

PHILOSOPHY AS PERMANENT REVOLUTION

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I. A POLEMICAL PREFACE.

Readers of 1984 will recall the function that Winston Smith performed for Big Brother, namely, rewriting news stories of bygone years so as to have them step in line with the current ideology. In this way, any historian would plainly see that Big Brother has acted coherently and purposefully: Present enemies are anticipated; economic policies are shown to have successful precedents; laws are justified by the mayhem that existed before their enforcement. That George Orwell conceived of such a function in the ultimate bureaucracy is a testimony to his subtle appreciation of how easily rational minds are persuaded. Erstwhile totalitarians have too often failed to realize that more can be gained by fitting their demagogic whims into the principles of rationality than not. And why is this so? First, these principles--epitomized by Aristotle's three axioms of natural deduction (i.e. identity, noncontradiction, and excluded middle)--are defined well enough such that open violations are easily spotted. But second, these principles are largely syntactic ones, which is to say, governing the form rational discourse must take; as such, they are designed to accomodate a wide range of content, some of which may be so indefinite as to be accomodated under several forms at once. It is in this realm of suggestiveness that the totalitarian can convince a people on their own terms that his view is really their view.

But we need not be so sinister in our examples, so let us talk about "great philosophers" instead of totalitarians. As much as members of the profession hate to admit it, the fact of the matter is that the great philosophers from Plato and Aristotle to Wittgenstein and Heidegger have somehow managed to weave their doctrines into the interstices of rational discourse on the basis of systematic ambiguity, overdrawn analogies, and ~~overall~~ ^{global} inconsistency. It is probably only a little unfair to say that the primary role of the exegete of philosophical texts is to show how the most significant statements in Western Civilization, as originally uttered, would not pass as sound reasoning in a freshman philosophy course--unless a host of highly idiosyncratic (even given the historical context) premises are granted. Hopefully, philosophical professionalism has not been so successful that the reader does not find this state-of-affairs a little strange. Indeed, we are taught to be as clear and rigorous as possible, to avoid metaphor until our analytic techniques can go no further, to

construct relevant examples for our position, and to anticipate possible counterexamples. Historically speaking, what happens when a philosophy meeting these criteria is advanced? It is difficult to illustrate our point here because such a philosophy tends to be forgotten very quickly. Of course, that may be what is supposed to happen: Like scientific theories, philosophies should be falsifiable--so one apologia goes. But what is gained by philosophies being falsified? And if we consider what it would mean to meet all the professional criteria, it appears that the philosophy in question would have to be very well-defined indeed--so well-defined that not many conceptual possibilities would have been eliminated by its falsification.

Perhaps the most venerable principle of philosophical professionalism, which also seems to carry the full weight of rationality behind it, is that one should answer the question at hand. This may be called "the principle of relevance." If such a principle is really in force, then when certain questions are dropped from consideration we should be able to locate how they were resolved. But of course, history testifies to the contrary: Questions seem to wax and wane in importance, and sometimes even fuse. Kant claimed to have solved the problem of objective reality by fomenting a "Copernican Revolution" in philosophy. As the metaphor suggests, this revolution was one of perspective: Rather than trying to empirically or rationally prove that there is an objective reality, Kant argued that objective reality is a presupposition of our knowing the world. This is very clever, but does it meet the principle of relevance as ordinarily understood? Probably not, for a rather pressing philosophical question has been "solved" simply by turning the unexplained phenomenon into a presupposition. It is not surprising then that most of Kant's colleagues did not find his solution intellectually satisfying in the least. But do we even remember the names of Kant's colleagues these days? The reader should notice that in posing this question, we are not trying to equate "the secret for becoming a great philosopher" and "the true philosophical method." Instead, we are testing the criteria of philosophical professionalism against the history of philosophy. Supposedly, these criteria are formulae for getting a philosophy into the forefront of discussion. If they succeed, then the philosophers who are ~~perennially~~ ^{Perennially} discussed--"great philosophers" (they need not be well-liked)--should meet the criteria. But they clearly do not.

Furthermore, history is not likely to be playing tricks on our interpretations, since the lack of professionalism in the great philosophers was quickly noted by their contemporaries. In this respect, the objections to the Meditations of Descartes are perhaps the most notorious. Astute critics like Pierre Gassendi and Antoine Arnauld suspected that Descartes was systematizing his intuitions rather than deducing the ontological order of the universe from first principles. And the Cartesian dialectical method of refining thought as it is being thought already concedes the point. In addition, the replies given by Descartes to his critics suggest further that in general he concocted his positions as he went along. This is in marked contrast to philosophers who are taught not to "think on paper" but to write only after the major arguments have been sketched out. It is this canon of professionalism that leads the lay reader to wonder, after all the impeccable reasonings have been put forth, why the philosopher wanted to consider such an issue in the first place. This is not a problem for the reader of Descartes who is initially introduced to intuitions about the world as familiar and vague as his own.

It is, however, a testimony to the power of the profession that whenever philosophers have attempted to contest the canons they have been reduced to hysterical babblings--witness Nietzsche and Feyerabend. Indeed, rather than abetting their cause, these philosophers have simply bolstered the party line that beyond the rational principles of philosophical professionalism lies cognitive chaos. Feyerabend is especially guilty of doing his cause a bad turn insofar as he maintains that philosophy and science should have no method whatsoever. Instead, he should have noticed that throughout the history of thought there has been, as it were, a "twilight zone" in which rational principles apply indeterminately such that virtually any position could be made persuasive--provided that it is formulated in just the right way so as to draw attention away from its own systematic ambiguity, etc. and toward the interesting consequences that follow from accepting it. Characterizing Kant as we just did does not advance the credibility of his position, and, not surprisingly, Kant did not express himself in this manner (throughout this discussion we are not concerned with whether Kant himself was aware of the need to be persuasive, etc.).

Consider the beginning of the Critique of Pure Reason in light of its conclusions:

Kant squarely starts off with an acceptance of empiricism, and then begins to wonder exactly what such a position commits us to. Little by little, the transcendental framework is then built up: If things are represented, they must be represented in space and time--fair enough; furthermore, things are differentiated categorically within space and time--this is true too; finally, things are categorized only insofar as the world is made sense of as a unity--also admissible. Thus, by the time we have assented to this series of a fortiori arguments, Kant is on the verge of reintroducing God into the world as a regulative principle of reason! And the effects of these maneuvers were not simply limited to the texts of one virtuoso thinker. Just consider the empiricists before Kant (e.g. Berkeley, Hume) vis-a-vis the empiricists after Kant (e.g. Whewell, Mach). The eighteenth century empiricists toiled over the problem of induction for fear that if knowledge could not be derived with certainty from phenomena then science would be rendered impossible. In contrast, the nineteenth century empiricists showed how science progresses only if the phenomena are organized in accordance with certain (transcendental) principles like simplicity, unity, analogy, etc. The earlier empiricists would be surprised by how easily the later empiricists acquiesced to the aprioricity implicit in such "regulative principles." In a sense, Kant succeeded where Leibnitz before him had failed by demonstrating that his position was a natural extension of the empiricist's rather than in direct opposition to it. Of course, Leibnitz had also been true to himself in opposing, say, Locke; but this was not the best strategy for keeping his a priori rationalism alive. As every political scientist knows, there are two ways to deal with an enemy: confrontation (à la Leibnitz) or infiltration (à la Kant). In the latter case, the protagonist works his position so deeply into the structure of the antagonist's position that the antagonist eventually can function only by conceding the strength of the protagonist. In a nutshell, this is how great philosophy--philosophy that keeps itself alive--works.

But unlike politics, philosophies always have the alternative of literally not recognizing each other's existence. The differences ^{currently} separating Anglo-American from continental schools of philosophy--or, roughly speaking, "positivism" from "phenomenology"--amount to a difference over how philosophy should be conducted. Each sees the

other as having renounced the classical task, and thus may be properly ignored as no longer practicing the discipline. And despite the efforts of especially Richard Rorty (in Philosophy and the Mirror of Nature) and Karl-Otto Apel (in Towards a Transformation of Philosophy), the two sides seem to be as far apart as ever. Indeed, as the continental tradition has become more well-known in the English-speaking world, the positivists have tended to feel confirmed in their suspicions that they had not been missing much by not reading French or German. The problem here is that the would-be synthesizers bring ^{a sense of either triviality or perversity} ~~either a sense of either triviality or perversity~~ to the task. For all his encyclopedic grasp of the two traditions, Apel wants to forge a synthesis on the rather banal notion that the positivists and the phenomenologists complement each other ⁱⁿ ~~by~~ virtue of their differing construals of what the philosopher ought to be doing. But notice that this alleged rapprochement is really nothing but an agreement to ground rules as to who can talk about what legitimately. Roughly speaking, Apel finds the positivists lacking in their appreciation of the hermeneutic method and the phenomenologists lacking in their appreciation of the scientific method. Thus, this is a strategy of mutual respect and, above all, ~~non-interference~~ ^{non-interference} not quite what we would want under the circumstances. Rorty, in contrast, reckons that the positivist tradition must die in order for the true way of philosophizing, an hermeneutical phenomenology, to thrive. Again this is somewhat roughly put, but it captures the perversity of his strategy, which itself rests on a nihilistic interpretation of continental philosophy that promises the dissolution of the entire discipline in the long run.

Our suggestion, as manifested in the papers composing this volume, is simple: Do philosophy as if there were no communication problems between the two traditions. If we are successful--which is to say, the philosophical approach of these papers is viable--then the reader should conclude that it is virtually impossible to appreciate the full scope of any issue without thinking "through" the two traditions. Thus, our solution is to have the positivists infiltrate the phenomenologists, and vice versa. The astute reader will recognize at this point that we will have to play Winston Smith in order to have any chance of success. In other words, conventional interpretations of the history of philosophy are probably the biggest obstacle

to unifying the discipline. This is most vividly illustrated in how very easy it is to write a history of twentieth century philosophy that mentions either Wittgenstein or Heidegger, but very difficult to write one ~~containing~~ ^{mentioning} both. To most historians of philosophy this difficulty is simply a given: In order to understand the nuances of philosophical developments in the twentieth century, we need to consider (so the historians say) whose position a particular philosopher was trying to respond to-- and, as it happens, the genealogies of positions containing those of the two aforementioned philosophers do not intersect. And as the saying goes, "good philosophy requires good history." But does it really? And what is "good history" anyway? It should strike the reader as a little strange that a discipline which has devoted so much of its energies in the modern period (and in both traditions) to debunking the ~~correspondence theory of truth~~ ^{pretenses of realism} should grant such a lofty normative status to history-- perhaps the most unruly discipline in the humanities which (if it can be said to have a method at all) rests on the ~~very correspondence theory of truth (insofar as history is concerned with recording what "really happened")~~ ^{Rankean dictum that the historian record the past as it happened.}. Thus, to say that good philosophy requires good history is to allow the blind (history) ^{to} lead the myopic (philosophy).

Furthermore, the alleged link between good history and good philosophy does not even stand up to any ordinary construal of the historical "facts." Can any of the great philosophers be said to have had an historical sense of their discipline? Only insofar as the history leads up to them. Witness Aristotle on the presocratics, Descartes on the scholastics, Kant on the rationalists and the empiricists, and Hegel on everybody else. In each case, the reader is presented with a rather compressed and ideologized history of the discipline that for all its stereotyping of predecessor issues, etc. probably forms more a part of the "historical consciousness" of philosophers than the meticulous studies of historians do. This point especially rings true when we consider how the historical courses are divided up in the college philosophy curriculum. For example, students get the impression that the seventeenth and eighteenth centuries consisted of battles between "rationalists" and "empiricists" until Kant declared a cease-fire. And as the closing pages of the Critique of Pure Reason show, this is exactly the impression Kant wants us to have. Does this mean that we have all been hoodwinked? Not at all, as long as we consider the persuasive function

of history. Presumably, if the historian of philosophy is to be of any value to the discipline, he must be able to render the history intelligible and, if he is really adept, to sketch the future of philosophy in terms of new fields of inquiry. In other words, the best historian would tell us "where" philosophy is going as a discipline on the basis of "where" it has been. And this is not mere soothsaying but substantive philosophizing in its own right: The historian would validate his prognostication by ~~demonstrating~~ ^{exemplifying} it. Most meticulous histories fail dismally at this task because the historians attempt to adopt the perspective of every philosopher discussed so that no coherent, let alone purposeful, picture can result. The principle ~~is~~ ^{we suggest here} is quite simple: A systematic ~~is~~ ^{falsehood} is more persuasive than a collection of incoherent truths. And why shouldn't it be? More things are explained by the former than by the latter so that we are able to see at a glance what further problems need to be addressed. In addition, ~~no~~ good arguments have yet to be given for the truth being the most rational belief to hold--especially as understood here, in opposition to the systematic falsehood. All this is really not as sinister as it sounds, once we take seriously the following question: What precisely does doing good philosophy have to do with getting straight what previous philosophers have said?

(INSERT # 1)

In keeping with the above comments, we have tried to construct a philosophically interesting text at the expense of ordinary historical canons. And, as we have suggested, this is not much different from what viable philosophy does normally. Footnotes have been eliminated only because their appearance would be misleading in light of what we are trying to do, since we use evidence as a lawyer would rather than as a scientist "should." And by parity of reasoning, just as it is not ethical to ascribe to oneself what others originally thought, likewise it is not ethical to ascribe to others what only oneself could be perverse enough to think. Authors and texts are mentioned just in order to orient the reader to the lines of thought that will be pursued. And "lines of thought" or "lines of inquiry" should be taken very seriously. When we talk about Carnap, say, we are not trying to reproduce his text faithfully but to pursue a "Carnapian" mode of thinking. The reader may regard this as the author playing the part of Carnap for purposes of making the narrative flow smoothly: When all is said and done, Carnap himself really has very little of

interest to say about phenomenological reduction. However, we have taken the liberty of extrapolating a position for him. Also, some philosophers (and the author of this volume may be a prime example) break into banalities at crucial points in the discussion. We have tried to enliven their arguments at those points. Indeed, the reader may be disappointed when he turns to, say, Apel's text, in light of the position we have attributed to him. A bibliography has been provided to aid the reader in his disillusionment.

