, for that very reason, be able to dispute *which truths* must be accepted by *any* thinker who has a claim to reasonableness. In such contexts it is futile to classify statements - especially in the area of men's presuppositions - as either "analytic" or "synthetic".

8. *Criteria of application* (two suggestions). The time has come again to back off one proposal and bark up another tree in search of analyticity. A new suggestion would be that to know the meaning of a word or statement involves knowing the criterion (or criteria) of its correct application or utterance. Thus "analytic" truths could be discerned on the basis *of what people would say* under certain situations about a word or sentence; to be specific, in the absence of the *criterial* feature(s), they would be *unwilling to use* the expression in question. However, when a commonly associated feature of an expression is missing and people continue to use that expression, this is evidence that the feature is not necessary to the expression. We might put the matter as follows. When people would *continue* to affirm a sentence or apply a term in the absence of some common feature, the statement "If S, then F" (where "S" is the sentence in question, and "F" is the affirmation of the relevant feature or truth) and the statement "All T are F" (where "T" is the term being considered, and "F" is the associated feature) would both have to be classified as *synthetic* truths at best. But when people would *not continue* to assent to these statements due to the absence of the mentioned feature, then the statements should count as *analytic* truths. The assumption in all this is that (at least some) expressions have fixed and univocal criteria for correct application.

Philosophers have made use of this notion of criteria-of-application in various ways so as to explicate the notion of analytic truth. One such approach has been that a truth is analytic when (using the model of "All T is F") the *criterion in mind* for the application of the *subject* expression

*includes* the *criterion in mind* for the application of the *predicate* expression. Leaving aside the question of how we are to individuate such mental objects, we must now ask: how can you tell whether this inclusion is the case or not? The answer is that we are to perform an experiment with our imagination. See whether you can consistently think of the subject without the predicate; if you cannot, then the truth is analytic. However, it is hard to see why this experiment would indicate anything other than an individual's personal ability to imagine things. Some people might be so dull that they cannot even imagine the subject of a *synthetic* truth without its predicate. On the other hand, when we have someone who claims that *he can imagine* the required separation of subject and predicate in the case of a commonly accepted *analytic* truth, how are we to dispute the fact with him? Have we been dull, or is he extraordinary insightful?

Moreover, we can ask just what it is for one mental criterion to be "included" in another. As with Kant earlier, this is usually left at a metaphorical level. One attempt to exhibit its meaning has been to draw an analogy with the inclusion of one set of travel plans within that of another. But this is a *faux pas*, and the analogy is dangerous to the advocate of the analytic/synthetic position. We understand mental *planning* precisely because it is voluntarily constituted; we *choose* to do certain things (in a certain order), thereby "creating" mental plans (to speak in the metaphorical sense again). However, the inclusion of applicatory-criteria-for-terms in mind is said to be something objective which we come to discern; it is not, according to the present thesis, supposed to be a matter of volition. Hence the analogy tends to suggest, if anything, that after all is said and done, the inclusion of mental criteria is a relative matter depending on personal stipulation. The analytic/synthetic advocate will likely just drop the analogy and say that the supposed "inclusion" referred to among criteria-in-mind is either seen by you or it is not. That is, he says, the simple end of the matter. Yes, but this retreat to intuition ends the matter too soon, for it is an admission of failure to explicate the analytic/synthetic distinction under the requirements previously established.

Furthermore, it can be seriously questioned whether the criteria of application for a particular term are fixed in advance of experience (as the present proposal for explicating analyticity assumes). Is it the case that statements are necessarily true *in themselves* (analytic), and that we come to recognize a special pre-existing relationship among the applicatory criteria for their terms (viz., inclusion) thereby apprehending the analyticity of the statement? This is dubious. Someone may very well know how to apply the word "whale" accurately in each case that arises, and yet his criteria for applying the word need not include the applicatory criteria for "mammal". In such a situation, even if the man knows how to apply the word "mammal", and even though he never fails to use the word "whale" correctly, nevertheless he *could not* (according to the proposed directions) discover through an examination of the operative criteria for his terms that "All whales are mammals" is analytically true. The criteria for applying terms will be relative to a person's store of knowledge. Someone with advanced training might view a whale as an aquatic mammal which resembles a large fish, while another person might simply apply "whale" to instances of particularly large fish - and yet the identifications of both turn out accurate. It seems inescapable that for the man who uses the simpler non-mammal criteria, *either* "All whales are mammals" is

*not* an analytic truth (thus, the necessity of its truth does not exist previous to the acceptance of a certain outlook or categorization scheme), *or* it is *not* apprehended as such through an examination of his criteria for the application of the constituent terms. Both consequences, which will be elaborated below, are devastating for the proposal under consideration.

Someone might respond to the fact that, of two people, one includes the criteria for "mammal" among his criteria for "whale" while the other does not, in the following way: these two individuals have *different meanings* for "whale". One meaning involves the analyticity of "All whales are mammals," while the other does not . There are at least four major defects in this device for rescuing the view that analyticity can be determined by apprehending the inclusion of applicatory criteria for one word within the criteria for another word. *First*, recourse to the claim that people have different meanings (as a device for explaining why an alleged inclusion-of-criteria may not be the case for everyone who can correctly use the terms in question) brings you eventually back to the previous problems encountered in the attempts to explicate analyticity either by synonymy or by stipulation. For, now, the criteria for meaning-identity and meaning-difference must be given, or else the analytic distinction must be thrown up to arbitrariness.

*Second*, even if we should overlook the previous unpaid explanatory debt for a moment, this rescuing device will undermine the original proposal that analytic truths can be discerned by consideration of one's criteria for applying terms in a statement. The proponent of this view might say that, when the amateur whale-observer adopts the meaning of "whale" used by the educated whale-observer, then he *can see* that "All whales are mammals" is analytically true. But here is the snag. While the amateur will now decide that the statement is an analytic truth, he will not have done so *simply by examining* his criteria for applying the word "whale", but rather by *adding to* the criteria (in adopting a new use of the word). That is, the educated applicatory criteria for "whale" will not be taught in some independent manner, *then* leaving the amateur-become-student *to go on* and discover that the criteria for "whale" (in the new, educated sense) so happens to include the criteria for "mammal"; instead, the educated sense of "whale" will be taught precisely *by teaching that* "All whales are mammals" is a necessary (analytic) truth. Criteria-inclusion is apprehended in the act of criteria- addition. Thus one does not *discern* the analyticity of some statements (by separate discovery of criteria-inclusion which pre-existed); he is merely *taught* the analyticity of some statements (by the stipulation of criteria-inclusion). Hence it turns out that criteria of word-application will not indicate some independently constituted state of criteria-inclusion; pre-existing analyticity is not divulged by the proposed investigation procedure after all.

*Third*, even aside from the fact that it shows analyticity not actually to be discerned by an investigation for criteria-inclusion, the attempt to rescue the original proposal for distinguishing analytic truths through recourse to the use of different meanings for the same term is a device which also surrenders the purported fact that statements are analytic in themselves - that the set of analytic truths is fixed in advance, a set which is clearly and uniquely set apart from any and all

synthetic truths. We have been told that analytic statements are those which have the criteria for application of the predicate term included in the criteria for application for the subject term. But then we saw that an accurate but amateur observer of whales could not, based on a consideration of his criteria for applying the term "whale", discover that "All whales are mammals" is analytically true. At that point it was replied that, if the amateur would adopt the educated observer's meaning (use) of "whale" (which includes the criteria for "mammal"), then he would discern the analyticity of "All whales are mammals." But this is just to say that a statement is *analytic on a particular use* of terms (which might not even be the common, amateur use of them). Analyticity is thus relativized to a selected body of knowledge or particular use of language. What should be the set of statements that count as analytically true (i.e., those exhibiting criteria-inclusion of the specified sort) is a relative matter; it cannot be determined in advance or in virtue of the statements themselves. But the result is then that one man's analyticity is another man's syntheticity.