We should emphasize that the papers presented in this volume do not represent ^{so much} a unified position held by the author as they represent a certain way of doing philosophy that is able to make sense out of many seemingly irreconcilable positions. In short, they are dialectical experiments. Again the principle is simple and practical: A position is understood when it can be altered to be made more interesting. Now what do we mean by "more interesting"? Roughly speaking (and the reader is respectfully asked to read the volume for a more detailed answer), a position is made more interesting when it is made relevant to issues that were previously considered irrelevant to it. If this definition reminds the reader of the one used by intelligence testers to measure creativity (namely, the ability to use ordinary items in unusual contexts), then he is on the right track. So much of twentieth century philosophy has been devoted to condemning the discipline for abstracting either commonsensical or scientific insights to such a degree as to make them impracticable to all but the handful of positivist logicians and phenomenological ~~metaphysicians~~ ^{hermeneutics} who earn their living by performing these abstractions. And for the most part, the discipline has deserved to be censured in this way.

However, as Rorty has astutely noted, what is really being criticized is a certain model of philosophical activity that is associated with ^{thinking per se} ~~contemplation~~ and the ^{mental representation} ~~passive description~~ of the world--the so-called "mirror thesis." But Rorty also thinks that the legitimacy of philosophy as such may hang on the acceptance or denial of this thesis. We could not disagree with him more on this point: Philosophy has the potential for regaining much of the "theoretical-as-practical" power it had over Western culture during the classical and medieval periods. But philosophers must turn their sights from traditional metaphysical models and toward a program of des--

cribing the world only ~~by~~ ⁱⁿ virtue of prescribing it. In short, philosophers should be in the business of changing minds--threatening strong foundations and shoring up weak ones. In their heyday, the sophists made this task look easier than it actually was--and Socrates capitalized on their attitude to portray ~~the sophists~~ ^{them} as intellectually irresponsible, a view that is to this day associated with the name "sophist." But notice that Socrates was able to make his charge stick only because the sophists did wield so much real power, such that it mattered whether they were intellectually irresponsible or not. (Can the same claim be made today?) And to the Athenian legislators, for whom Socrates was just another sophist, this power--especially when directed toward the youth--seemed very real indeed; hence the famous trial and death that launched Socrates into immortality.

For better or worse, in the modern period the only philosophical position that has combined a catholic and sophisticated theoretical interest with an explicit commitment to changing minds is Marxism. And again for better or worse, Marxism has been remarkably successful in both arenas, especially considering the competitors it has had to face. Yet because of Marxism's practical commitments, philosophers have refused to think of Marx in the same terms as they would Kant, Hegel, Wittgenstein, and Heidegger. Marx is supposedly a "political theorist," not a "real" philosopher. His practical commitments are taken as sufficient reason for holding his theoretical observations suspect. These negative responses testify to the impotence of philosophical opinion outside the profession today. We are all familiar with the scholarly and polemical literature "refuting" the tenets of Marxism. And after it has all been consumed, the reader may rightfully wonder how can so "fallacious" a way of thinking have ~~so~~ ^{such} great an impact on the world. The philosophers would have us believe that the ordinary person is quite desperate, gullible, and perhaps even irrational--and so he cannot be expected to see the truth of the matter. The author finds this a rather far-fetched explanation and would prefer to think that philosophers have lost touch with the intellectual virtues that the world recognizes. ^{the very} At least, the success of Marxism is a phenomenon that deserves more philosophical attention.

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This book is dedicated to my mother.

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II. A SOBER INTRODUCTION

Perhaps the most potent nonsequitur in philosophy--or any argumentative discourse--is that once a thesis is conclusively refuted it no longer is relevant to the discussion at hand. On this view, once identified and eliminated, a falsehood can be safely forgotten without fear of its infecting theses accepted as true or ^{perhaps} even cropping up at unsuspected places further along the discussion. If falsehood is to be preserved at all, it is only in the didactic sense of reminding the discussants of how the path of reason can go astray--true to the etymology of "error." But notice that the move to "eliminate error" presumes that falsehood can be treated symptomatically; in other words, to remove the thesis deemed false is to remove exactly what is false in the discussion, and thus there is no need for a complex etiology. The localized nature of falsehood is reflected in several, otherwise divergent, approaches to truth: The false thesis is the one ^{which, if true, would} require changing the truth-values of too many other theses; the false sentence is the one that disrupts the continuity of the author's text; the ^{knowingly} false utterance is the one that violates the principles of ^{sincerity and charity} ~~communication~~ presupposed ⁱⁿ all communication. Notice that these usual treatments of falsehood lend credence to the "redundancy" theory of truth espoused by, among others, Frank Ramsey and Peter Strawson, which stipulates that "is true" may be appended to ^a ~~any~~ statement unless otherwise indicated--say, by refutation, incoherence, or deception. The presumption here is that truth is semantically primitive, such that falsehood ultimately is defined as the contradiction of a truth. But once revealed as a contradiction, the falsehood is consigned to another discipline--a "psychopathology of error"--which ensures the subsequent irrelevance of the falsehood to the mainstream discussion. On this view, to understand the nature of falsehood is to understand why it should not have arisen in the discussion initially; hence, the didactic role played by error.

But in spite of its nonsequitur status, "falsehood entails irrelevance" is taken to be unproblematic on the basis of the dubious heuristic principle that a truth is a more effective vehicle for discovering more truths than a falsehood is. Such a heuristic is dubious because there is what we will initially call a "Popperian" sense in which we learn only by our mistakes. If we perform a set of (experimental or mathematical) operations that always come up with the "right answer"--which is to say, the one anticipated--then it will never become clear in what sense we have access to the truth: Do we need to perform the entire set of operations, or are some steps (or a particular ordering of steps) merely redundant conventions that may subsequently lead us to draw false inferences from the truths we have already discovered? The problem is that in performing a set of operations that are sufficient for regularly eliciting truths we have not determined which of those operations are necessary. To

determine the necessary ones we would have to start anticipating points at which truths will not be elicited. Falsehood then becomes a vehicle for delimiting the sense in which our theses are true, or (perhaps more concretely) the domain of things to which our theses apply. A notable example of this procedure can be found in Niels Bohr's "correspondence principle" of scientific progress, whereby the applicability of a physical formula is dependent on the value assigned to a boundary condition, or "parametric variable". (According to Bohr, progress arises from one formula successfully encompassing at least the parameters of its predecessor.) To take the addition of velocities in the same direction as our example, if the parametric variable of the speed of light is taken to be "infinite" ("indeterminate" might be a better term to convey the irrelevance of the parameter for applying the formula), then the simple Newtonian sum of $v_1 + v_2$ follows. However, if the speed of light is rendered constant, then the special relativity formula of $(v_1 + v_2)/(1 + (v_1 v_2/c^2))$ follows, where "c" is the speed of light. From the second formula we can see that the difference between the Newtonian and relativistic sum will only be apparent for velocities approaching the speed of light. Otherwise--and this covers most applications of physical formulae--the Newtonian addition is sufficient to arrive at the right answer (and hence at this level Bohr would say the relativistic and Newtonian formulae "correspond"). However, if we take ~~the~~ ^{the Newtonian sum} as our heuristic--as nineteenth century physicists in fact did--then the anomalies of velocity addition for high velocities become more striking, since the initial formula was not designed with "potential falsifiers" in mind ^{that is, indications of} when the boundary conditions necessary for the applicability (or "relevance") of the formula have been exceeded. In general, we can diagnose the crisis of a Kuhnian paradigm of normal science in terms of the scientists not sorting out necessary from sufficient conditions for the predictive success of a formula--and thus not anticipating under what circumstances that success would end. In contrast, our "Popperian" prescription for scientific revolution is not to look for truths with truths (i.e. do not project the most probable hypotheses) but with falsenoods (i.e. project the least probable hypotheses) in order to define the boundary condition of the truth in question. Our revolutionary scientist is thus interested in being right about when he will be wrong, which is possible by virtue of his making predictions about the outcome of his predictions. This meta- or auto-prediction should be taken as the first clue to the necessary interdependency of truth and falsehood, which are themselves only two aspects of what all arguments are really about: presuppositions. In the foregoing case, we would be concerned

with what must be taken for granted (i.e. the boundary conditions) in order to predict that a formula will or will not achieve the right answer, and likewise, to acknowledge that the right answer has or has not been achieved. So goes the initial statement of our thesis.

The above considerations are guided by the unorthodox belief that because of its emphasis on logic and method rather than on any unique subject-matter, philosophy may be defined as the discipline with the ability to keep other disciplines in a state of permanent revolution. Despite its unorthodoxy, this belief seems to be assumed unwittingly by the sort of criticisms made by Thomas Kuhn against Karl Popper's characterization of the scientific method as one of "conjecture-and-refutation": Such a "philosophical" approach, argues Kuhn, fails to capture the cumulative and conservative tendencies of normal science. Of course, we can give a "Popperian" response, namely, that normal scientists are failed revolutionaries only because they are not yet fully self-conscious of their methods and so are unable to exploit their possibilities. Thus, as opposed to the Kuhnian (and perhaps commonsense) view that normal and revolutionary scientific activity involve radically different types of thinking, we would argue that they are the same activity marked by different degrees of self-consciousness or "knowing what one is doing." And so whereas Kuhn might say that a normal scientist wants to test the truth of an hypothesis (e.g. that light is wave-like) while a revolutionary scientist wants to challenge the presuppositions that make the hypothesis testable (e.g. that light is either particle-like or else wave-like), our "Popperian" selves would like to say that the latter is always possible but is most often inadequately realized in terms of the former. Notice that the issue is not one to be decided by an appeal to historical evidence, for the issue is itself a question of what is the most relevant description under which scientific activity falls. And also notice that the question of relevance is important not in order to determine the "fact of the matter" about how scientific thinking works but in order to persuade scientists to act as if ^{a particular} ~~that~~ description were true.

A priori there is no reason why these two tasks should lead to opposing results. Yet we emphasize this difference in order to counteract Aristotle's legacy to philosophy that the descriptive function of rational discourse merely amounts to "saying true things about the world," a presumption that underlies even views about the goal of ordinary communication. Instead, we would argue that language--as a primarily practical and only secondarily (~~as the means by which practice is effected~~) descriptive medium--includes within each purported description a prescription to act so as to

realize fully what one is persuaded of when he accepts a description as relevant to what he is doing. An obvious advantage of our position is that it removes any strong language/world distinction by making "linguistic events" as efficacious as ordinary "physical" ones: Thus, it would make perfect sense to say that one acts in a certain way because he accepts a certain designation as relevant to what he does. For example, a laborer busies himself in the workshop because he has been persuaded (perhaps unwittingly) that he is a "skilled craftsman" and so he acts so as to maximize the appropriateness of that title; if he thought that he were just another anonymous member of the "working class," then he might act otherwise—even though this "cause" would amount to little more than a change in titles. Marxists implicitly realize the prescriptive efficacy of descriptions when they stress the importance of the workers seeing their labor as "alienated," seeing management as representing "bourgeois interests," etc. Indeed, such can be taken as the thrust of Marx's injunction to philosophers in the Eleventh Thesis on Feuerbach to "change the world." A second advantage of our position, ~~which will become more evident as the thesis unfolds,~~ is that it places "rational reconstructionist" historiography (championed, ~~say,~~ by Imre Lakatos) at a higher level of methodological respectability than is usually accorded—indeed, higher than the ordinary empirical approaches. We would argue that determining what was or was not the case merely offers inchoate expression to the underlying question of what could or could not have been the case, the starting point of not merely a "philosophical history" but of any inquiry deserving the name "history." Thus—and here our "Popperian" selves leave Popper behind—interest in the truth or falsity of (logical or empirical) propositions signifies a partial understanding of the real interest of arguments, namely, in the relevance or irrelevance of the presuppositions grounding the possibility of those propositions being either true or false. In short, the archetype of all forms of argumentation is what in the spirit of Kant has been called "the transcendental argument."

Before contiguating to explicate our thesis, a question of precedents is in order. First, the seeds for our theory of descriptions as primarily prescriptions were ^{sown} laid in the philosophy of science with Nelson Goodman's "grue paradox" in Fact, Fiction, and Forecast. In this work, Goodman subtly shifted the emphasis in how philosophers addressed the relation between hypothesis and evidence—the so-called problem of "qualitative confirmation." Whereas Carnap and Hempel had sought the entailment relations between the two types of scientific statements, Goodman asked what hypothesis the scientist should "project" (orient his research program toward testing) in light of what the evidence tells him. "Grue" is a mythical color that appears green

before a given time but blue thereafter--that time commencing with the next experiment.

Thus, for a set of tests before the given time, both grue and green have identical supporting observation statements. On the basis of Carnap's descriptivist logic of confirmation, it is impossible to judge between these two equally well-grounded predicates, even though our intuitions are on the side of green objects not suddenly turning blue after a given time. Goodman suggests that ease of conceptualization and technical manipulation are implicit in the current use of "green" (at least vis-a-vis "grue"). Thus, the predicate may be said to have a "practical entailment." Second, something needs to be said about the logical status of presuppositions: They are absent from Aristotle's discussions of the syllogism, but they constitute an autonomous mode of reasoning (i.e. transcendentalism) for Kant. Perhaps the first text to recognize presuppositions as such is Antoine Arnauld's 1662 Port-Royal Logic, the Cartesian manual for reasoning. In the tenth section of his chapter on "Judgment," Arnauld introduces their significance--much as we have done here--in terms of the possibility of a contended point being conceded simply by entering the controversy. The classic case, of course, is John Stuart Mill's "When did you stop beating your wife?" Indeed, this question--rather than Socrates' "What is Justice?"--may well be the paradigm of philosophical inquiry--insofar as philosophy is the search for presuppositions.

One practical consequence of our thesis is that it becomes much more difficult to avoid the effects of a refuted argument, for if an argument is proven false in the "normal" sense then the truth entailed by that argument being falsified still shares the same presuppositions, which are what made it possible for that falsehood to be controverted by that truth. For example, in turning to Copernicus, we see his concern with fixing the number of epicycles at thirty-four rather than at Ptolemy's eighty as a bit of internecine polemics, which makes us wonder why be concerned about epicycles at all? In advancing this question, we appreciate both the irrelevance of epicycles to contemporary discussions of planetary orbits and their centrality as a presupposition common to Ptolemy and his Copernican antagonists. Furthermore, our motive for posing such a question is that Copernicus' persistence in defining his astronomy in Ptolemaic terms led him to follow up sterile lines of inquiry that were bound up with taking epicycles to be a relevant way of talking about planetary orbits. To prevent this historical blindness we wish that Copernicus had come up with a way of talking that preserved his astronomical insights, yet at the same time cancelled out the language of Ptolemy, whose shortcomings made such insights initially possible but now threaten to misdirect further inquiry. In short, we request what after Hegel is called "the determinate negation" of Ptolemy, which is to say, the negation not merely of Ptolemaic truths but of Ptolemaic presuppositions--such that

it should be possible to reconstitute the insights of Copernicus without any reference to Ptolemy whatsoever. In other words, once Ptolemy is determinately negated, or "sublated," he is made irrelevant. Indeed, the astronomy textbooks of today satisfy these Hegelian conditions, but we wish that Copernicus had written them. However, that simple refutations are ordinarily taken to be determinate negations is shown in what passes for revolutionary thinking nowadays. In particular, we have in mind Paul Feyerabend's attempts to revolt against positivism by challenging the possibility of designing an ideal methodology of science. But this is to go somewhat ahead of our story. We will return to the case of Feyerabend shortly, after introducing the reader to the author's method in the ~~first chapter~~ ^{accompanying essay}.

Let us begin by anticipating a "fundamental" complaint about ~~the first chapter's~~ ^{its} conception: "Positivism" and "phenomenology" are used with such cosmic breadth as to render them indecipherable, except as opponents in some vain Manichean struggle. Certainly, the reader will argue, our two antagonistic movements are not composed simply of a conjunction of compatible positions. Indeed, it is even questionable that the positions subsumed under either title bear a "family resemblance" to one another. Our defense will start by reconsidering the metaphor of "family resemblance" as a criterion for designating identity or essence. When Wittgenstein presented the notion in Philosophical Investigations he had in mind a disjunction of physical traits among a group of people that identified them as a family--not everyone need have the same features but each must have at least one trait in the disjunction. And indeed, philosophical movements and schools have regularly been cast as a family resemblance of theses--e.g., Leszek Kolakowski's Postivist Philosophy, which draws a composite portrait of positivism that is intuitively on the mark even though no particular positivist can be fitted into the picture. However, the metaphor can be explored further to unearth a "transcendental" interpretation, which is the one we adopt: Instead of looking for the family's phenotype (i.e. the brown eyes, brown hair, and snub noses, at least one of which each family member has), as Wittgenstein asks us to do, why not consider its genotype?

The genotype of, say, positivism consists of a series of presuppositions that are implicitly accepted in order to make disagreement possible. Feyerabend, in "Explanation, Reduction, and Empiricism," is as much a positivist as his rival Ernest Nagel merely by virtue of entertaining the possibility of two commensurable theories being the basis of an intertheoretic reduction. We can capture his position as follows: Only if two theories could be proven commensurable, would intertheoretic reduction then be possible; however, since two theories cannot in fact be proven commensurable, intertheoretic is not in fact possible. Thus, Feyerabend accepts the relevance of the

antecedent to the consequent as a necessary condition of its being brought ^{about} but disagrees as to whether the antecedent itself can be brought about. In this context, "positivism" becomes a much more formidable school of thought because the would-be critic cannot simply controvert a thesis, as Feyerabend does, but must make the entire controversy itself irrelevant by challenging the presuppositions that center it.

We are proposing an admittedly dialectical approach, and, as such, demands that the critic first set up the controversy so that the presuppositions centering it can be derived from the sense in which the two poles oppose each other. In other words, positivism cannot be superseded merely by making Nagel irrelevant to philosophical inquiry. Indeed, since Nagel can be opposed in many different ways, it is not even clear what such a proposal would mean. It must be remembered that presuppositions are of the possibility--not the actuality--of a thesis. And so what presupposes Nagel's position also presupposes his opponents. Of course, centering the controversy is not by itself sufficient to make it irrelevant, but by having delimited the presuppositions the critic now knows the sense in which he is able to oppose it. Thus, according to how these presuppositions are cast, the critic will have been virtually given the Archimedean fulcrum on which to set his transcendental lever. In the dialectical method this moment of transcendence occurs when the synthesis (i.e. the presuppositions grounding a thesis and its opponent) is regarded as a new thesis that can then be controverted from a new antithetical pole. At that point, the original controversy has been made irrelevant. In closing the first chapter we sketch how Heidegger in fact serves as such an Archimedean lever from which to transcend the positivist controversy over physicalist reduction.

The reader will already have noticed that we employ the turn-of-phrase "make... (ir)relevant" when theses usually are (ir)relevant to one another. It is this latter use that compels linguistic analysts to cry "Category-mistake!" whenever efforts are made to import terms from one discourse into another. However, in general we try to show there are no good ontological, let alone good strategic, reasons for allowing such an objection to hold sway in philosophy. In the ~~first~~ ^{accompanying essay} chapter, we have deliberately selected two positions that have no obvious relevance to one another--positivist and phenomenological uses of "reduction"--in order to show how relevance can be "made." The guiding principle of our so-called "rhetorical" approach is that the two positions must negotiate some common ground, which by no means implies achieving a watered-down compromise, but instead demands that both sides break new conceptual ground. And once this new conceptual ground has been broken, we can then ask what makes such a negotiation between the two positions possible.

In this respect, we oppose the two most commonly used philosophical methods,

which will be called "logical" and "grammatical." On the first approach (alluded to earlier in this introduction), the critic supersedes an issue by rejecting the false of two alternatives and strengthening the true so that it can no longer be susceptible to the thesis that has been proven false. Although this is perhaps the most common method of conducting philosophy in either the English or continental tradition, it suffers from several drawbacks that nevertheless have been accepted among the "brute facts" of philosophizing. For example, any criterion on which a controversy is decided always seems arbitrary and can be claimed to be biased against the position "proven" false. This arbitrariness may be grounded in the very fact that the two positions oppose each other. In other words, because there is no readily decidable answer to the question in dispute, the dispute is real; if the question were readily decidable, both parties would then presumably realize this and not dispute. Settling the dispute by appealing to criteria that both sides (ought to) accept as legitimate is therefore more a move of expedience for maintaining order within the discipline than a real attempt to deal with the dispute as a dispute. What would constitute such a real attempt? As indicated earlier, have the parties negotiate their controversy, and rather than expecting a "winner" and a "loser," expect a realization of what the controversy was about (i.e. what made it possible) so that it can be displaced by a new controversy.

A curious feature of the logical approach to resolving philosophical disputes is its presumption that at least one of the parties has been wasting his time arguing. There generally is ^(self-conscious) no attempt to "resituate" a "faulty" argument in a more amenable setting, or, if there is, the attempt is seen as gratuitous. The same applies to the "winner" accounting for how the "loser" went astray. And even when attempted, it usually amounts to little more than some condescending remarks about the misuse of language or a misunderstanding of the problem at hand. Once again, it is as if not only does the winner have the right answer but he is also the only one who knows on what basis he has won. Overall, we can trace the problem of the logical approach to its implicit belief that actual philosophical discourse is not essential to the question of whether a philosophical position is "true" or "false." Controversies persist only because our confusions persist, with such confusions taking many forms: posing the "wrong" questions, misunderstanding the opponent, reasoning fallaciously, etc. Thus, for the logical approach, there are "real issues" to be disputed not in the sense that each side necessarily holds a completely legitimate position but that the resolution of the dispute will reveal how legitimate the respective positions were: Error is required to highlight the truth.

In contrast to the logical approach, the grammatical approach has attempted to set each position in its proper historical context and to show how virtually all

philosophical disputes arise from misunderstanding this context, which is the sole source of the position's validity. Thus, armed with historical awareness, the philosopher selects his position according to the context of connotations he prefers, with the judgment involved here being more like an ethical or even an aesthetic one. For example, Ian Hacking offers reasons why we should not be wedded to "meaning" (Why Does Language Matter to Philosophy?) and "probability" (The Emergence of Probability), while Richard Rorty does likewise for "epistemology" and "systematic philosophy" in general (Philosophy and the Mirror of Nature). They allegedly derive their critical techniques from the deconstructive mode of philosophizing initiated by Heidegger in Being and Time and developed in hermeneutical and structuralist circles. However, there are reasons to suspect that these proponents of the grammatical approach are merely practicing an historicized version of ordinary language therapy, whereby current usage is replaced by etymology and philology. We shall cast our suspicions as a pair of ad hominem remarks--against their attitudes and their motives.

The grammaticist's attitude toward the misunderstanding of philosophical positions that has followed from ^{violations of} ~~violating~~ their historical contexts is one of regret: Such misunderstandings should not have occurred because they have only led philosophers to struggle over pseudo-issues. Rorty's virtual pity toward Kant for devising an imaginative solution (the transcendental method) to a pseudo-problem (the mind-world dichotomy) generated from the collective confusions of Descartes and Locke is indicative of this attitude. Instead of category-mistakes, these practitioners invoke context-mistakes. And instead of castigating the philosopher who should have a better grasp of ordinary usage, they sympathize with his inevitable historical blindness that allows misunderstandings to occur. Later in the first chapter we reinterpret "misunderstanding" in light of the rhetorical approach. Briefly put, the claim of one speaker misunderstanding another is not so much an epistemological description as an ontological prescription: On the one hand, the grammaticist would mean that the speaker exhibits imperfect knowledge of the speech situation (perfect knowledge of which is potentially there and may be attained via "deconstruction"), while we, on the other hand, mean that the claimant is legislating a difference into the previously undifferentiated speech situation, and it is only by virtue of that legislation that the difference is real (i.e. there is no "truth of the matter" about the speech situation that is actualized from a potential state in this legislation).

Now consider the motives for one grammaticist disagreeing with the practice of another, namely, "factual errors" that occur in the deconstruction of a philosophical position. Although these grammaticists aim to show how any appeal to external validation in order to adjudicate a controversy (as the logical approach suggests) mislead-

ingly takes historically conditioned criteria as if they were universal principles of reason, they themselves employ sophisticated techniques of textual interpretation and ideological analysis in order to ensure the most "accurate" historical record possible, which will enable them to sort out who misunderstood whom and by how much. In short, like the logical approach, the grammatical approach presumes a "truth of the matter" and differs from the former only in the metalanguage used to reveal that truth: history rather than logic or ordinary language.

The faults we find in both the logical and grammatical approaches are symptomatic of what can be called the "autoreductive" tendency in philosophy. Let us say mathematics succeeds by its own methodological standards to a greater degree than the other disciplines succeed by their own standards. This proof of practicability is then taken by philosophers as external validation of the mathematical method, which seems to suggest that it has an access to the "truth" that other methods do not. Consequently, philosophy not merely fashions analogues from mathematics for its own purposes but goes so far as to be assimilated by mathematics and to advocate similar measures for the other less "progressive" disciplines. In other words, rather than taking the sentence--"The logical form of arguments reveals their underlying propositions in the clearest way possible"--as requiring an explication of the mathematical metaphors, philosophers interpret it as calling for their arguments to be literally expressed in mathematics; hence, if Fregean semantics cannot be completely translated into axiomatic set-theory then the semantics is at fault. But while the attempt to reduce philosophy to mathematics may be more obvious because of the notational reduction (to symbols) also required, it should not overshadow the subtler attempt to reduce philosophy to history.

Just as there is methodological value in recasting mathematical virtues like clarity, precision, self-evidence, proof, and simplicity as metaphors for philosophical endeavor, after the manner of Descartes and Leibnitz, the same can be said of recasting historical virtues like distance (as the strangeness of an historical context), frames of reference, and limited horizons, after the manner of Hegel and Heidegger. The value lies in delimiting the sense in which each is a virtue within its own discipline once it must be negotiated with its metaphorical counterpart in philosophy. An awareness of this dialectic arises upon reading Descartes' appeal to "clear and distinct ideas" and realizing why he cannot be taking "clear" in the strictly mathematical sense. In most general terms, appropriating the virtues of another discipline amounts to assuming the discipline's attitude. For example, a "mathematical attitude" distrusts vague formulations. It is important to keep this in mind when ascertaining what it means to philosophize in the "historical attitude"

endorsed by deconstruction. An historical attitude accepts the reality of change and the relativity of truth according to the position one holds in the course of this change. Indeed, the historical attitude is, so to speak, "existentially" grounded in the practices of historians who record how "real" views come and go with changing social conditions, etc.--just as the mathematical attitude is existentially grounded in the practices of mathematicians who can prove a theorem only if it is demonstrable given a fixed set of operations, inference rules and/or axioms. And in order to cultivate an historical attitude, the philosopher who has lingering attachments to "absolute truth" may wish to survey the history of thought for himself. But it is another matter entirely whether he must also be doing history in order to be doing philosophy.

For Hacking and Rorty it seems ^{that} if philosophy is to adopt the historical attitude then it must also adopt the historical method. Indeed, the deconstructions practiced by these two appear in the form of didactically critical histories: Lessons on how we may profit from the mistakes of our predecessors, or at least how to have the proper frame of mind if these mistakes are inevitable. But this conjunction of attitude and method is unjustified, and, in the case of history, it may well be that to adopt the historical attitude is to reject the historical method--or any method that delimits a discipline by providing standards of external validity. In this respect, philosophy may be best described as the "undiscipline" (a term to be understood as neutral to the possibility of philosophical "systems" and "structures"), which explores conceptual possibilities, delimits their presuppositions, with the express aim of exploring new possibilities.

History inculcates this dialectical attitude by revealing in general how every position has been superseded and that such supersession has resulted from the interaction of positions. And furthermore, if those instances of supersession and interaction were eliminated--which would be a desirable (albeit impossible) state-of-affairs for Hacking and Rorty--then there simply would be no history, or at least no need for an autonomous discipline by that name, for logic would absorb its tasks. Once again, essential to the historical attitude is that change is real and not mere distortion, misunderstanding, etc. Acting on this insight, philosophy then becomes inherently discursive and incomplete: The meanings of terms are negotiated as they interact with other terms, and the possibilities for negotiation have no a priori limits. To echo our earlier claim, any position can be made relevant to any other position, but the trick is to describe the sense in which such fabrication is possible.

III. FROM POSITIVIST TO PHENOMENOLOGICAL REDUCTION (chapter one)

1. Problematizing the Puzzle

The puzzle is why do positivists and phenomenologists use the word "reduction" to characterize their respective philosophical tasks--the translation of all "meaningful" (keeping in mind that meaning is the method of verification) sentences into the language of physics (i.e. ^{manifestations of} ~~matter-in-motion~~) and the abstraction of the transcendental conditions of understanding? As it stands the puzzle has yet to become a "problem" in Gilbert Ryle's sense insofar as the question offers no clues as to how it may be answered. We can however identify three approaches.