Since "analytic" means "analytic-on-this-usage" it is futile to distinguish analytic truth from synthetic truth. Let me illustrate. Image a man who examines his criteria for the application of the term "monkey", and he finds included there the criteria for the expression "eats bananas". Most people would agree that "Monkeys eat bananas" is a true statement; however, for the man in question the statement is *analytically* true. It turns out that, no matter how good an imitation of a monkey we find in other respects, if the creature refuses to eat bananas, our man will not apply the term "monkey" to it. If he is told that the statement, "All monkeys eat bananas," is the sort of thing we usually deem a synthetic truth, he can reply that it is an *analytic* truth *on his usage*. If anyone wants to retain the current suggestion for identifying analytic truths and yet save the category from the jaws of relativity, he will need to set forth the criteria for deciding *whose* analytic truths are the *genuine* ones. But this is at base the same task we *set out* to accomplish: namely, to pick out the analytic truths in distinction from the synthetic ones. It thus appears that the present proposal has advanced us very little toward the accomplishment of the task undertaken.

*Fourth*, it should also be questioned whether the rescuing device under consideration is accurate in its claim: namely, that the amateur and educated whale-observers have different meanings for "whale". Although this was granted for argument's sake above, we should now ask *how* anyone *knows* that these two observers have different meanings. After all, the referents of the term are the same in all actual situations for both observers; they apply "whale" to the same things, and thus it seems we would be justified in saying that the *amateur* nevertheless *knew* what the word *meant*. The reply to this would undoubtedly invoke a *hypothetical situation* which would reveal that the application of the word "whale" *would differ*, thus demonstrating the difference of meaning for the amateur and educated whale-observer. If, for instance, a creature looking like a whale were to be found without mammary glands, the amateur would continue to apply the word "whale" to it, while the educated observer would not. However, should the educated observer surprise us and renounce the analytic truth that "All whales are mammals" (based on the finding of this non-mammal, whale-like creature), then we must conclude - according to the present proposal - that he has *changed the meaning* of the word "whale". Previously, "whale" could not have been applied to a non-mammal,

but now it is being so applied. So we will be told: "The criteria have been altered in such a case. But as long as the meanings remain *unchanged*, analytic truths can be discerned by apprehending criteria-inclusion (of the previously specified sort). Therefore, analytic truths are never renounced; whatever is offered as a counter-example is in reality a case where the meanings of words have shifted."

However, the above explanation may not be as plausible as it appears. Hypothetical situations will not actually tell you whether the meanings of terms have changed or not; thus they will not exhibit that the criteria for applying terms is fixed, or *a fortiori* that there is a pre-established relation of inclusion between the applicatory criteria of some words. Consider this illustration. Three people agree that "All cats are animals" is true. Is it *analytically* true? Well, we are to consider whether the criteria for "animal" are included in those for "cat", and supposedly a hypothetical situation will tell us whether they are or not. So imagine that we discover that all the creatures which look and behave like cats are (and always have been) automata. One person says, "Cats are not animals after all." A second person replies, "No, there never were cats." A third person disagrees with both, saying "We should conclude, instead, that some animals are automato." Who has kept the *meanings* of the terms in tact? Whose response evidences that he held "All cats are animals" to be *analytically* true? On the other hand, held the statement to be merely contingently true, and then came to change his *belief* that it was true at all? Clearly, this hypothetical situation raises a problem as to how we should speak, but it is not at all clear which of the available options represents a decision to change our meanings and which represents a change to beliefs. The reasons for the shift will be the same in either case. Therefore, the proponent of the analytic/synthetic distinction has told us that an analytic statement (one whose terms bear a relation of criteria-inclusion) can be denied only when the meanings of the terms have changed (thus altering the criteria-inclusion relation), but we now see that this response still leaves it an open question as to which statements count as analytic truths. For it is not clear that hypothetical situations will delineate changes of meaning from simple changes of belief. Until the criterion of meaning-identity is made explicit, we still will not be able to discern the genuine analytic statements.

Therefore, the criteria of application for terms (and relations of inclusion among those criteria) do not seem to be fixed in advance of experience, and statements are not analytically true in themselves (and apart from empirical knowledge). Whether "All cats are animals" or "All whales are mammals" are analytic or synthetic truths is indeterminate. When there is agreement on the *application* of terms (e.g., "cats", "whales"), there can yet be disagreement on the *criteria* of application. This disagreement cannot be clearly categorized as a difference in meaning, rather than a difference in belief (even when hypothetical situations are alluded to). Hence reflection upon his criteria of application for terms cannot tell an individual whether there is a pre-existing *inclusion* of criteria for applying the terms in a true statement, and thus whether the statement is analytic or not. To discern an analytic truth cannot be to apprehend the inclusion of criteria-of-application for terms, for apart from *accepting* a statement *as necessarily true* there is no inclusion of criteria to "apprehend."

A *second suggestion* for distinguishing analytic truths which also turns on the notion of criteria-of-application for terms can now be entertained. The previous suggestion had run afoul through its inability to distinguish natural laws from analytic truths. Consequently, the new suggestion begins by distinguishing law-cluster concepts (those whose identity is determined by a *bundle* of general laws, any one of which can be abandoned without destroying the identity of the concept: e.g., "atom", "kinetic energy", "gravity" "whale", etc.) and single-criterion concepts (the terms for which are applied on the basis of only a *single*, generally accepted criterion: e.g., "bachelor", "vixen", etc.). Next, the new proposal sharply delimits the analytic truths which it aims to explain. The proposal is said to pertain only to analytic *definitions* which are *intuitive* (not demonstrable), and more specifically to intuitive definitions of *single words*. For the referents of these words no exceptionless natural laws happen to be known. Furthermore, acceptance of the analytic definition has no consequences beyond that of allowing an interchangeable use of a pair of expressions (viz., a definiendum and its definiens).

With these qualifications in mind, the new proposal is that an analytic definition can be discerned as one where a single word is identified with an interchangeable expression which serves as its only necessary and sufficient condition (actually applied in practice) of identification. That is, the subjects of analytic truths must be one-criterion words; the definiens in an analytic definition is a criterial feature or logical characteristic of the definiendum. A common example is "All bachelors are unmarried men." Hence to distinguish analytic from synthetic truths requires us to distinguish single-criterion words from law-cluster words.

A number of criticisms can be leveled at this suggestion. The most obvious is that it amounts to an *ad hoc* shoring up of a position through extensive qualification, and what we are left with as analytic truths differs extensively from the original, larger class of common examples. And *even then* the proponents of this approach to analyticity concede that it admits of borderline fuzziness between analytic and synthetic truths. Moreover, we are told that some statements can be *construed as* analytic (where, apparently, they are not normally taken as such). Thus the adjusted and restored proposal still leaves the analytic/synthetic distinction rather indistinct.

But there are principial problems in arriving even at that point by this method. First, there is a certain irony about this position. To know that "All A's are B's," one must know that B is the only general principle that applies to A, by which A can be identified conclusively. *If* there is some natural law relevant to A, by which A is (or could be) identified by someone with the requisite knowledge, then "All A's are B's" would not turn out to be analytic (since A would not be a single-criterion word). So note the irony: the statements which are alleged to be utterly trivial and arbitrary - analytic truths - require us to make an intelligent universal negative judgment (to the

effect that no natural laws apply to this case in hand) before they can be definitively identified. One must know the most in order to discern the least.

In defense, the advocate of the present proposal might take refuge in the consideration that there is no good reason to suppose that there are natural laws associated with the subject terms of analytic truths; that is, the burden of proof is on the critic of adduced analytic truths to give just cause for doubting that the word being defined is one-criterion in nature. However, this "burden of proof" business is a tricky matter. One could easily turn the tables by contending that, since the advocate is propounding the *affirmative* position that there is a unique class of statements which have a peculiar nature about them and, as such, must be respected as immune from revision, the burden of proof is *his own*; his claim is a far-reaching, significant, and existential one and consequently it cannot be expected to stand as truth just as long as nobody undertakes to challenge alleged instances. Well, however one resolves the counter-charges that "The burden of proof is on you," this much is indisputable: the present proposal leaves the isolation of analytic truths as something which is *relative* to one's knowledge. It is certainly conceivable that someone could hastily conclude that some true statement is analytic, when in fact this person simply lacks the education necessary to see that other laws (beside the one stated) also apply to the subject term of the true statement under consideration (e.g., someone who reads only the first few pages of a physics or biology book). Now then, the difficulty will become that of deciding when the truths we label "analytic" have been hastily labeled, and when not. Hence much further explication is necessary before the present proposal will enable us to distinguish analytic truths from synthetic truths with any confidence.

Furthermore, according to the present thesis, to identify an analytic truth one must first be able to identify a single-criterion word (one which has only one necessary and sufficient condition for correct application). This raises the troublesome matter of *individuating* criteria. Since so much rests on one's ability to discern a single criterion, the task of laying down conditions for differentiating one criterion from another cannot be evaded. For example, "All bachelors are unmarried men" is viewed as analytic just as long as being an *unmarried man* is the only condition for concluding that someone is a bachelor. "But," someone might contend, "there is *another* criterion for the correct application of the word "bachelor", namely: being an *unwed male*." If this counter-claim should stand uncorrected, then "All bachelors are unmarried men" would *fail* to be analytically true on the present thesis. "Bachelor" would not be a single-criterion word after all.

Obviously, the present position can be salvaged only by showing that "unmarried man" and "unwed male" are in reality only *one* criterion. But this means that one must be able to identify them as synonyms - which brings us back to the troubles previously encountered in an attempt to explicate analyticity. To avoid these, the advocate of the present thesis might attempt to construe identity of criteria *behavioristically*: when those who use one criterion *do the same thing* as those who use another criterion, then in reality the two criteria are actually *one* criterion at base. The sad

fact is, though, that *even* those who hold to the *same expressed* criterion (say, "unmarried man") do *not* follow the *same behavior pattern* in determining whether the criterion holds in a particular case. Some people might look for a wedding ring on the left hand, some look for possible witnesses, and others check relevant state records. The single-behavior test will not even work for the *single expression* of a criterion, then, much less for the *multiple expression* of a criterion.

To shore up his (already extensively shored up) position, the advocate might now say that one criterion is identical with another if those who hold the one *could do all* the things done by those who hold the other, and *vice versa*. However, unless the judgment, "Those using criterion A *could do* (even though they *do not do*) everything those using criterion B do," is a grand instance of question-begging, it must be a *prediction* subject to confirmation and disconfirmation. But since the judgment pertains to something which *does not* actually happen, it will be impossible to confirm or infirm it in practice. But before we venture into the whole area of determining the truth of counterfactual hypotheses (which we will discuss shortly), let us simply stop and take appraisal of where we are. It must be overwhelmingly obvious that distinguishing analytic from synthetic truths has by this point become: (1) not at all a task whose difficulty is commensurate with the alleged triviality of the statements in question, and (2) more importantly not something which can be determined by reference to *language alone* (as was originally imagined with respect to analytic truths). Moreover, the present course of the discussion is going to lead the advocate into the highly debatable issues of the behavioristic approach to semantics; only by weathering the strong objections to that outlook would the present thesis succeed (in the limited area left to it) at labeling some truths as "analytic" (after the extensive and requisite empirical investigations into behavior). It is at best highly questionable whether behaviorism can be sustained here, and thus the allegedly clear notion of analyticity has been explicated by sinking into the decidedly unclear matters of behavioristic semantics. If this is the only direction the explication can take, then we are justified in concluding that analyticity is *not* very well understood (at least at the present time) and cannot be expected to play an important role in philosophical disputes.

A final problem remains to be discussed. It can be broached by pointing out that advocates of the single-criterion view of analytic truths admit that single-criterion words can through historical development change their linguistic character, becoming law-cluster words. For instance, on a previous understanding of "atom", the statement "Atoms cannot be split" would express an analytic truth; however, after certain scientific developments and experiments, "atom" became a term identified by a cluster of laws, such that one day "Atoms cannot be split" came to be viewed as a synthetic statement - and a false one at that. Therefore, to know that a certain statement is analytic, we must be sure that its subject term is presently a single-criterion word, rather than one characterized by a number of natural laws (or symptoms) which *could* be used *indicate* the appropriateness of using the term in question. The emphasis lies on the predicate expression being a *criterion* for the subject expression, not merely a symptomatic indication. The point can be made in this fashion: *even if* there were exceptionless natural laws about bachelors, they could not be used to conclusively *determine* who counts as a bachelor; the only genuine *criterion* of bachelorhood is revealed in the truth that "All bachelors are unmarried men."

Thus we can see that, if analytic truths can be identified only by one who is able to identify single-criterion words, then not only do we have the difficulty of individuation (discussed above), but also the problem of *identification*. We must be able to distinguish, not only one criterion from another criterion, but also a *criterion* from a mere *symptom*. Briefly put, what distinguishes synthetic symptoms from analytic criteria? (This question is a challenge to the present thesis about single- criterion words *as well as* to the previous thesis about criteria-inclusion between words.)

The proposal seems to be this. Of the *features* which regularly characterize the occasions in which a word is correctly used, some of the features could be reliable *empirical* correlates (viz., symptoms), while at least some other feature will be attributable to the word's meaning, thus being *logically* characteristic and definitive of the word's proper use (viz., a criterion). Now then, how could these two kinds of features be distinguished from each other in actual instances of word usage? We want to test whether a feature which obtains in all normal cases of a word's occurrence does so in virtue of the word's meaning or not. Meaning is here explicated in terms of criterial feature(s); the list of such logically characteristic features must not include those which a speaker does not rely upon in his willingness to use the word in question. However, an obvious snag arises. There can be no evidential basis for identifying some reliable feature of a word's usage as logically characteristic rather than empirically symptomatic. Because the feature is*, ex hypothesi*, perfectly reliable, we could never actually observe a case where the word is properly used in the absence of that feature. This fact is true of both criteria *and* symptoms of the word's usage, and thus observation alone will not distinguish the two.