First, we can perform a logical analysis of the positivist and phenomenological expositions of reduction to locate the points of compatibility and contradiction, with an eye toward developing criteria by which the differences can be settled, such that one of these reductions appears more "well-grounded" than the other. The very project of the phenomenologist Edmund Husserl may in fact be seen in this light. In Ideas he pits himself against the positivists to determine who has got an adequate account of Essential Being, which will decide between their respective reductions. Should the arguments favor Husserl, then positivist reduction would be shown to rely on an uncritical attitude toward the ontological status of empirical phenomena. Should the positivists prevail, Husserl then must admit to populating the world with shadowy essences that merely duplicate phenomena. Of course Husserl wins the game he has set up, but his victory in the area of logical analysis extends beyond the arguments for reduction to the very use of the term "reduction." The positivists failed partly because they took reduction to be a form of understatement, or trivialization (i.e. an "explaining away"), whereby Essential Being became nothing but an inductively derived law, what Husserl calls the "naturalistic misconstruction." Thus, a lasting effect of this logical analysis of "reduction" would be disinfecting philosophical discourse of stray colloquial uses of the term.

But we may prefer a second, "grammatical" approach, whereby "reduction" is seen merely as a loose metaphor for two activities that deal with two different categories of phenomena. The problem then becomes delineating the contexts in which it would make sense for a positivist and a phenomenologist to use "reduction." From the viewpoint of the previous approach, accepting one type of reduction entails no positive or negative commitment to the other. There is therefore no concept of "reduction" over which the positivist and the phenomenologist are vying to provide an analysis of, nor is there even a "common core" of meaning both sides must have in order to speak intelligibly of reduction. The choice of the word is purely accidental and its meaning solely contextually determined. Curiously enough, the positivist Rudolf Carnap is a leading exponent of this view. He

sympathizes with Husserl's task of ontological grounding the sciences, but he also notes that phenomenology accomplishes this by rejecting the findings and methods of the sciences and retreating to levels of rigor (perhaps high) appropriate to metaphysical arguments. For at least the early Carnap (of, say, The Logical Structure of the World), physics is the modern heir to ontology, and if questions of the latter raised by Husserl cannot be reduced to those of the former, then there is nothing to argue about. But his seemingly tolerant stance indirectly casts aspersions on phenomenology since the ability to contest an issue on physicalistic criteria is central to the meaningfulness of any philosophical program. In short, the fact that Husserl cannot argue with the positivists on their own ground indicates the inadequacy of phenomenological reduction. The sense in which we sympathize with this assessment will be revealed upon turning to the third approach.

The grammatical approach seems to suggest that positivists can afford to be tolerant with phenomenologists because the latter are from the start in such a cognitive disadvantage—being metaphysicians and not scientists—so as not to be relevant to positivist concerns. Pluralists may argue that this rather ironic brand of tolerance is peculiar to positivists, and that it is indeed possible to present an unpolemical version of the grammatical approach. However, whatever else positivists and phenomenologists may be doing in "reducing" our conceptions of the world, they are advancing a one-world thesis: What Carnap finds in physics and Husserl finds in transcendental phenomenology is the ultimate structure of the actual world, which will provide the most comprehensive account of how things in the world come to be as they are (Husserl would add "...for us"). The only difference between them then is "where" the ontologist should turn to find this structure. For Carnap it is in an already constituted science, the identity of which is determined by the history of ontology itself: Physics has become what the Greeks would have called the primary science of Being. For the later Husserl (of, say, The Crisis of European Sciences), and especially Heidegger, the history of ontology is a succession of misreadings of the problem of Being from Aristotle's first division of the problem into discrete questions of beings in the world so as to gain technical control over the possible range of answers—so all-encompassing was the initial formulation of the problem by the presocratics. The techniques that yielded results, such as the mathematico-experimental method of the physical sciences, were taken to embody the answer to the general problem of Being, such that other aspects of the problems that did not so easily yield to technical control (e.g. questions of the soul) were recast physicalistically. The phenomenologist is thus faced with the task of rediscovering the original problem, and this means suspending the ontological claims of the sciences.

Juxtaposing the opening moves of the positivist and the phenomenologist in this

fashion now suggests that their positions are overtly contradictory. However, the contradiction also contains a "modal" complication. If, as Carnap maintains in "Psychology in Physical Language," the reduction-language is already available in physics, then sentences in other, ontologically unreduced sciences--like psychology--need only be reducible to be "meaningful" (againⁱⁿ the positivist sense), but these sciences need not reorient their own research programs physicalistically. In contrast, Husserl argues in The Crisis that phenomenology--as the task of reducing to Essential Being--cannot remain a mere logical possibility (which it has remained throughout the rise of positivism, much like a forgotten memory in Plato's reminiscent theory of knowledge) but must be practiced so as to alter the way in which science itself is conceived; hence, not surprisingly, Husserl rarely gets beyond thinking through the implications of his method to actually applying it--phenomenology being so inaccessible to the natural attitude of contemporary philosophical methods.

It may be remarked that Carnap can afford to invoke the mere logical possibility of reducing psychology to physics because the reduction is already a real possibility for the behaviorist psychologist who models his operational definitions and physiological correlates of mental acts on the methods of physics (at least as conceived by the positivists). On the other hand, Husserl must call for the actual implementation of phenomenology since its logical possibility, albeit implicit in the history of ontology, is ineffectual as such, and is perhaps rendered even more ineffectual (as something to be self-consciously avoided by "scientific" philosophers) when acknowledged as a possible way of doing philosophy, as Carnap was shown to do. But having added this modal dimension, the rivalry between phenomenological and positivist reduction looks somewhat different. We need, especially, to consider whether the success of Husserl's program in reorienting the sciences entails the impossibility of reducing phenomenological sentences to ones in physics. Admittedly, it is difficult to imagine how this could be the case. But if it is not the case, then phenomenological and positivist reductions are compatible, even though they presuppose contradictory readings of the history of ontology.

Thus, although there is some sense in which the program of reduction common to positivists and phenomenologists naturally places them in opposition, it is difficult for any controversy to get off the ground--for the phenomenologist, on the one hand, has the problem of demonstrating a radical break from the positivist (i.e. by making the latter's task impossible) and the positivist has the reciprocal problem of showing that his thesis is not a trivial one compatible with any other ontology (i.e. he must show that translating any meaningful sentence into physics is more significant than, say, translating any English sentence into German--reduction must be something more than translation as normally understood). In light of these difficulties, we can imagine the two "reductionists" unsuccessfully attempting to controvert

each other's theses.

Suppose the phenomenologist starts by reducing a percept eidetically (i.e. freely varying aspects of the thing represented to see what must hold for all possible variations) such that the essence of that thing is preserved. The result will be probably expressed in a "transcendental semantics" in which the thing reduced, say a chair, is defined by the complex of possible relations it enters into that a related thing, say a table, cannot enter into. These relations would then capture the structural and functional features that differentiate it from other things in what Husserl calls the "Lifeworld." In other words, in what sense does it become part of, or "constitute," the Lifeworld, and in what sense does it interact with other things in that Lifeworld? Although we have stressed how the phenomenologist would identify the chair's essence according to how ~~things~~^t can be distinguished from other ~~things~~, or negatively defined, the positivist can still reply that these semantic differences only make sense as more or less adequate representations of how the physical world actually is. The positivist would then continue that the intellectually sophisticated, but nevertheless ordinary, language on which the phenomenologist bases his transcendental semantics is merely a protophysicalist reduction relying too heavily on untested and unsystematized intuitions. And the positivist just needs to move from Husserl to Peter Strawson's Individuals to Hilary Putnam's "Is Semantics Possible?" to show how formalizing our intuitions can yield an adequate "descriptive metaphysics" (Strawson) of the every day world that nevertheless is divorced from the ultimate ontological concerns of scientists, who may indeed be misled by such a "stereotyping" (Putnam) metaphysics—as, say, Aristotle was in trying to locate the essence of motion.

But if instead the positivist presented his case first, the phenomenologist would look better in reply. Suppose now the positivist opens the debate by showing how according to logico-empirical criteria of meaning a sentence in psychology can be reduced to one in physiology, which reduces to one in chemistry, and finally to one in particle physics. He could then echo the claims of Auguste Comte and Hans Reichenbach that in fact the history of science is oriented toward physicalism, which is to say, sciences have progressed according to the degree to which they have approximated the techniques of physics. The dialectical nature of phenomenology can make itself evident at this point: But what makes such a hierarchy of the sciences possible? In other words, the positivist does not understand the limitations on his vision of the world, particularly the extent to which his view of the autonomy of scientific truth is in fact tied to the peculiar (and historically conditioned) relation the scientist has to the Lifeworld (the world in which science is practiced—and the world from which the positivist seems to wish to escape by making physics a higher-order

science than psychology). It is conceptually facile to equate what has historically worked (and neither Husserl nor Heidegger ever contest the positivist account of the history of science, unlike Kuhn, Feyerabend, etc.) with the progressive realization of truth, for it does not address the phenomenologist's transcendental question. Likewise, it is unfair for the positivist to retort "How else could the problem of Being be resolved?" since physicalism has had ^{one is tempted to say,} the advantage of being allowed to work, and "being-allowed-to-work" is not a feature of the ^{sociological} success of physics but has something to do with what makes it possible to treat the world physicalistically, which is a presupposition of subsequent successes. To parody Heidegger: Why is there physics rather than net-physics?

We see then that in both combinations the opponent can portray as naive the reduction advocated by the first disputant on the grounds that it comprehends the ontology of the world in too restricted a manner. More precisely, this restriction takes the form of misjudging the relative ontological weight assigned to ordinary language vis-a-vis scientific language. In short, the problem is how to focus one's philosophical perspective. At this point we introduce the third, "rhetorical," approach toward problematizing reduction. So far we have assumed that the positivist and phenomenological accounts of reduction are discrete positions. But if ⁱⁿ controversy they reveal one another to be inchoate and incomplete accounts of themselves (i.e. the positivist is a protophenomenologist and the phenomenologist is a protepositivist) then it becomes clear that there is a common field of relevance between the two, even though it is not clear where arguments for one type of reduction end and arguments for the other type begin. ~~We suggest~~ ^(rather) this is because positivist and phenomenological reductions are defined dialectically. In other words, each can be identified only in terms of how its position differs from the other. The question to ask then is under what dialectical conditions do the positivist and phenomenologist appear to be performing reductions.

For the positivist, it is when he is counterposed to an ontologist who posits entities on the basis of grammatical (either ordinary or scientific) forms. Post-Kantian attempts at a transcendental psychology, including those of Alexius Meinong and Franz Brentano, come to mind as precursors of phenomenology. On the other hand, the phenomenologist appears as a "reductionist" when counterposed to a philosopher who sees his conceptual horizon as "boundless"—i.e. every meaningful question is poseable and answerable. The contrast between Carnap and Heidegger could not be stronger at this point. Both hold that a question presupposes a range of possible answers, but for Carnap this is a sign of a well-formed question that reveals technical control over the phenomena and opens new paths of inquiry, while for Heidegger this is a sign of the hermeneutic circle that reduces any sense of epistemic novelty to

the heretofore undiscovered grounds of one's own inquiry. Thus, according to whether the metaphor of reduction is explicated positivistically as the elimination of unnecessarily duplicated worlds or phenomenologically as the delimitation of the scope of inquiry, the "unreduced" ontology appears as a form of phenomenology or positivism, respectively. And while the two metaphors themselves are not defined in logical opposition to one another, we can appreciate, say, how duplicating a mechanics of the mind in the image of the mechanics of the body--as Ryle characterizes it in The Concept of Mind--may result from a circular process of inquiry whereby the two regions can only be understood in terms of each other and therefore start to ~~be attributed~~ ^{take on} ontological features that reflect this epistemic co-dependency. For example, the will is invoked as a mechanical cause of behavior just on those occasions when a physical cause is not to be readily found, and autonomic physical reactions are taken as the cause of behavior when there is no evidence of mental input--ignorance of how the body works is defined as knowledge of how the mind works, and vice versa.

The relation between the phenomenological and positivist reading of the reduction-metaphor can now be rendered as follows: Evidence for reduction-as-delimitation is found in the possibility of reduction-as-elimination ~~by virtue of these being~~ ^{through the presence of} recurrent forms of ontological relations that are applied to diverse realms of being, like mind and body. These forms include parallel (and sometimes supplementary, as we have just seen) forms of causality and identification (e.g. identifying a motive that remains constant over time is analogous to identifying a chair over time). The positivist, like the phenomenologist, is suspicious of these forms being parallel simply by accident, and hence the impulse to reduce-as-eliminate redundant levels. However, the positivist, whose suspicion was initially directed against the ability of linguistic forms to pick out unique physical entities (i.e. mind-talk picking out mental events and body-talk picking out bodily events), is willing to take at face-value the ~~historical semantic assignment of~~ ^{historical significance assigned to} physics as ~~the~~ ^{designating} fundamental science.

The positivist may wish to invoke his own linguistic-~~truth~~ ^{empirical-truth} distinction to argue that the results of physics are not defined as Essential Being but have been revealed as such through the development of scientific inquiry. However, from just examining ordinary language, it is difficult to imagine what else could an expression like "what literally happened was..." means except a description of a state-of-affairs in the physicalistic (or behavioristic) terms that are appropriate given the sensory apparatus available to the discussants. For example, if the state-of-affairs is a bank robbery, and you are giving an eye-witness account, the physical units will be macroscopic. But a physicalistic account involving the most sophisticated sensory apparatus in use might be able to provide the chain of neural links from bank teller to robber in acknowledging his request and handing over the money.

Thus, although it may be a matter of historical (cf. natural) selection that physics became the fundamental science, removing physics from that role would take ontological legislation, or a "revisionist metaphysics" as Strawson would put it, by virtue of the physical being semantically linked (at least in the present) to "the literal." But of course it was a piece of ontological legislation in the first place that eliminated the uniqueness of grammatical forms that could not pass physicalist criteria of identification. Presumably, it is possible that talk about bodies could have been taken as "metaphorical" duplication of talk about minds if the sciences developed in a more "idealistic" direction, and in that case perhaps some form of psychology would have been the fundamental science. And indeed while it may sound extraordinary to speak of physicalism employing mechanical forms only "metaphorically" because they "literally" apply to the way the mind works, this very view is the keystone of essentialist and idealist ontologies: Since we cannot directly comprehend the literal, essential forms (this power is usually reserved for demons or angels, depending on whether one adheres to a pagan or Christian theodicy), we must apprehend them via the physical world, which represents the essences imperfectly. ^{In that microcosm} Recent studies ~~of epistemology, the philosophy of education,~~ ^{has recently} on the role of metaphor in education by Hugh Petrie ~~in fact~~ ^{in fact} revive this perspective: Rather than saying a child learns different kinds of facts by using metaphors, it may be better to say that a child learns metaphors by being exposed to different facts which serve as exemplars.