In response to this, advocates of the view being examined have appealed to anomalous situations and a speaker's intuitions about *what he would say* under such situations. That is, a counterfactual hypothesis is set forth ("what if the heretofore reliable feature were to be absent in some instance of the entity named by the subject term?" - e.g., "what if we found cats which were automata rather than animals?"). If the speaker would still use the word in question, the hypothetically missing feature of the word's usage. Allegedly, then, in situations where some of our relatively secure beliefs (about features being invariably correlated with the correct application of a word) were to turn out false, what we would say reveals the actual meanings of our words - which in turn determines the possible range of analytic truths.

We see, then, that the analytic/synthetic distinction rests on the criterion/symptom distinction, and drawing the latter relies upon the *reliability* of a speaker's intuitions about what he would say in counterfactual situations. The confirmation of that reliability cannot depend upon *observation* - which is precluded by the terms of the question; since these hypothetical situations never arise in the case of perfectly reliable features, there is no way to confirm empirically what a speaker *would say*. Moreover, the reliability of the speaker's intuitions cannot rest on *theoretical* confirmation,

for we have no characterization of the criterion/symptom dichotomy which is independent of the reliability of a speaker's intuitions (about what he would say in anomalous situations); without that independent theory there are no confirmable or disconfirmable predictions about what would be said on the basis of the speaker's intuitive claims. Consequently, the reliability of the speaker's intuitions is held to be supportable only when they derive solely from his *mastery of the language*.

However, it is highly implausible that the reliability of a speaker's intuitions about what he would say under counterfactual situations can be ascribed to (or held to be implicit in) his mastery of his language. To ask what we would say should some of our beliefs (about reliable features accompanying correct word usage) prove false involves asking what *new* beliefs would replace the old ones, and that all depends on what theories would be devised and adopted under the anomalous situation. To decide what new beliefs should be endorsed, therefore, requires long and serious inquiry at the time our expectations become misleading. Only at that time would it be evident how much of our current belief-system and ways of talking would have to be adjusted to accommodate the new discovery. And there is simply no good reason to think that an ability to predict the outcome of such investigation, theory reformulation, and novel belief adoption, is implicit in a current mastery of a language. Hence it is quite implausible that a speaker actually *knows* what he would say under anomalous situations. A knowledge of language will hardly give you good grounds for deciding what beliefs will be adopted and what theories will be proven in the imaginary future of science! Linguistic competence does not entail prophetic ability to say what theories would replace the currently entrenched ones if a change in empirical generalization were uncovered.

Should the advocate of the present proposal become stubborn, insisting that a speaker's intuitions about what he would say under counterfactual situations is *always reliable*, and that any *alleged unreliable* intuitions will turn out to be unacknowledged *equivocations*, then we would rightly insist on support for these claims. We have already seen above an attempt to rescue a proposed method of identifying analytic truths by explaining away falsifying illustrations as instances of meaning-change; the same rescuing device is being invoked here. We are being told that a criterial feature could be prophetically surrendered by a speaker only if the meaning of the term in question had changed. A speaker's intuitions about what he would say in anomalous situations is fallible, then, only if there has been an alternation of meanings.

But, we must ask in reply, how can such a claim be supported? Can we clearly isolate and identify the cases which are changes in meaning? To do so would presuppose some technique for determining meaning-change which is *independent* of the speaker's intuitions about what he would say. However, if a standard for meaning-change could be found independent of these intuited answers, the appeal to intuitions about what-the-speaker-would-say would be superfluous. And if we do *not* have this independent technique, then the identification of meaning-change will rest precisely on the same appeal to intuition which allegedly supports the criterion/symptom

distinction - which is obviously circular. As a matter of fact, a characterization of the distinction between logical and empirical features of a word's correct usage, a characterization which is independent of an appeal to speaker's intuitions about counterfactual situations, has not been set forth. (Recall, also, that it was indicated previously how difficult it is to decide what responses to anomalous situations - e.g., cats being automata rather than animals - should be taken as changes in belief, and which should be taken as changes in meaning.) Without an independent criterion of equivocation, there is no reason to suppose that a speaker's knowledge of his language actually equips him to answer counterfactual questions accurately. A speaker's claims about his hypothetical, future, linguistic behavior has no special freedom from disconfirmation. Therefore, another popular attempt to distinguish analytic truths from synthetic truths must be dismissed as inadequate.

Apart from the above discussion we can quickly and easily see why the previous proposal had to fail. Analytic truths, we were told, were to be identified as those statements which asserted the single-criterion of a particular word (the subject of the statement); moreover, a criterion had to be taken as a *necessary* condition for the correct use of the word in question. Hence the ability to distinguish analytic truths relied on the ability to discern necessary conditions. However, originally analyticity had been introduced to explicate necessity. With the previous proposal we have actually taken a round about way to close a large circle. It has been simply assumed that there are *no synthetic* necessary conditions for the proper use of a word; thus necessity and analyticity could be illusively used to explain each other.

Both of the foregoing attempts to explicate analyticity have, in the long run, reduced to appeals to counterfactual conditions. This in itself indicates the weakness of the two proposed ways of identifying analytic truths (viz., criteria-inclusion, or single-criterion). To rest your explanation of analytic truths on the use of counterfactual conditions is inadequate because the latter are just as much in need of explication as the former. The statement of counterfactual conditionals is customarily used to explicate dispositions or tendencies - in the case at hand, the tendency to use expressions in a certain way; they are supposed to help us determine what people (or things) *would have done* in circumstances which have not actually occurred. Hence a counterfactual conditional statement has the usual "if...then" form; however, the antecedent is false (as is evident from context or by the use of the subjunctive mood). For instance, "If the gun had been loaded, then the duck would be dead." Now the problem is that of providing an analysis of such statements which accounts for their conditional element (the sense in which the consequent *follows from* the antecedent), which makes clear what is involved *in finding out* (determining) that they are true or false, and which does not utilize *irreducible* (nonexplicable) *modal notions* such as possibility and necessity (since they are objectionable to empiricism). This problem of analyzing counterfactual conditionals is especially acute in cases where the counterfactual antecedent is a supposition which contravenes our beliefs (e.g., "If gravity did not hold on earth..."

A simple truth-functional analysis (where the truth-value of the logical connective is uniquely determined by only the truth-values of the variables - the place markers in a logical formula which name expressions cannot be adequate for counterfactual conditionals, for they are used in the material sense. This is unlike the everyday use of "if...then" because the material sense does not determine the truth of the conditional on the basis of the interrelations between the senses of the component sentences, but solely on the basis of the truth-values of the components. Hence the conditional connective in formal logic ("If...then") is true under a given interpretation if *either* the antecedent is false *or* the consequent is true. In this case, *every* counterfactual conditional statement would be true since they all have false antecedents: e.g., "If the gun had been loaded, the duck would be dead" or "...the duck would not be dead." Both a statement and its contradiction would be true. However, counterfactual conditionals are used in philosophy in the sense that a given antecedent will lead to *only one* determined consequent and *not* its contradiction. Thus we must look for something other than a truth-functional analysis of counterfactual conditionals.

It has been suggested that counterfactual conditionals are asserted on the strength of certain presuppositions. That is, these statements are really more *complex* than they seem on the surface. Specifically, counterfactual conditionals are statements about *what can be deduced* (viz., the consequent) from a *set* of statements when the *antecedent* is *added* to the set as a supposition. Hereby nothing turns upon the truth or falsity of the antecedent, just as long as it is consistent with the set of presupposed statements. However, *which set* of statements is to be presupposed? In order for the antecedent to be consistent with the set of presuppositions, the set will have to *exclude* some of the speaker's *beliefs*, for the antecedent will *ex hypothesis*, as counterfactual, always be inconsistent with one's set of beliefs (statements taken to be factual). So then, in the nature of the case counterfactual conditionals will be ambiguous. One cannot decide that *one* state of affairs is the only possible one in accord with a false supposition, for whatever interpretation is given, that supposition will *conflict with some other beliefs* of the speaker. For the speaker to suppose the false antecedent, then, will call for him to alter other relevant beliefs, and this alternation will require *extralogical interpretation and selection*.

When someone supposes a statement which is contrary to fact, there will be at least two other statements which he believes and which are relevant to the counterfactual statement; these three will form an inconsistent triad. Some means must be found for saying which of the two believed statements will have to be excluded on the acceptance of the counterfactual. But there are no universally accepted or obvious *grounds* for such a decision; an impartial case cannot be made out for preferring the exclusion of one belief to the exclusion of the other. Therefore, when we ask someone what the consequence of supposing some counterfactual statement would be, his answer will reveal which of two beliefs he takes as *fixed* and which he takes as more *dispensable* than the other. Taken a common example. The Greek gods were deemed immortal, and Apollo was numbered among the gods. Now then, for someone holding these two beliefs*, what would follow* from supposing that Apollo were a man? One person might say, "If Apollo were a man, then Apollo would be mortal"; however, someone else could equally say, "If Apollo were a man, then one man would be immortal." The decision between the former counterfactual conditional and the latter

counterfactual conditional will depend on one's life context, his presuppositions, his hierarchy of certainties; that is, it will depend on which of his beliefs (about the gods, or about man) will be taken as more firmly entrenched than the other. There is no easy, neutral, or universally evident way to settle disputes over which counterfactual conditional is the appropriate one for a given supposition. You surely cannot tell simply by examining your language!

We conclude, then, that if the explication of analyticity rests on the use of counterfactual conditionals, the explication will not enable us to pick out the analytic truths from the synthetic truths with any degree of assurance. Indeed, the selection will be determined by one's structure (or ordering) of beliefs. In an attempt to rescue the move to counterfactual conditionals one might interpret them, not as statements but as incomplete arguments which are completed by a set of statements that *sustain* the conditional *without* actually *implying* it. That is, if we have good reason for accepting a set of statements, and if this set does not undermine the antecedent of a counterfactual conditional but sustains the (whole) conditional statement, then the counterfactual conditional can be advanced. Well, then, when do we have good reasons for accepting the above mentioned set of presuppositions (which, in turn, could sustain the conditional statement)? The answer to this question, we are told, will ultimately rest on the resolution of the problem of induction. But notice where this brings us in our discussion. To support analytic truths by appealing to counterfactual conditionals is to appeal to an *argument* which will have to be *inductively* convincing - which is just to say that analytic truths are not very distinct from *synthetic* truths after all!

9. *Null factual component*. A final attempt to distinguish analytic from synthetic truths which aims to preclude *synthetic a priori* statements is associated with logical positivism (reductionism) and the verificationist theory of meaning. According to it sentences can be classified into two categories: those whose truth can be determined by an analysis of the sentence itself, and those whose truth can be determined only extralinguistically. The former class of statements are true in virtue of *logical* form and *meaning* relations among the predicates used. (They can be known with absolute certainty, but unfortunately they do not tell us anything interesting about the world.) The present thesis now needs to explain its approach to meaning, an approach which will aim to make meaning depend upon sense experience.

According to the popular tradition, statements can be analyzed into a linguistic component and an extralinguistic factual component (which is circumscribed by a range of confirmatory experiences). A statement is meaningful if and only if it is either analytic or empirically verifiable; in the latter case the statement's truth of falsity would make a possible difference to experience, whereas in the former case the statement's truth is trivial. The specific meaning of a statement is the procedure followed to verify it, the empirical method used to confirm or infirm it. An analytic statement, then, is a statement which is confirmed no matter what; in it the linguistic component is all that matters in determining its truth. The present thesis holds that two expressions are

synonymous if and only if they are alike in their method of empirical confirmation. Thus a statement would be analytic if it were synonymous with a logically true statement. The preceding proposal for distinguishing analytic truth from synthetic truths will thus depend for its cogency on the verificationist theory of meaning and on reductionism (i.e., the view that any meaningful synthetic statement can be expressed in observation terms or rewritten into an analysis of the experience needed to confirm it empirically). On both counts the present view will be found wanting.

Verificationism says that a synthetic truth is meaningful if and only if it can (in a specific fashion) be empirically confirmed or infirmed; any other *true* statement which *lacks* this specific verification-procedure is analytic. This immediately raises the question of which methods of verification are to be accepted, and how conclusive the verification or falsification must be. Vagueness at this point will erase any sharp analytic/synthetic distinction. There is also a question about the status of the verificationist principle itself. If the principle is not empirically confirmed (which it is not), then it would require that itself be viewed as a trivial definition; since its advocates are not inclined to accept this alternative, the principle is either meaningless or a rationalization of prejudice. Beyond these initial troubles, however, is the fact that the crucial attribute, "verifiable", has not been defined in such a way that any statement whatsoever is precluded from being a meaningful, synthetic statement.

In his first edition of *Language, Truth and Logic*, (New York: Dover, 2nd ed., 1952) A.J. Ayer held that, where an experiential or observation statement is one which records an actual or possible observation, a meaningful statement is such that "some experiential propositions can be deduced from it in conjunction with certain other premises without being deducible from those other premises alone" (p. 39). However, it was quickly pointed out that we can take any statement whatsoever, "S", and place it in conjunction with "If S, then $O_1$" (where "O" represents an observation statement). When we do this, "$O_1$" follows from the conjunction, and yet is not deducible from "S" or from "If S, then $O_1$" separately. Consequently, on this explication of verifiability, *any* statement could count as verifiable in a specific fashion (even analytic truths!).

In an effort to remedy this situation, Ayer restated his verifiability criterion in a second edition of his text. There he proposed that a meaningful, synthetic statement is one which is either directly or indirectly verifiable, where these two modes of verification are understood in this way:

A statement is directly verifiable if it is either itself an observation-statement, or is such that in conjunction with one or more observation-statements it entails at least one observation-statement which is not deducible from these other premises alone; and...a statement is indirectly verifiable if it satisfies the following conditions: first, that in conjunction with certain other premises it entails

one or more directly verifiable statements which are not deducible from these other premises alone; and secondly, that these other premises do not include any statement that is not either analytic, or directly verifiable, or capable of being independently established as indirectly verifiable (p. 13).