In elucidating this curious historico-semantic relation between the metaphorical and the literal, let us finally consider Claude Levi-Strauss' characterization of the "savage mind" as having the same cognitive structures as the "civilized mind": The savage thinks in physical objects (e.g. animals are identified with spiritual qualities to such a degree that the patterns of interaction among ^{the} animals provide the "logic" of spiritual qualities) rather than in concepts, not out of an inability to abstract but out of the immediacy of the concrete—much in the same way that post-cartesian philosophy has claimed immediacy to the cogito as evidence for the certainty of concepts. We can see then Levi-Strauss' reasons for claiming the universality of the immediate/mediated binary despite its disparate manifestations: Like literal/metaphorical, it is constituted as what the psychoanalyst Jacques Lacan would call "a chain of floating signifiers"—which, within the analytic tradition, falls conceptually between a pre- and a post-Tractarian interpretation of the sense-reference distinction. In other words, while there is a determinate difference in the senses of "immediate" and "mediated" such that the truth-conditions of each can be spelled out in a common language ^{whereby} ~~such that~~ one implies the contradiction of the other (where "truth-condition" is understood in Frege's pre-Tractarian sense of those properties which would be true of the thing in question, should it exist; thus,

~~Pegasus has truth-conditions), there is no "recipe", given these truth-conditions, for picking out actual cases that satisfy them (contrary to the verificationist interpretation suggested by Wittgenstein in the Tractatus and explicitly defended by A.J. Ayer in Language, Truth, and Logic); hence the need for ontological legislation to determine criteria for what will satisfy the truth-conditions, or what will count as an instance of "immediate" or "mediated" thought.~~

To resume the argument, the move from ^{positivist} ~~these~~ to phenomenological reduction involves an a fortiori appeal: If positivists are suspicious of language's ontological claims for itself, as it were, why not also be suspicious of how it proposes to settle those claims? That is to say, why cannot the primacy of physics be considered part of the same historical baggage language carries as the mind-body distinction was shown to be by Ryle? ~~At this point, positivists can invoke with some irony the preferred continental metaphor of language organically growing out of the life of the culture: Some parts of language are anachronisms, like the appendix, useful at some earlier point of development but better removed now before it has a chance to become infected and contaminate the rest of the language.~~ Furthermore, ^{But if} ~~the~~ ^{return,} ~~positivist can~~ launch his own a fortiori argument at the phenomenologist: The phenomenologist sees the scope of inquiry necessarily delimited only because he refuses to leave the world of man defined by ordinary language, which is largely based on unaided perception and from which the essences are abstracted. And seen in this light, the history of Western science indeed seems locked in its presuppositions because the phenomenologist is self-consciously limiting himself to the possible modes of inquiry available to someone having Aristotle's technological resources. And if those were all the possibilities ever available to man then the phenomenologist would be correct. But in the modern era aided perception is itself essential to how man is defined in the Lifeworld. These aids range from rather unproblematic correctives of ordinary perception, like eye-glasses, to microscopes and telescopes, which quite literally extend the scope of inquiry. If the phenomenologist accepts these aids to be as much a part of the Lifeworld as his eyes, and continues his form of reduction, he would then arrive at the positivist picture: What grounds Being are the fundamental constituents of matter and the laws governing their possible interaction. In fact, in The New Scientific Spirit, Gaston Bachelard attempts a phenomenology that takes into account this technical reconstitution of the Lifeworld—"phenomenotechnics" as he calls it—by replacing Husserl's view of man's essence as correlative with his physical being (even ^{though} ~~of~~ a different substance, mind) with a Marxist view of man as "homo faber"—man continually making himself in dialectical response to the nature he wishes to control.

which can be detected by the intervention of scientific instruments

2. The Rhetorical Nature of the Problem.

We can now isolate two key features of the rhetorical approach to problematizing reduction: First, taken as discrete positions (either in the manner of the logical or grammatical approaches above), positivism and phenomenology have incompatible premises yielding apparently incommensurable metaphors. But second, when these incompatible premises are taken to be dialectically defined against one another (such that an unreduced version of one is the other) concerning a common field of relevance (Essential Being), then the two types of reduction can be considered as two ends of a scrites, one attainable from the other by extending the process of reduction initially used through an a fortiori argument: "If you can go this far, then you can go this much further." The impetus for adopting this approach is that not only is it not clear what qualifies as a positivist-but-not-phenomenological reduction, and vice versa, but also it is not clear why a purported instance of one type of reduction would not be an instance of the other type as well. In appealing to the inherent vagueness of the reduction problem, we are suggesting a view of philosophical discourse resembling Charles Sanders Peirce's cosmological principle of synechism-- that the universe ^(of discourse) is continuous.

Notice that by "vagueness" we do not mean a state of imperfect knowledge such that the account of either reduction is not adequate to decide what are possible instances of each. Instead, again following Peirce, we admit there is nothing inadequate about the formulation of the two types of reduction per se, but that possible instances are necessarily underdetermined ⁱⁿ by virtue of the inherent looseness of fit between theories and evidence, as generalized versions of symbols (for Peirce, an "argument"--the semiotic form of a theory--is a symbol) and referents. Hence, vagueness is an ontological feature of the way signification occurs in the world. If this is so, then the scope of relevant instances of the two formulations is indeterminate in principle and consequently negotiable in practice. In other words, because of the nature of semiotics, it is justifiable for, say, a phenomenologist to claim that if the positivist were to extend his reduction to instances he would not immediately consider relevant to his concerns, then he would arrive at phenomenology. Of course, it is up to the phenomenologist to lead the positivist by the hand, as it were, and demonstrate in what sense can the latter's method be extended to perform the type of reductions he thought his method was designed to oppose. However, to claim that the two types of reduction are discrete (and thereby addressing cases that are unrelated to one another) ^{just} because it may not be obvious how a positivist would arrive at a phenomenological reduction is to convert our state of knowledge (or ignorance) about the applicability of these methods to an essential feature of them. In his essay on synechism, Peirce lodges this criticism against formulating

"nominalism" (by which he means the Humean attitude toward the reality of causes and nonsensible forces) as an ontology rather than as an epistemology, and against hypothesizing atoms as the ultimate physical units (i.e. "hypostatizing" them) rather than as the primitives of the language of physical science as it is currently practiced (Carnap, as we shall see, revives this point in the distinction between material and formal modes of speech.). The synchistic ground of the criticism lies in the tacit assumption made by the discontinuity arguments (i.e. nominalism and atomism) that the unexplained is unexplainable, or, in the case of the two reductions, that the unrelated is unrelatable. To the atomist Peirce would ask how these discrete atoms comprise at least apparently continuous objects, and this would require somehow accounting for that part of physical reality—heretofore unexplained by the atomist—which is nonatomic yet provides the "field" in which atoms move and ultimately interact.

However, raising synchistic objections in philosophical discourse is a somewhat subtler matter since types of reduction, unlike types of atoms, are ostensibly inventions rather than discoveries by the inquirer, and the discretionist might therefore argue that these methods are only as applicable as the practitioners say they are, which is to say, their ontological status derives from being products of a reflective mind. But we must here remind the discretionist of the indeterminate nature of signification: It is misleading to say that the positivist and the phenomenologist design their respective reductions and then see how they can be mapped onto the world, as if each needed to satisfy some correspondence theory of truth. Instead, each reduction would not be the type of reduction that it is if it were not for the peculiar interaction of, say, "mind" and "world," or "theory" and "evidence" (these terms can be used as long as they do not pick out two discrete realms of being but only alternative ways of talking about the same realm of being, the world in which the reduction-theory is formulated). The evidence then does not support the theory as a posteriori confirmation but in fact contributes to the material conditions of the theory being formulated as it is. Thus, the success of behaviorist psychology does not merely support physicalism but participates in its very conception.

Before going any further, the reader is entitled to evidence showing that we are not misrepresenting Peirce's concept of vagueness too much. Thus, here is a relevant passage from "Critical Commonsensism":

Logicians have too much neglected the study of vagueness, not suspecting the important part it plays in mathematical thought. It is the antithetical analogue of generality. A sign is objectively general, insofar as, leaving its effective interpretation indeterminate, it surrenders to the interpreter the right of completing the determination for himself. "Man is mortal." "What man?" "Any man you like." A sign is objectively vague, insofar as, leaving its interpretation more or less indeterminate, it reserves for some other possible sign or experience the function of

completing the determination. "This month," says the almanac-oracle, "a great event is to happen." "What event?" "Oh, we shall see. The almanac doesn't tell that." The general might be defined as that to which the principle of the excluded middle does not apply. A triangle in general is not isosceles nor equilateral; nor is a triangle in general scalene. The vague might be defined as that to which the principle of contradiction does not apply. For it is false neither that an animal (in a vague sense) is male, nor that an animal is female...No communication of one person to another can be entirely definite, i.e. non-vague.

Notice that the a fortiori argument showing, say, positivist reduction to be simply a natural extension of phenomenological reduction "completes the determination" of phenomenological reduction, which heretofore had nothing determinate to say about instances accounted for exclusively by the positivist form—e.g. microphysical particles. Also notice we can say that as it is usually presented phenomenological reduction offers inchoate expression of positivist reduction as long as we do not take the inchoateness to be a priori such that positivism, as it were, is entailed by phenomenology. Peirce's example of the almanac-oracle highlights the aposteriori nature of negotiating vagueness. It is only our deductivist biases that lead us to associate too quickly discursive continuity with the logical consistency obtaining between two theorems rather than with the semantic openness of vague utterances. We can reformulate the modern theory of meaning in a "Peircean" manner as follows:

After Frege

1. the sense of a proposition (i.e. its truth-conditions; the ontological commitments involved in the possibility of the proposition being true)
2. the referent of a proposition (i.e. the thing that satisfies the truth-conditions, its ontological complement)
3. the reference of a proposition (i.e. existentially fused state of the proposition referring to something in the world; the correspondence aspect of the correspondence theory of truth)
4. the verification conditions of a proposition (i.e. the operational rules by which the possibility is made a potential, something provable)

After Peirce

1. the semantically open texture of a vague utterance, whose possibility is given by virtue of the many ways it can be determined
2. what closes the semantic texture of the vague utterance (e.g. the event that follows the almanac-oracle's divination)
3. the continuity that exists between (1) and (2) by virtue of the vague utterance having an open texture (i.e. the naturalness with which the event satisfies the divination)
4. the discursive strategy (i.e. the actual rhetorical moves) by which (2) is shown to a fortiori follow from (1).

One curious remark Peirce makes in passing in the above quotation is that vagueness plays an important part in mathematical reasoning. Perhaps we can alleviate some of the curiousness in the following manner: Recalling our earlier comment of how evidence constitutes the material conditions of a theory's formulation, consider how the material conditions shifting as the theory is applied, as in the

case of extending phenomenological reduction into more "positivist" instances.

The model in fact comes from Hegel's account of the dialectical transition from quantity to quality, in which the qualitative differences in states-of-matter, say between liquid and gas, derive from graduated quantitative differences in temperature. And this model finds its mathematical basis in the sorites paradox. In its most general form, the sorites consists in the method used (say, adding 1 to n, where n is a ^{small} integer) not being altered across a chain of inference, yet the inferred instances to which this method is applied (consecutive integers) being so ordered that at some point the method attains a different status in light of them (i.e., at the start it was thought that adding 1 to small integers was a formula for generating small integers, but after a large number of ns this is no longer the case). Using a positivist means of reduction to arrive at conclusions that then make the reduction look phenomenological--its purported opposite--is not quite as neat as this mathematical formulation of the sorites suggests. The primary problem is that although it is (supposedly) self-evident that a large number will result if 1 is continually added to a small integer, without actually performing the sorites, this is hardly the case when bridging the two reductions. As stated earlier, the phenomenologist actually has to demonstrate the soritical route to his position from positivism, and vice versa. The difference is fundamentally one between logical and grammatical "truth," on the one hand, and rhetorical "truth," on the other. At least up to the time of Leibnitz, (so argues Ian Hacking in "Leibnitz and Descartes: Proof and the Eternal Truths") demonstrating the theoremhood of a sentence was merely an epistemic crutch and not a necessary condition of that sentence being a theorem. More pointedly, utterances were taken to be grammatical or not, even though "generative grammars" demonstrating their grammaticality (i.e. as the successive application of phrase structure rules and transformations) did not come into their own until this century.

But the "rules" of rhetoric, say as presented by Aristotle, are not by themselves sufficient for deciding whether a given speech is "effective"--the rhetorical measure of truth. By "effectiveness" we mean the degree to which the intentions of the speaker are reproduced in the audience's opinions. (The reproducibility of these intentions can be taken as part of the groundwork for legitimating the consensus theory as a theory of truth, in the manner of Juergen Habermas: Discourse is practically possible only because what is true can be conveyed to the audience, and the speaker intends to convey what is true.) Thus, the truth is not so much embodied in utterances that are correct in themselves (say, by virtue of referring to the world) as in utterances that come into being the right way, which is to say, through the dialectical participation of both speaker and audience. In short, the speaker must define his intention in terms of what is appropriate and comprehensible to the

audience. From a logical or grammatical point of view, it is possible for a speaker to make a correct utterance and the audience not to understand—but that would be the audience's fault insofar as the correctness of the utterance presupposes that the audience (as either rational beings or competent speakers) should be able to respond appropriately to it. From a rhetorical point of view, however, it is not clear who is not "correct" when an intention fails to be conveyed. Usually the speaker is blamed for not demonstrating that in fact his view is a reasonable extension of the audience's. In other words, the speaker is trying to transform the rhetorical move into a logico-grammatical one by having the audience "discover" something they already know, or, less paradoxically, something they must be assumed to know given what they self-consciously believe (or that they believe as if they know that something).