This second attempt, however, fares no better than the first, for it permits any statement ("S") or its negation ("not-S") to be meaningful or verifiable. Now then, let us take as premise 1: "(not-$O_1$ and $O_2$) or ($O_3$ and not-S)" and as premise 2: "$O_1$". Neither of these premises will independently entail "($O_3$ and not-S)", whereas the conjunction of the two premises does entail it - which means that "not-S" is directly verifiable. Now let us take as premise 3: "S". Premise 1 in conjunction with premise 3 entails "(not-$O_1$ and $O_2$)". Hence "S" satisfies the criteria for indirect verifiability just in case premise 1 does *not* independently entail "(not-$O_1$ and $O_2$)". *If* premise 1 *does* entail this conclusion, then *either* of the *disjuncts* in premise 1 must entail the conclusion (according to standard logical laws). And thus if the *second disjunct* of premise 1 *entails* the mentioned conclusion (which happens to be the first disjunct), then "not-S" is directly verifiable. Hence the second disjunct of premise 1 ("$O_3$ and not-S") does *not independently* entail the mentioned conclusion, "not-$O_1$ and $O_2$" (i.e., the first disjunct of premise 1). Therefore, we see that "S" is indirectly verifiable and "not-S" is directly verifiable - which is just to say that any and every statement can pass the verifiability criterion. And in that case the verifiability criterion will not enable us to draw the boundary between analytic and synthetic truths.

We turn then from verifiability to reductionism. Forgetting the above inadequacy of the verificationist theory of meaning, let us now ask just what is the supposed relation between a *statement* and the *experiences* which contribute to or detract from its confirmation? One must know this if he is to understand the positivist view of statement synonymy and thereby its approach to analyticity. Two answers have been suggested. *First*, it has been maintained that every meaningful statement is translatable into a statement about immediate experience; that is, a meaningful synthetic statement is actually a direct report of some sense experience. It becomes incumbent upon this position, then, to specify a sense-datum language into which all significant

discourse can be translated statement by statement. Rudolf Carnap best attempted to do this in a specific and serious fashion. However, his language was not strictly a sense-datum language; it included the notions of logic and pure mathematics, and his ontology embraced sets (and sets of sets). Further, even his translation of the simplest significant statements about the physical world were left in a sketchy condition. Moreover, most importantly, Carnap's reductionism could not do what it was required to do. A paradigmatic statement of his treatment of attributes was "Quality q is at point-instant x;y;z;t" (thereby specifying a three-dimensional and temporal location for the attribute). But the connective "is at" remained an undefined, alien expression which was not eliminated in favor of sense-data. Hence the reduction necessary to account for synonymy and (thereby) analyticity could not be carried out.

Consequently a *second* and common answer to the question posed in the above paragraph has been advanced, saying that each synthetic statement has associated with it a unique range of possible sensory events such that their occurrence tends to confirm the statement , while another unique range of experiences tends to detract from the statement's confirmation. This is, of course, the central thrust of the verificationist theory of meaning. Now if it is significant or meaningful to speak of single statements being confirmed or falsified one by one, in isolation from other statements, then it can seem significant to speak of a kind of statement which is vacuously confirmed whatever may happen - that is, an analytic statement. Reductionism amounts to the view that *every meaningful* statement if *confirmable* (can be "verified") by *a particular set* of experiences *or by every set* of experiences; the former are synthetic statements, while the latter are analytic. In the analytic statements the factual component is empty and the linguistic component is everything.

However, to state matters this way is simply to *restate* the analytic/synthetic distinction all over again - to restate what was to be explained in the first place. We are still left wondering how one goes about *separating* the linguistic component from the factual component in any particular statement in a natural language. It has not yet been explained what it is for the factual component in a statement to be null, or how it is that single synthetic statements can be empirically confirmed. Indeed, the reductionist scheme collapses altogether once we recognize the fact that, as Quine puts it, "our statements about the external world face the tribunal of sense experience not individually but only as a corporate body" ("Two Dogmas of Empiricism," *From a Logical Point of View*. 2nd ed., New York: Harper Torchbooks, 1961, p. 41).

Positivistic reductionism is at odds with the fact that whatever our experience may be, it is always in principle possible to hold onto or reject any particular statement - just as long as we are prepared to make extensive enough revisions elsewhere in our system of beliefs. No single statement is empirically tested in isolation from others, and hence any statement can be made immune from revision if the person holding that statement is willing to make adjustments in other beliefs relevant to the statement. (Recall examples given above regarding cats being automata, Apollo being a man, the experience of logically contradictory things etc.) It is possible for a man to maintain some particular belief in the face of all kinds of falsifying evidence; no matter what happens the belief can stand, for the man always has the option of adjusting other statements of his system in order to account for the counter-evidence without touching the privileged belief.

For instance, if his tactile sense tells a man that a reed which is extending above the surface of the pool of water in which it grows is straight, the falsifying evidence of his visual sense (the reed appears either crooked or broken) will usually not push him from his belief that the reed is straight. The tactile impression is granted a privileged status, and the visual impression is accounted for in

various ways (e.g., light refraction, etc.). However, it would be just as possible for a man to maintain that the reed is really crooked, and then account for his tactile impression in various ways. His system of beliefs faces experience as a corporate whole, and revision can strike anywhere; beliefs do not undergo empirical scrutiny one by one. If the thing of which a man is most certain is that monkeys eat bananas, that belief will not be tested in isolation of other claims. It is for that reason that a man can devise a reply to *any* counter-example or empirical experience which might tend to suggest that some monkeys do *not* eat bananas; the man can revise other beliefs instead of his claim about monkeys and bananas - even going to the extreme of appealing to hallucination or to a wicked plot to deceive him, etc.

Positivism was misled by thinking that an isolated statement has a particular, unique correlate in sense experience which necessarily and sufficiently confirms or infirms it. However, because no particular experience is necessarily linked with some particular statement, it is misleading to speak of *the* empirical content of an individual statement and to speak of a particular experience (or set of experiences) sufficiently confirming or falsifying a corresponding statement. Because our belief-systems are under-determined by empirical observation, incompatible systems can often accommodate the same set of direct observations equally well - even though the response to some particular experience varies. Experience does not exhaustively regulate our knowledge-claims; nor *could* it do so. A conflict between experience and our beliefs will occasion a readjustment somewhere in the body of our epistemic commitments, but counter-evidence does not in itself show *which* of the statements in our network of beliefs must be altered. There is great latitude of choice as to which statements to modify in the face of a single contrary experience. Thus it is a theory as a whole, not any one of its constituent claims, that is subject to verifying evidence or counter-evidence in observational experience. From person to person the adjusted portion of a theory can vary, from its observation statements (dismissed as illusion) to its logical laws (now admitting of exceptions). The statements of a system will be inter-connected in various ways, and thus a modification at one point will occasion changes elsewhere as well. For these reasons it is mistaken to think that statements can be tested one by one in some indisputable fashion.

We would conclude then that it is wrong to seek a boundary between statements which are verified by a *particular* experience and those which are true come what may (i.e., verified by every experience). *Any* statement can be treated as subject to revision, whether it be a law of logic (e.g., the law of excluded middle, revised in order to simplify quantum mechanics) or the central paradigms of science (e.g., Kepler's revolution against Ptolemy, Einstein's over Newton, Darwin's over Aristotle, etc.). Any statement can be treated as immune from revision (confirmed by *every* experience); it can be held as true "come what may," just as long as we make drastic enough adjustments elsewhere in the system. Even a direct observation statement can be held as true in the face of recalcitrant experience by pleading hallucination or amending your logical laws, etc. Consequently, no statement is "analytic" to the exclusion of others. Within any particular system it is possible to distinguish the firmly entrenched statements which we are extremely reluctant to give up from those which we are more willing and ready to abandon under certain experiential conditions. However, there are no statements which in themselves depend for their truth on a *direct*

*confrontation* with experience, and there are none which in themselves derive their truth from language alone. There are simply more and less entrenched statements, more and less significant statements, etc. Therefore, it is an illusion to distinguish between individual statements which are *immune* from revision (analytic) and those which are *subject* to revision (synthetic). The final attempt to distinguish analytic from synthetic truths must be dismissed as inadequate.

Conclusion and Consequences

It is now apparent that the attempt to find truth which is insulated from the world of contingency and uncertainty by classifying some statements as analytic (and hence necessary and *a priori*) is a misguided philosophical maneuver. The idea that truths can be divided into two classes namely, empirically significant yet contingent, or trivial yet necessary and that infallibility pertains only to conventions of language is an insupportable dogma. The analytic/synthetic distinction is not lucid or defensible; it has not been adequately explicated, and thus its application lacks justification.

In the course of arriving at this conclusion about a pervasive philosophical prejudice we have uncovered many valuable insights of epistemological significance. They bear repeating. Every thinker will grant a preferred status to some of his beliefs or knowledge-claims; such statements in his system of thought are privileged in that they are not allowed to be overthrown by isolated experimentation or simple experience. Within a particular conceptual scheme there will be central paradigms of truth. These will be accepted as immune from revision as long as the conceptual scheme remains unchanged. Little *obvious* argumentation is offered for these paradigms, but they are not arbitrary or insupportable. These are *substantive* truths, even though they function somewhat like stipulated truths. These basic convictions or presuppositions are not true in virtue of language, or words, or definitions alone; they have factual content and significance. What a man will deem rational to give up will be relative to his belief system and its central paradigms. Men who are taken to be "rational" will nevertheless differ among themselves on which truths should be presupposed; differences of opinion evidence themselves even with respect to allegedly necessary and "analytic" truths. Conflicts are even possible over the truths of logic. More broadly, different fundamental, central, or basic beliefs will bring with the various standards of reasonableness; another thinker is thought to be "irrational" because his outlook does not square with one's own basic beliefs or presuppositions. Of the beliefs in one's system of thought some will be more, some less necessary; some beliefs will be treated as more fixed or entrenched than others, and likewise some beliefs will be given up more easily than others. The statements of one's system of thought will not be completely determined by empirical procedures, and they will not be tested one by one, in isolation of other statements. When a central conviction or presupposition is altered, it will often be difficult to say whether this represents a change of belief or a change of meaning; at the most basic level in one's thought meanings and beliefs are not sharply separated.

What the above observations amount to is this. Different people will set apart different truths which are to be accepted under any and all circumstances; these statements will be a subset of the whole system of beliefs. Because such statements are centrally located within one's network of beliefs they will strongly resist revision; within that conceptual system they will be given special treatment. They represent one's epistemological priorities or what he takes as logically primitive. These principles are employed in making predictions, in judging other claims, in relating various beliefs to one another, etc. One's system of thought as a *corporate whole* encounters the tribunal of experience, and recalcitrant or falsifying experience *will* force revisions somewhere in the system. However there is no set portion of the system which must be revised in response to some set experience; which beliefs will undergo alteration will depend on the presuppositions which are being used - the presuppositions being the very least likely beliefs to be revised. When the presuppositions are abandoned we have, not just a change in attitude toward particular facts, but rather an extensive shift in one's concepts, standards, or paradigms.

Simply given a true statement in some natural language, who can say whether it should rank as immune from revision or not? Nobody can tell just from the isolated statement itself. It all depends on its place in a network of thought, its position in one's conceptual system. Which statements should be taken as certain and granted revisionary immunity cannot be determined simply by the notations of a language (as has been erroneously thought with respect to "analytic" truths). Which points of truth can be properly taken as the firmly entrenched beliefs of a system of thought? That is like asking which geographical points in a country can be taken as starting points for a trip. The entrenched truths will vary from person to person, relative to one's manner of life, goals, experience, etc. *Any* statement can be treated as immune from revision - immune no matter what a person observes (provided appropriate adjustments are made elsewhere in his conceptual system). Deciding which statements among the competing claims *should be* and *properly are* immune from revision is one of the most significant and difficult tasks of philosophy; the matter cannot be easily resolved by appeal to a muddled distinction between analytic and synthetic truths.

The human epistemological condition, then, is characterized by adherence to presuppositions which resist falsification and yet cannot be characterized as trivial. People have beliefs to which they will cling though everything else fails. Their thoughts and lives are governed by such presuppositional beliefs; whatever is inconsistent with them is to be eliminated. The presuppositions of a system of thought will be the standard of truth and evidence in it. They will reflect a person's most basic commitments and will affect all areas of his life. Therefore, even though they will be taken as certain (and not simply probable), they will be far from trivial or simply conventional. Indeed, when all of the superficial cosmetic of objective and unemotional academics is stripped away, these presuppositions will be seen as matters of passion and highest personal concern. The meaning of one's life is usually tied up with his presuppositional beliefs, and consequently they make a difference in all of his concerns, behavior, thoughts, etc. Revisionary immunity here does not imply that such presuppositions are informationally vacuous or insignificant! It is just because these beliefs are granted revisionary immunity that they *are* significant, substantive, and far reaching in their effects.

It should be noted in passing that there are many *degrees* of revisionary immunity exhibited among the beliefs of one's system of thought. That is, some beliefs are more, some less, firmly entrenched in our thinking. Each belief governs one's behavior and reasoning to some extent, but those which are least extensive in their effect and least firmly entrenched will be those which are the first to be revised or repudiated when his system of thought is challenged by counter-evidence. Every new experience and all new knowledge will be fit into our system of thought in such a way that a minimum of intellectual labor and of life-style alteration is necessary. The most firmly entrenched of our beliefs will call for the greatest revisions throughout the system of thought and behavior, and thus they are relinquished last of all. One will require more than usual counter-evidence before he will abandon his presuppositional commitments - if he will abandon them at all (rather than suspecting the alleged "evidence" in some way instead). Furthermore, it should be noted that two people can have the same presupposition and nevertheless develop differing systems of thought on the basis of it; this is because their secondary commitments, experiences, philosophical abilities, training and social influences will be different. Presuppositions have the greatest control over a system of thought, but they are not the only factor in that system's development. Likewise, people who share presuppositions can respond to counter-evidence in different ways; the desire for simplicity, minimal disturbance, and social acceptability can lead people to seek consistency for their thoughts in different directions.

Analyticity and Apologetics

The above study and its conclusions have a special bearing on Christian apologetics. In the first place, the popular notion that a statement is knowable only by empirical experience or by definition becomes untenable with the failure to draw a cogent and sharp distinction between analytic and synthetic truths. The fact is that our substantive beliefs are under determined by empirical experience. Human knowledge has a pervasively theoretical (or theory-governed) rather than observational nature. This is not to underestimate the place of empiricism in epistemology or to say that knowledge can be completely divorced from empirical experience. But it is to recognize that empirical procedures do not, and could not, determine and justify all of a person's knowledge-claims. One's system of thought is regulated by presuppositions which are *more* than trivial definitions and which *surpass* the warrant of direct observational experience. There are statements which even the empiricist will claim to "know" and nevertheless cannot be classified as either "analytic" or "synthetic" (e.g., "There is a past," the laws of natural science, the principles of logic, moral obligations pertaining to honest scholarship, etc.).