Posed in this way the rhetorical approach strongly resembles the original task of philosophizing attributed by Heidegger to the sophists in What is a Thing and is perhaps most famously portrayed in Plato's Meno when Socrates manages to elicit geometric truths from an ignorant slave. A genealogy can be traced from the reminiscence theory of knowledge advanced by Socrates to the Heideggerian definition of truth as the discovery of what presupposes, or "grounds," one's own inquiry. (Such a genealogy would also include Peirce's proto-Heideggerian claims for the pragmatist method in "Critical Commonsensism") In this sense it can be said that the rhetorical approach to problematizing reduction presupposes the validity of the types of issues raised by phenomenology. But this should by no means suggest that phenomenologists have actually endorsed this approach. Indeed, Husserl was earlier seen to advocate the logical approach when dealing with his positivist opponents. To illustrate this point further, we shall now critically appraise Karl-Otto Apel's program to situate conceptual equivalents to phenomenological and positivist reduction as complements. And then we will deploy the rhetorical approach by having the phenomenologist-as-speaker try to elicit what the positivist-as-audience "must already know."

3. Phenomenology's Rhetorical Difficulties.

For purposes of ideological critique, it may be proposed that phenomenologists have rejected the rhetorical approach in coming to terms with positivism because, if successful, it would make the claim that phenomenologists are practicing the original task of philosophizing more difficult to maintain—if by "original" is meant without the distortions subsequently accrued in the history of philosophy. Thus, the fact that Husserl's actual arguments against the positivists are quite distinct from his arguments in favor of phenomenology has been taken—by his defenders—not as a sign of his inability to show the relevance of phenomenology to the problems of positivism

(which would mean showing how phenomenology meets the objections it raises against the positivists) but a sign of how radically off the mark the positivists are, even in formulating problems. However, if Husserl were able to show that phenomenological reduction is just an a fortiori extension of positivist reduction, then it might be thought that phenomenology is dialectically dependent on positivism for its sense. And, to continue, if this dialectic were situated historically (i.e. phenomenology as the unique antithesis of positivism), then it could be claimed that if positivism did not turn out as it did, phenomenology would not have turned out as it did.

Indeed, if we follow Heidegger's account of the role of the "already-known" in classical Greek thought, the radicalness of phenomenology lies only in the fact that it arises now and not then--and here we are reminded of Marx's ironic comment on the rise of Louis Buonaparte as the second Napoleon: "History, as it were, occurs twice: the first time as tragedy, the second as farce." The quest for things-already-known ("ta mathemata" in Greek) originated in the sophist's search for the suppressed premises in public arguments. But when Aristotle "privatized" Being into discrete beings and one such being, the physical ("ta physica," self-originating things: the name bespeaks its own irreducibility or unconditionedness), came under technical control, the quest for the public--that which presupposes all beings and thereby Being as such--became the obscure task of reorienting thought toward what it would be like to ask such a question, a problem both phenomenologists and positivists admit must be addressed before "What is the ground of Being?" can be posed meaningfully. And so although Heidegger may be posing many of the same questions as Plato, his attitude toward posing them (and therefore the significance of providing answers) is much different--and certainly this is due to positivism. In short, Heidegger is the "second Plato" in the same way as Louis Buonaparte is the "second Napoleon."

4. Apel's Mediation of Positivism and Phenomenology.

We have selected Apel, however, as our critical focus because he specifically proposes to reconcile the differences between positivist ("scientific") and phenomenological ("hermeneutic") reduction by "dialectical mediation," which prima facie is similar to our rhetorical approach. Apel's argument will be reconstructed from "Scientistics, Hermeneutics, and the Critique of Ideology: Outline of a Theory of Science from a Cognitive-Anthropological Standpoint," the second chapter of Towards a Transformation of Philosophy. Like Feyerabend, Apel reads the dialectical method through Niels Bohr's complementarity thesis--more precisely, the reading of the history of science presupposed by the thesis--which renders the concept of mediation more commonplace than is usually understood in Hegelian-Marxist circles. The thesis and antithesis of a dialectic (or, two poles in a dialogue) in such circles are said to presuppose, or (when under Kantian influence) "transcendentally ground"

one another. Apel, however, says that the thesis and antithesis complement each other, or delimit one another's relevance by virtue of being two discrete aspects of the same thing: We are of course reminded of Bohr's wave-particle duality, but this view can in fact be traced to the first modern dialectical logician Johann Gottlieb Fichte, whom Apel's colleague Habermas especially credits in Knowledge and Human Interests. Then with some help from Comte's progressive positivism, complementarity is converted into an account of the history of science. Before the two poles realize ~~they are~~ ^{their} complementary, each claims the totality of a given field of knowledge as its own (eg. Newton vs. Huygens on the nature of light). However, there are no adequate criteria for deciding the matter and so the dialectic is "frozen" in metaphysics. Finally, the poles are "mediated," with the resulting "synthesis" being a demonstration of their compatibility. The synthesis is "scientific" because the ideological--i.e. totalistic--claims of both sides are eliminated by invoking the valid points of one against the other. The "commonplaceness" of mediation suggested here is that it resembles the peacefully negotiated settlement of the bargaining table where each side gets what he "deserves." This position nevertheless is to be expected from Apel, given that he also believes, like Peirce before him, that a community of potential truth-seers must be presupposed in order for a rational dialogue between two positions to be possible.

From an Hegelian-Marxist perspective, the most striking feature of Apel's account of dialectics is its denial of the "reality" (i.e. the ontological status) of contradictions. The source, once again, is Fichte, who in the Science of Knowledge argued that we are able to entertain contradictory notions at the same time because neither of the contradictories completely commands our consciousness, since each one commands only as much of it as the other one does not. But together, the two contradictories comprise the totality of consciousness since nothing can be thought beyond them. Fichte presented this view in opposition to the psychological validity traditionally granted to Aristotle's principle of noncontradiction. Now let us introduce positivism and phenomenology as the two contradictories. For Apel they are irreconcilable only insofar as they are metaphysical, which is to say, as each makes claims over the entire methodology of science to the exclusion of the other. However, keeping Fichte in mind, this apparent contradiction is resolved once the spheres of relevance ^(for each) are demarcated through scientific mediation, which requires what Apel calls "the a priori of the communication community." Put this way, Apel's proposal resembles the logical approach we earlier attributed to Husserl--with the exception that in Husserl's "game" only one species of reduction can win, while in Apel's "game" mutations of both species do win. This difference highlights the fact--that escapes Apel's notice--that

neither positivism nor phenomenology can remain intact as a result of mediation, and the extent to which both reductions have been changed can be gauged by relating each original form to the form it assumes by virtue of being mediated by the other. And it is here that the Fichtean and the Hegelian-Marxists face off: Whereas the former would say that mediation results in a greater self-consciousness of the methodological complementarity that has existed between the two positions all along (hence the apparent nature of the contradiction), the latter would say that any such complementarity must be negotiated and as such does not subsist in some a priori state "waiting to be discovered" (hence the real nature of contradictions).

5. Mediation as a Semantic and Ontological Issue.

Take a simple Marxist example: A producer—i.e. a laborer regarded as a producer—bears a certain relation to his product, and the two are mutually defined by that relation. In other words, it makes no sense to talk about a "producer" unless "products" are possible, and vice versa. Apel would call this relation "mediation." However, following Hegelian logic, the Marxist argues that the producer also bears a relation to this relation, and this is the Marxist concept of mediation. The producer is defined as the creator of the product, he who brings into being by transforming nature; yet, the producer has this control only by virtue of being defined in terms of the product, which is to say, as its producer (i.e. the producer of it; as critics of Hegel and especially Bradley have pointed out, the theory of mediation heavily rests on the ontological import one gives to the possessive case: is there a sense in which the product possesses the producer?). At this point, the analytic philosopher might object that this supposed contradiction results from conflating the material (producer-as-a-being) with the formal (producer-as-a-term) modes of speech. And there is a sense in which the Marxist would not dispute the point: Formal and material are indeed analytically distinguishable modes of speech, yet they are indiscriminately used in the course of real speech. This could be a sign of either the analytic distinction not representing an ontological difference (the Marxist view, as we present it) or its representing such a difference that nevertheless goes unrecognized (the analytic view). Analytic philosophers (including here the later Wittgenstein, Ryle, and J.L. Austin) have interpreted this problem therapeutically in order to restore proper usage. The diagnostic argument informing their therapy in the case of the Marxist's malady might take the following form:

- (1) There is a term "producer" that is well-defined within the semantic universe of capitalist social relations.
- (2) One of the consequences of "producer" being a well-defined term is that its possible meanings are delimited by the terms it can possibly relate to.
- (3) Modes are mixed when the meaning of "producer" is considered

for all possible languages in some attempt at getting at a real, or material, definition of the term.

(4) This usually involves picking out in the world the lowest common denominator of what all languages refer to when using "producer," which Marx might call "species-man" or "homo faber."

(5) Now this extension will be necessarily underdetermined not because there is a "producer-in-itself" free from the semantic constraints of capitalist and other social relations, but because the extension no longer falls under a well-defined term (or concept) for any particular language.

(6) Thus, the second mediation, whence a real contradiction arises between the producer taken independently of social relations and as a constituent of them, is as spurious as any "double-world" theory--and this one is particularly reminiscent of the indeterminate-transcendental-ego/determined-empirical-self dichotomy perpetrated by Kant.

(7) The cure: Only use the formal mode when talking about terms, which is to say, do not change the rules of the game but change your illegal playing habits.

The Marxist objection to this treatment would start by examining how the therapists skirt the fact that there are many more possible definitions of "producer," or the thing picked out in the world by the term (if we accept Habermas' reading of Marx's concept of ideology as systematically distorted communication, then a "de-ideologized" material mode independent of the formal mode is posited), than the existing language-game would permit, and indeed some of these would be quite disruptive to play. But why continue playing the game? Now this is not the skeptic's usual global rejoinder, for the second form of mediation makes it a more specific question. But before considering it, we must first ask what is the ontological status of this "producer-in-itself" that can be related to the relation the producer enters into with the product. Although it is an essence distilled from various socio-economic systems throughout the history of what has been designated as species-man, it is not a conjunction of definitions or properties that must be present in any possible case of species-man. Rather, the essence is more like a Kripkean "possible world story" which traces identity "causally" (i.e. historically) from the actual world to other possible worlds. On this account, instantiations of the essence in two possible worlds need not have any common property as long as a story can be told whereby one instance "becomes" or "is transformed into" the other by virtue of being in the other world. Eidetic reduction is the correlate of this view in phenomenology: Let us say I imagine the chair before me, and then I imagine a possible world in which the chair has been annihilated so that it no longer retains any of its previous properties. That this second image continues to be grounded in the essence of the chair rests on the otherwise unrecognizable rubble being designated in the second

world as what would be designated as a chair in the first world. They are thus two episodes in the same possible world story.

Already we can anticipate an objection that will appear shortly: Is it not possible that any two episodes can constitute part of the same essence? In describing eidetic reduction, Husserl seems to rely on intuition to indicate when appearances have been so varied that the essence is lost. Thus, Husserl himself does not present an example as radical as the one cited above concerning the two episodes of "chairhood." As for Kripke, he quite straightforwardly puts a priori limits on the types of episodes that can constitute part of the same essence by invoking a "baptismal criterion" which stipulates that any candidate episode for a given essence must be able to tell a possible world story that traces back to some primordial episode of naming for which there is unequivocal empirical evidence. We find both Husserl's and Kripke's moves artificial extensions of their basic theory. As we shall see, any theory of reference, identity, or essence that aspires to "verisimilitude" must above all be able to explain why reference slips, identity gets lost, or essences fuse—for that seems to be the way the world works. So in answer to the objector's question, we say yes, any two episodes can constitute the same essence, but each pair is not possible in the same sense as one another. For example, you say that what is the chair today was the chair yesterday, and likewise for the table. I, on the other hand, argue that what is the chair today was the table yesterday, and likewise for the table vis-a-vis the chair. The reader may see the resemblance to Goodman's grue paradox mentioned in the introduction. Both are perfectly good stories but mine requires accounting for certain presupposed states-of-affairs that yours does not: How did the cross-identities take place (molecular recombination, etc.)? And why am I the only one who tells this story (special mental powers, etc.)? As with Goodman, your story is more entrenched because it does not require readjusting so many ordinarily held presuppositions. However, just because my story is more difficult to tell, it does not make it any less possible—indeed, it has the potential for being more interesting. After Nicholas Rescher's A Theory of Possibility, we can distinguish "individual essences" (chairs, tables, etc.) from "dispositional essences" (gravity, language, etc.) according to the extent of their effects on the possible world stories we can tell as a result of altering them (e.g., imagine identifying the chair in a "possible world" where there is no gravity). Rescher's distinction resembles the way in which Quine "naturalizes" what separates analytic (cf. dispositional) from synthetic (cf. individual) statements. Thus, the entrenchment of your story of the chair over mine is revealed in the new accounts of certain dispositional essences of the world—especially certain laws of nature—I need to give and you do not.

But whatever its particular episodes may be, how are we to characterize the subsisting essence? One way would be through the totality of its instantiated episodes, which is to say, the essence of a thing is its history, a view in line with Hegel and Marx. The lesson of Marxist historiography, especially as presented in The German Ideology, is that species-man "makes himself" in his dialectic with nature. The episodes of this dialectic are the instances of man in the succession of (possible) social relations. Furthermore, man can understand himself only in terms of this history, which reveals, among other things, the radical difference between man's self-identification before and after "economy" becomes an autonomous and eventually the superordinate social institution. Yet this radical difference in instantiations does not alter the fact that both are grounded in the same essence, part of the same history. That two episodes may be necessary conditions (i.e. the one must be traceable from the other) for each being what it is (i.e. instances of the same essence) and yet have no common properties is then the sense in which "real contradictions" reveal themselves in (or, as) history. Marx is especially countering histories that emphasize an essential difference between the sentient being of animals and the rational being of man, a legacy of Aristotle still present in the Enlightenment thinking of the classical political economists. However, this is not to say that the economists rejected an evolutionary account of man; instead, they argued that the relation between man and his animal ancestors was more one of "counterparts," in David Lewis' sense, than of identity. It might seem as though Marx and the economists are quibbling over semantics, but whereas the economists were able to show the "essential difference" between animal and man in the rise of technical rationality (epitomized in capitalism), Marx was able to pack more ontological import into the metaphors of capitalist exploitation "reducing men to animals" (since the distance between men and animals was not that insurmountable to begin with).