The two most popular polemics against Christianity in twentieth century philosophy have rested on the analytic/synthetic distinction. Verificationalism declared that meaningful statements were either analytic or empirically verified (synthetic); however, the numerous problems afflicting this attitude have been rehearsed above. The distinction it relies upon is obscure, the standard of verifiability is such that any statement can pass its test, and the positivist criterion cannot pass its

own requirement. Seeing this, some philosophers continued to charge Christianity with meaninglessness, saying that its adherents are reluctant to allow any experience to falsify its claims. Because nothing is allowed to count as a disproof of Christianity's assertions, they are vacuous or meaningless, it was claimed. Because nothing is at stake for the believer, nothing is really being asserted. However, it turns out that in actuality *every* person has presuppositions which function in exactly the same way - even the philosopher who attacks the faith. These presuppositions are such that, aside from a theoretical revolution in one's thought, no evidence is allowed to count against them; they are held immune from revision. Yet these presuppositions are anything but trivial or vacuous; they are highly significant and make all the difference in the world. The Christian can thus hold to the infallibility of Scripture in the face of counter argumentation and (alleged) evidence *without* thereby reducing the Bible's claims to analytic trivia. What Scripture says is "synthetically" true, even though it is "analytically" certain. The breakdown of the analytic/synthetic distinction prevents the falsification-polemic against Christianity from having any force (unless it undermines *all presuppositions*, anti-Christian as well as Christian). We are not compelled to choose between a merely probable and fallible set of empirical claims and a meaningless or trivial metaphysic. Therefore, neither verificationalism nor the argument from falsification conditions are telling against the Christian faith; all philosophers have presuppositions which defy the analytic/synthetic distinction. And because that distinction is obscure and unjustifiably applied, such presuppositions are in no jeopardy.

In the final analysis it turns out that everyone *treats* some statements *as* "analytic." That is, certain truths are thought of as carrying their evidence inherently and are granted epistemological primacy or revisionary immunity. These presuppositional truths control our concept of evidence and verification; they are paradigmatic and criterial. They even govern what we deem to be possible (remember, to deny an "analytic" truth is to state what is impossible, for "analytic" statements are *necessarily* true). Any reasoning or evidence which is adduced in order to refute these presuppositions is itself called into question; revisions will be made anywhere else in one's system of thought before he will relinquish his entrenched beliefs. To treat a statement *as* "analytic" means that it has ultimate authority in one's thinking and governs his overall perspective. To treat the statement as a presupposition is not to make it uninformative or meaningless. To utilize an "analytic" truth (or presupposition) is to show that one *understands* its full *meaning*, and meaning is more than linguistic notations; it is part of a way of life. People, social customs, attitudes, practical use, and much more are necessary to understand an expression in language. When one accepts a presupposition (or a truth treated as "analytic") he makes a way of speaking, a context in life, and an application his own. That is why a particular usage can be rejected without involving yourself in self-contradiction. To insist that "Business in *not* business" is not self-contradictory; rather, it is a rejection of a particular outlook and way of life. There are no sentences which derive their truth from language alone. The statements which a person treats as "analytic" or presupposes reveal his basic life commitments. Because everyone has these basic beliefs, and because of the function such presuppositions have in one's system of thought, apologetics will ultimately become a matter of argumentation at this fundamental level.

Finally, the failure of the analytic/synthetic distinction indicates that the consequences of holding to it which were enumerated earlier should be seriously challenged. Their repudiation has noteworthy implications for the practice of Christian apologetics. It now appears that statements are not tested one by one or considered in isolation; rather, systems of beliefs as a whole are subjected to scrutiny. Apologetics is not a matter of arguing over a few individual statements here and there, but instead whole worldviews are in collision. The apologist's method of defending the faith, then, must aim to undermine the unbeliever's corporate system of thought and establish the Christian perspective as a whole.

Next, no statement is automatically immune from revision; such immunity is granted in the context of a system of thought. Necessary truth cannot be discovered in some impersonal world of language, and no truth is insulated from the experiential world. The Christian will seek infallibility in the word of the living and true, *personal* God; His truth makes a great difference to one's thinking and experience. It is immune from revision, not because of the nature of language in some sense, but because of the nature of God Himself. Revisionary immunity can be found only in God's personal communication, and it is misplaced when located in the trivial conventions of man. The analytic/synthetic distinction has had the effect of sending men in search for certainty which is independent of God. Furthermore, by now we would recognize the mistake in holding that statements which are granted an immunity from revision must be non-informative and make no difference to the world of experience. To treat a statement as firmly entrenched is not to empty it of its significance or content.

Moreover, not all statements are treated on an equal footing and uniformly subjected to the standards of empirical evidence. Some statements in a system of thought are more basic than others and are evaluated in a different manner than others; they are considered to have a special claim on our adherence because they regulate our standards for evaluating further statements. Empirical considerations are never final in the testing and adoption of such basic statements, but in fact empirical considerations actually rest on other commitments, are governed and evaluated by more basic presuppositions, and cannot be expected in themselves to compel a revision or replacement of one's presuppositions. The truths which one takes as paradigmatic and immune from revision will govern his epistemological standards of evidence, justification, etc. Consequently, the apologist is misled if he attempts to make empirical argumentation of philosophical methodism decisive for his defense of the faith. Only a presuppositional apologetic will finally be adequate to the needs of the situation. In principle, logic and experience can be rendered impotent at any particular point by the use of appropriate presuppositions, and thus if our evidence and reasoning are to have force they will have to be rooted in considerations which are more central or fundamental. It is obvious that in practice the claims which are made for empirical or logical arguments and their supposed decisiveness are exaggerated; these claims would fare well in the presence of the traditional analytic/synthetic distinction. However, that distinction does not withstand the challenge for explication.

With the sharp distinction between analytic and synthetic truths being repudiated, philosophy is no longer sharply separated from science (i.e., a concern with essences or meanings is not divorced from a concern with facts). Ontological questions come to be on a par with questions of natural science, for the boundary between the two is blurred by the presuppositional nature of belief-systems. Scientific theories and metaphysical claims are involved in the centralities of a conceptual system, and neither has a prior claim to credibility. An absolute distinction between analytic and synthetic truths would give a special status to science; however, the failure of that distinction indicates that neither science nor metaphysics is any more or less a matter of "fact" than the other. Considerations of truth and knowledge are a function of presuppositions, and the nature of those presuppositions could be naturalistic for one man but supernaturalistic for another. The resolution of their disagreement cannot be simply consigned to science and logic, unless one is satisfied with veiled question-begging.

Knowledge is not simply a matter of observable phenomena and definitions. For the apologist to think that it is, he will have a deeply distorted conception of what is required of him in defending the faith. The knowing process and the objects of knowledge themselves will be misconceived. Clarifying the nature of your presupposed beliefs is the most important step toward a satisfactory apologetic. We must become clear about the role played by presuppositional truths in our system of thought before we can gain an adequate view of the world, knowledge, and disagreements between various thinkers. One's view *of what it is to have and to gain* a particular view about the world, man, and God will greatly affect his very *view itself* of the world, man, and God. Hence the apologist should be very mindful of the implications of the breakdown of the analytic/synthetic distinction. That failure shows that revisionary immunity is a function of presuppositions and thus that the defense of the faith (defending its immunity from revision) must be presuppositional in character.