Now if real contradictions arise in Marxist historiography in the sense outlined above, then two questions arise concerning historico-causal theories of essence in general: First, if an historico-causal link is all that is needed to trace an essence across possible worlds, then, as Michael Dummett and Gareth Evans have pointed out, the reference is no longer "preserved" in any ordinary philosophical sense (e.g. the persistence of personal identity over spacetime). Does this not mean that anyone with a keen sense of storyline can show two seemingly unrelated instances are in fact grounded in the same essence? Second, given the total indeterminacy of reference stipulated in the first question, how is it the case that in fact we can intuit both essential and accidental differences? Actually, both these queries are quite misleading. In "The Causal Theory of Names," for example, Evans imagines a

case in which a basketball player "Louis" ends up being identified as Louis XIII of France because in tracing exclusively the use of the name through discourse the person designated by "Louis" is lost track of, thereby allowing two histories to become one. Notice that presumably Evans has isolated two temporally well-separated episodes in the history of "Louis," which when juxtaposed do appear quite different, not unlike juxtaposing a word in current usage and its etymological antecedent. And of course this perhaps tenuous link between the two episodes would not have been possible except for a series of "misunderstandings." Yet the example by no means disproves that identification takes place in this manner: It merely casts aspersions on the process—hence "misunderstandings"—since it violates the ontological prescription that the history of naming ^{should} mirrors the history of things, or more colloquially, that we should (and can) keep track of what we are talking about. In light of Evans' example, we would add to our initial formulation that talk about "Louis" over time must have developed so as to escape the notice of the speakers' prescriptive notions of identity (which may include a family resemblance, if not an outright conjunction, of descriptions)—if talk went immediately from "Louis the basketball player" to "Louis the King of France" then an "essential difference" would most certainly be registered by the speakers being aware that they are misunderstanding each other. Likewise, only if the two ends of a sorites are juxtaposed as enthymemes (i.e. premise and conclusion stripped of intermediate argument) does the so-called "sorites paradox" arise, as we have seen earlier. And, as Aristotle notes in Book III of the Rhetoric, enthymemes are most effective in forensic oratory, where the aim is to accuse or defend, while the same argument in soritical form is best suited for political oratory, where dissuasion or persuasion is the goal. Thus, we can see how Evans is able to use the Kripkean causal theory of reference against itself by shifting its mode of presentation (i.e. the possible world story) from a sorites to an enthymemes.

It sounds strange to take unpreserved reference and misunderstanding as prescriptive criticisms of historico-causal theories of identity because we do not usually associate "misunderstanding" with, say, "misbehavior." Unless it is claimed that we always misunderstand (a notion that certainly deserves more explication), misunderstanding only occurs when it is pointed out to us—when the continuity (sorites) of our understanding is broken by juxtaposing two episodes from it, one where we did understand or could have understood and one where we did not understand. The same of course applies for misbehavior, but there are ordinarily different connotations: There is a sense in which we are always "behaving." Misbehavior is a type of behavior that arises when some of our behavior seems incongruous to its

"general character," a family resemblance of norms and attitudes (Raymond Williams chronicles the historical confluences of the descriptive and prescriptive senses of "behavior" in Keywords). Misunderstanding, in contrast, is rarely (except in post-Heideggerian circles: Hans-Georg Gadamer, Jacques Derrida) regarded as a type of understanding. Instead, it is granted no ontological status whatsoever (the fate of "Nothing" as a substantive term bears comparison here): When we misunderstand we are not usually taken to understand a meaning other than the one intended—we are just said not to understand at all by virtue of not understanding that intended meaning. Indeed, if that were the correct explication of "misunderstanding" then rational discourse would not survive long enough to point out the first misunderstanding! But of course discourse does persist in spite of and maybe even because of misunderstanding (e.g., when taken to represent "uncertainty" as a regulative idea that motivates speakers to refine what they say for fear of not conveying what they mean).

After this considerable digression we may return to the ontological status of a "producer-in-itself" on which relies the intelligibility of the Hegelian-Marxist concept of mediation. As we have seen, misunderstanding is best understood as an ontological prescription based on how the prescriber reads the discourse in which the misunderstanding supposedly "occurs." In the case of Evans, the scriritical movement from Louis the basketball player to Louis the King of France was condensed into an explosive enthymeme that implicates the Kripkean for allowing the former Louis to "turn into" the latter. From Evans' reading then, the "real" plot of the discourse concerns the rather ordinary Louis as traced by a disjunction of descriptions on the family resemblance model. Now let us look at the Marxist in light of this. The history of social relations is itself scriritical: There is no moment in late antiquity say, when a man can say that he was previously a slave but now he is a serf; nor is there a specific point at which man becomes commoditized as labor. Indeed, if the latter change had occurred so drastically and so obviously, means would have been taken to ~~prevent~~ ^{stop} it. Bracketing just how drastic it was, the commoditization of man as labor was certainly not obvious as such until the plot of how man has made himself is juxtaposed with this latest capitalist episode. For the peasant driven from his ancestral turf to the industrial towns in the late eighteenth century, the change may have been drastic but such population shifts were normal around that time and presumably done out of the peasant's self-interest—as he understood it. When he enters the labor market and becomes a producer, it makes perfect sense that his role in the social system is defined in terms of the product he produces, and here we see an analogue to the language therapist's "good sense" in keeping to the formal mode of speech. However, when the Marxist examines how man arrived at this state-of-affairs, he finds

that the plot of history has taken unexpected turns that now, via political economy, threaten to sever man's ties with his history (and hence his essence) by claiming that the value of man has never been anything other than how much it costs to reproduce his labor (Louis Althusser, for one, identifies this realization as Marx's theoretical revolution). And just as the political economists invoke their own definitions of man to discount the history of man, so too the language therapists invoke the formal mode to argue the logical superiority of the formal mode to the material mode.

The producer-in-itself can be seen as the plot of history taken thematically-- "homo faber" is its title, just as Louis the basketball player is the theme of Evans' discourse. The mediation of the theme and the current episode reveals the current episode to be a "low point" where the disparity between man's possibilities and his actuality is greatest. The Marxist mediation then is this enthymematic presentation of the possibilities and actuality of history that "awakens" man from the false consciousness of regarding his identity critically. This awakening, which assumes the logical form of a paradox, can be seen as the source of alienation. Unlike Evans and the language therapists, just because the current episode in the history of man violates the family resemblance of descriptions governing homo faber in the past, the Marxist does not thereby claim that a misunderstanding of man's self-identity has taken place (although many non-Marxist historians would argue that in seeing man "reduced" to "labor Marx himself is mixing economic history with the history of metaphysics) since man's essence is ultimately identified as his history. Man should not therefore rewrite his history to preserve his essence but should historically move away from this latest episode by ^{attempting} ~~intending~~ to break with it (i.e. revolution). In Evans' case, speakers would have to take it upon themselves to steer the discussion back to the original Louis, if so desired, rather than saying that they were really discussing two different people[^]. (Evans' own strategy) And the first step in this direction is to develop the sense in which the current episode is both grounded in and represents a limitation on human history, which is initiated through the Hegelian-Marxist form of mediation.

6. Apel in Light of the Foregoing Investigation.

Let us now resume the mainline of the argument: Apel's mediation is an attempt to have the two dialectical poles realize the reasonableness and relevance of each other's position. To echo an earlier thought, the rhetoric of totalistic claims over the methodology of science is reduced to a logico-grammatical compatibility in the sense that if the positivist wanted to talk about what the phenomenologist talks about

he would then have to talk phenomenologically, and vice versa. Although Apel, like Habermas, is critical of decision-theoretic models of rationality, the rationality achieved through his brand of mediation is motivated by the imperfect ^{knowledge} each pole has of the other, a presupposition of decision theory. But this presupposition is couched in hermeneutical language rather than that of utility-maximization so as ^{that} ~~to result in~~ the formulation of Apel's thesis ~~in terms resembling~~ ^{resembles} a Gricean coordination problem: Positivism claims the entire methodology of science as its own only because it does not understand what phenomenologists are doing, but if it did understand it would accept them (and vice versa). Just as taking a calculated risk is one way of being rational given imperfect knowledge, so too is trying to find out more in order to be more certain about what is really within one's power. Apparent conflicts, or contradictions, exist between positivism and phenomenology only because they are not fully aware of the limits of their own positions. And because the relevance of each is delimited independently of what the proponents themselves ideologically claim, the mediation that results does not change the positions as such but, rather, offers the proponents a clearer understanding ("enlightenment" is often used in this context) of what they have been arguing for all along. In this light, the Marxist's second mediation looks superfluous: The relation positivism has to its complementary relation with phenomenology is exactly the same the complementary relation positivism has with phenomenology.

But the Marxist would counter that Apel sees mediation as merely determining the protocols of positivist and phenomenological discourse—not unlike Ryle's categorical analysis of language usage—which locates the transcendental conditions of what each can say outside of what they actually say to one another. Thus, just as it makes no sense to talk about "linguistic competence" changing as a result of a change in "linguistic performance" in Chomsky's transformational grammar, so too Apel would not consider the possibility of the transcendental conditions themselves changing, for they always subsist potentially in every utterance made in the discourse in question; hence, for Apel mediation can be glossed as "actualization" (of a potential). In contrast, the Hegelian-Marxist would hold that transcendental conditions, first of all, do not "transcend" in the sense of not requiring actualization for their ontological status (Apel's mediation is possible and necessary, respectively, only because the conditions subsist as a potential and yet they have not been fully actualized in discourse). Instead, these conditions and the discourse conditioned by them are necessary for each being as it is. Thus, rather than asking "In what sense is a phenomenological reduction possible?" the Hegelian-Marxist would ask "In what sense is a phenomenological reduction possible, given the sense in which the positivist

reduction is actual?" And the answer to the second question will only arise from actually deriving the phenomenological from the positivist reduction—but more importantly, the question itself will only be meaningful to ask at that point. This is why the puzzle of how positivists and phenomenologists can be both doing "reductions" cannot be assumed to be a "problem" until a "solution" is offered. In this context, we must remember that in initially posing the transcendental question of cognition, Kant does play the Humean skeptic or the Cartesian constructionist, but in fact accepts the actuality of the world as given and then reflects on what such a commitment amounts to.

At last we can follow through the reasoning of Apel's paper to see these objections materialize. His argument will be sketched so as to highlight how positivism and phenomenology in the guises of scientistics and hermeneutics are mediated by each other by virtue of speaking complementary languages, and how complementarity itself can be taken as a means toward self-emancipation from the cognitive limitations imposed by contemporary methodological problems in the sciences.

(1) Scientistic overextension of the concept of explanation:

Positivists (especially Theodor Abel) interpret Max Weber's "Verstehen" as the logical component of an hypothesis about the cause of an actor's behavior. In imagining possible causes, the scientist applies the principle of charity to consider what would be reasonable to elicit such behavior under the circumstances, a Peircean "abduction." However, this reason is subject to further empirical analysis (e.g., more data, Bayesian confirmation) which after meeting inductive criteria is deemed a cause, which is to say, an event that can satisfy a variable in a law-like statement about behavior.

This reduction of reasons to causes discounts the ontological difference between the two: A reason is a transcendental condition of the action always present as a presupposition of any action of that kind; a cause is an antecedent even that is present or absent from a specific instance of the action. Consequently, social scientific explanations based on natural science (i.e. hypothetico-deductive) models seem impoverished in relation to the types of phenomena it tries to explain.

Apel's solution is to compensate natural science models of explanation by adding the judgment of a scientific consensus as to the appropriateness of a social scientific explanation. And appropriateness requires a sense of the historically grounded presuppositions of the action, which does not easily lend itself to the possibilistic thinking of contemporary scientists invoking the principle of charity; hence the need for hermeneutics.

(2) Hermeneutic overextension of the concept of historicity:

Hermeneuticians (especially Gadamer) deny the possibility of extending man's cognitive horizon beyond its presuppositional base, which after Heidegger has been called "Western metaphysics." Consequently, the alleged "discoveries" of the sciences are nothing more than realizations of that base for

purposes of transcending it, contrary to the intentions of Habermas' self-critical science of discourse (which Apel endorses).

This extension of the hermeneutical circle to the point of cultural solipsism does not then proceed to the meta-level of considering what are the transcendental conditions of presuppositions appearing as discoveries rather than as the presuppositions they ought to appear as. In a more Heideggerian vein, "How can we be surprised by what we already know?" And posed this way, hermeneuticians seem to be treading on a contradiction that they must not be able to say. Why must not? Because the phenomenology of discovery, even in the hermeneutical sense, is grounded in the possibility of discovered presuppositions helping us discover undiscovered ones. If the phenomenology of discovery were ^{not} grounded in that sense, then hermeneuticians would have no basis for demonstrating the subsequent discoveries are presuppositions in the same sense as earlier ones.

Apel's solution is to compensate the circularity of historicism by adding the dimension of depth of knowledge about the presuppositional base by ideological critique and psychoanalysis, which import the positivistic idea that science can systematically build on what it knows such that knowledge of how man has been constrained and controlled in the past allows him to take greater control of his future.

- (3) Apel sums up the emancipatory interest that is made possible by ideological critique and psychoanalysis as man's ability to understand the causal determinants of his existence and thereby be able to know the sense in which behavioral change is possible. In this way, a scientifically informed hermeneutics can free man from existing ideological constraints, and hence their complementary relation.

At the outset, keep in mind that the Hegelian-Marxist view of dialectical mediation would not so much criticize Apel's diagnosis and treatment of the methodological problem of the sciences as his understanding of the sense in which he has "solved" it. Once again, Apel thinks that mediation reveals the transcendental conditions of both positivism and phenomenology in themselves. It just so happens that part of the transcendental conditions of both is that they are complementary and therefore mediatable in Apel's sense. However, the Marxist would not situate this complementarity in some potential that will be actualized upon adopting the Habermas-Apel line on rational discourse, but in the presupposition of some actualized state-of-affairs, namely, when positivism and phenomenology are shown to extend their problematics into each other's sphere of relevance. Now in the above argument Apel does portray what such a state-of-affairs would be like, and we can take that as an actualization. However, while this actualization may indeed expli-

cate what Apel means by mediation through complementarity, it is not required for the expression "transcendental conditions of positivism and phenomenology" (or "the a priori of the communication community" which grounds their complementarity) to be meaningful. In fact, Apel himself does not believe that it is necessary that these conditions be actualized in order for them to subsist; hence, they are presented as a type of "cognitive ethics" that are always actualizable but need to be self-consciously (through the emancipatory interest) actualized. (The contrast to Kant here could not be greater.) The difficulty for the Marxist would be in determining the ontological status of the transcendental conditions when they are not actualized (i.e. in what sense do they subsist) and how Apel would know them—as well as why he would not count his own explication of the conditions as a form of actualization (he says his articles are merely "programmatically"). These problems surround any attempt at making sense of the proposition that "ultimate reality" somehow depends on a "perfect" state-of-affairs (i.e. perfect knowledge of what makes phenomenology and positivism possible). ~~In this sense, Apel is an heir to Husserl.~~

7. Implications for Understanding the History of Modern Philosophy.

After accepting Apel's explication of the transcendental conditions as an actualization of them, the Marxist would then juxtapose the sense in which positivism and phenomenology have been defined in terms of each other with what these types of reduction usually mean when taken alone (or have come to mean by virtue of their history). This second mediation would no doubt generate a paradox, that phenomenology and positivism can complement each other only if they are made to be more compatible with one another. Many of the historically possible aspects of phenomenology, for example, must be reworked with an eye toward positivism: The hermeneutic circle must be negotiable so as to include the possibility of having a deeper awareness of one's presuppositions. The result is that what Apel thinks is some logico-grammatical compatibility of phenomenology and positivism has been revealed as a "fabricated" (taking the term neutrally) connection that belongs to rhetoric. What then? One need not be a Marxist to suggest scrapping Apel's program and "restoring" the essence of positivism and phenomenology to their "rightful" discrete positions. However, the Marxist would counter that even within what have become the histories of positivism and phenomenology themselves are such rhetorical "contrivances" (again taking the term neutrally)—only they have gone scot-free unnoticed. In fact, if two disparate episodes of each movement are taken enthymematically, a contradiction would be found. In phenomenology, consider the fate of the "natural attitude" to perception from being defined in terms of prepredicative experience in Husserl's Logical Investigations to the very much postpredicative experience of what is taken for granted in

the Lifeworld, as presented in his Crisis. In positivism, look at how Russell originally interpreted the maxim—"Wherever possible, logical constructions are to be substituted for inferred entities"—as a call for Machian phenomenalism (i.e. reduction to sense-data: "The Relation of Sense-Data to Physics") and later as a call for Carnapian physicalism (i.e. reduction to matter-in-motion; "Logical Atomism"). In short, the essences of phenomenology and positivism are nothing but these subtle rhetorical moves, and so contradictions elicited by an enthymeme of two historical episodes are real insofar as they constitute the essence. Consequently, why not allow positivism to be phenomenologized and phenomenology positivized as the latest episodes in their histories? So if Apel has uncovered the transcendental conditions of the two reductions, then they appear as what presupposes an actual episode in their history, an episode he prescribed into existence. In short, he has solved his problem by changing the status of the terms in question.

8. Models of Mediation for the Rhetorical Approach

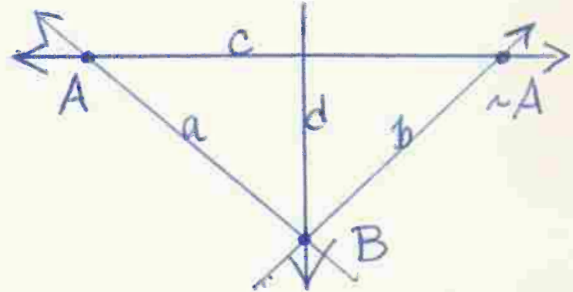
Now we want to start with positivist premises and arrive at a phenomenological conclusion. This is to say that in addressing the "facts" of scientific inquiry (including the behavior, etc., to which psychic states are reduced) the positivist is also addressing the transcendental conditions that make the inquiry possible. This claim is warranted by virtue of an equivocation on the meaning of "address," which is illustrated in "I address the audience" and "I address the problem." The former will be called the "dative" function of address and concerns what is literally presented before the inquirer as "given," just as an audience is what the speaker finds before his eyes. The latter "address" will be called the "accusative" function and concerns the object to which claims made by the inquirer are to be attached. The positivist-as-positivist addresses datively, while the phenomenologist-as-phenomenologist addresses accusatively. However, as philosophers, the two necessarily address both ways, in the same sense that a speaker must be addressing an audience in order to address a problem. The difference between the two lies in what is recorded in the name of philosophy about this scientific inquiry or rhetorical episode: The positivist only records information about the audience, as it were, while the phenomenologist only records information about what the speaker is talking about (it is important that the reader keep the point of the analogy in mind here; and not be misled by the historical connotations of the two movements). Posed this way, we see that when the positivist thinks that his inquiry relies merely on inductive generalizations from the facts (perhaps systematically recast in deductive form), he assumes that what he "talks to" is what he is talking about, and thereby becomes like the speaker who reckons the ^{so}prerequisite for giving an effective speech

is to find out all he can about the audience. Similarly, the phenomenologist who claims to be able to "intuit" essences by turning away from the positivist's facts resembles the speaker who thinks all he needs to consider in making an effective speech is what he is talking about.

The precedent for raising these two functions of address is to be found in the famous ontological question posed by Aristotle in the first book of the Metaphysics: "What would it mean to be that thing?" In current philosophical discourse this is read as a question of definition that perhaps conflates the material and formal modes of speech (i.e. "...mean to be...."), but nevertheless can be answered by establishing a Russellian identity between a definite description ("what would it mean...") and a proper name ("...that thing") via a semantically superfluous copula ("...to be..."). In that case, we would have expected both sides of the copula to take the same grammatical case so as to show that "to be" merely expresses a transparent identity. However, "to be" takes the dative here, which renders the question more like "What would it mean to be to (for) that thing?" This can be interpreted as a request for the sense in which Being can be presented as that thing. The picture we have in mind is of Being-in-itself undifferentiated yet through some mediation appears as distinct beings, or things. On our model of address, this is then a question directed at the speaker who must somehow manage to make what he is talking about apparent to the audience by persuading them, which is to say, by having the object of his speech become apparent in them as opinions held as their own. Perhaps the best way to understand how the speaker mediates is to see the given opinions of the audience independent of the speech as the figure of a figure/ground Gestalt, in which the ground is the object of the speaker's talk also independent of the speech. In that case, the speaker must determine how the figure and ground are delimited by one another so that a "Gestalt-switch" can occur whereby the roles of figure and ground are reversed. (In the phenomenological literature, Jean-Paul Sartre is perhaps the only expositor to attempt an account of "ground" that does not rely exclusively on "Phenomenogese," and even though the account ^{offered} in Being and Nothingness rests on the suggestive metaphor of how ^{we} become aware of someone not-being-there-~~f~~i.e. the case of looking for Pierre in the café and not finding him², we would speculate that it was just this Gestalt sense of "ground" he was trying to capture. In any case, the process of Gestalt-switch captures well the "dialectical law" of the interpenetration of opposites.) To put it more rhetorically, the speaker determines how what he is talking about must be presented, given the natural attitude of the audience, in order to realize the presupposition of his and their^{both} being in the same rhetorical episode,

namely, they are open to his attempt at persuading them. The Gestalt-switch occurs when the object of the speaker's talk "surfaces" to become the natural attitude of the audience, while the original natural attitude "recedes." And so the audience is not aware of how much their minds have actually been changed because they are never in a position to consider the difference between figure and ground, since that would require seeing both as figures at once. But again, the possibility of such a change also is what presupposes the rhetorical episode.

We are on the verge of constructing the grammar of dialectical reasoning. While such a grammar need not be articulated in order to complete our project, it will nevertheless go some way toward systematizing the rhetorical approach we have been discussing throughout this ^{essay} ~~chapter~~. First consider the diagram of the dialectic, which has been labeled according to its "moments" (A,-A,B) and reflective (a,b) and unreflective (c,d) modes of mediation.



The difference between "reflective" and "unreflective" modes depends on whether the mediation is recognized as such or not, in which case it is taken as part of the natural attitude that takes things for granted by seeing them as immediate, or unmediated. The reflective mode is manifested rhetorically as enthymemes; the unreflective mode as sorites. The reflective mode assumes the standpoint of the transcendental attitude (B) which "comprehends the Gestalt" (or, realize the presuppositions of the rhetorical attitude in question) by virtue of understanding the sense in which the figure A is figuring the ground -A (and likewise how -A is grounding A). This transcendental attitude is articulated as the two address-functions—the dative (a) and the accusative (b)—and corresponding to each we have two critical stances, which in the previous sections were represented by the language-therapist and the Marxist, respectively, as well as two constructive stances, which have attributed in this section to positivism and phenomenology, respectively. The unreflective mode assumes the standpoint of the natural attitude (A and -A), as in the audience being persuaded to the speaker's position because it appears as a natural extension of their own view (c) without realizing that such a position also alters their original view (d). The conjunction of (c) and (d) entails a real contradiction, in the sense discussed earlier. Also (c) and (d) capture the complementary senses of "ideology" developed by Marx in The German Ideology, the former being an apparently untranscendable world-view (sometimes called "hegemony") and the latter being the alterations in historical perspective continually needed to keep such a world-view intact (sometimes called

"false consciousness").

Now consider the following chart which correlates the moments of the dialectic with the various categories we have been using during this inquiry:

DIALECTICAL MOMENT	ARISTOTLE'S QUESTION	ONTOLOGICAL TRANSLATION	SEMANTICAL TRANSLATION	RHETORICAL TRANSLATION	GESTALT TRANSLATION
Thesis (A)	...(to) that thing.	phenomena (beings in the world)	proper name	audience	figure
Antithesis (-A)	...to be...	noumenon (Being-in-itself)	copula	what is talked about	ground
Synthesis (B)	what would it mean...	mediation	definite description	speaker-as- speech	Gestalt.

We unfortunately will not be able to develop all the connections suggested here. However, the previous discussion in this paper should provide an ample beginning. In passing though, we direct the reader's attention to what can be seen as a check of the plausibility of this system: As we have presented it, if Russell is followed in divesting the copula of semantic value, and thereby eliminating the antithetical moment, then only the dative function of reflective mediation is available. And indeed, this function has already been associated with the positivist task, under which Russell would be normally included. Finally, consider how our intuitions about the shortcomings of the extreme positivist and the extreme phenomenologist are satisfied by our model. The former would be faulted for banality, which is to say, for telling the audience what they already know; ^(i.e., the facts in logical shorthand) the latter would be faulted for obscurity, which is to say, for disregarding the competence of the audience so that the speaker's message never gets through. ^(i.e., some essence having no determinate relation to the facts)

But more important for purposes of actually persuading the positivist to the position of phenomenological reduction is some idea of the logic of dialectical reasoning. First, we must assume the speaker's position and the positivist the audience's. In light of the above grammar, this move should appear significant, especially since the radical difference between the transcendental and natural attitudes has now been explicated. Then following Strawson's "On Referring," the logical form of the presupposition will be taken as "Either A or -A entails B," which reads contrapositively as B being the necessary condition for either A or -A. In both cases, B is the presupposition. This form captures what seems to be most essential to the transcendental argument in that the possibility of A (which is actually either A or -A) does not follow unless B obtains. Furthermore, it captures the mathematical metaphor of "the absolute value" (i.e. the integer quantity irrespective of its being positive or negative) that Husserl uses for the suspension ^(or "bracketing") of ontological commitment to the natural attitude, and it is from this suspended state

that the essence is phenomenologically reduced. A is the state-of-affairs addressed datively by the positivist, and -A grounds A by delimiting its significance. At this point the sense in which A is "grounded" is not clear, for anything that is not A is possibly -A. Say A = "This is red." What is -A? "This is not red?" Yes, but only in the syntactic and not the semantic sense of the expression. In other words, while we do admit that the antithesis formally negates the thesis, we do not want to be committed to the interpretation: "Either 'this is red' or 'this is not red' presupposes that 'this is colored'," which would arise upon assuming that the thesis alone can establish the semantic constraints on the antithesis and, consequently, on the nature of the presupposition. However, in true dialectical fashion, thesis and antithesis must delimit each other, so that the presupposition is synthetically derived. In saying that this is not red, we may be saying that this is soft instead, and what is presupposed then is something like "secondary qualities."

It may be argued, however, that "secondary qualities," if it is to have any sense, must be understood as a collection of qualities including "color" and "texture." In that case, red and not-red, as soft, would still presuppose color--as well as texture. But this argument can be accepted only if we suppose that a term used in discourse--more specifically, a text--carries all its possible semantic relations rather than simply those that are relevant to distinguish it from the other terms in that discourse. Thus, if the positivist offers this being red and this being soft as his alternatives, we would need to say (claims the objector) that he is presupposing everything he could about the meaning of each rather than just presupposing what would account for those two particular alternatives being posed together. In the jargon of structuralist linguistics, we would counter that the grammar must be generated from the text, and not the text generated from the grammar--if only because the ontological status of the former generation is comprehensible by virtue of its being grounded in something actual, the text, while the status of a "generative grammar" is unclear (e.g., How does it compare to the deductive "generation" of theorems in logic; does it have some additional mental component that logic does not?). There is above all a strategic reason for wanting to locate the presupposition as a minimal, or necessary, difference, and this should forestall the objection that we are simply reducing presupposition to the lowest common denominator between two opposing terms. In the act of dialectically synthesizing the opposition of A and -A, or identifying its transcendental conditions (notice the following correspondences in Hegelian, Kantian, and analytic languages: synthesis (or sublation) = transcendental conditions = presuppositions), this synthesis itself becomes a thesis that is opposed by another antithesis, etc. The movement of this second dialectic makes the

opposition of the first dialectic irrelevant, and thereby constitutes a formal model of how to transcend one's presuppositions (to some new ones, of course). However, this model is only possible if the opposing terms of a given dialectic do not carry all their possible presuppositions but only the ones necessary to render them antagonistic. To return to our example: If I suspect the positivist alternatives of this being red and this being soft to be "a distinction without a difference," as Peirce would say, I may nevertheless wish to retain the categories of color and texture but resituate them in a new set of alternatives--and in fact it may be by reflecting on these categories that the new set of alternatives arises. Thus, in subsuming "this is red" and "this is soft" as the synthesis of "secondary qualities," I would then be in a position to oppose it to, say, "primary qualities" (but the antithesis selected could be as semantically incongruous as "soft" is to "red"). I could then argue against the positivist by challenging his relevance to the argument, or, as the structuralists say: "decentering his text." The positivist thinks the problem is choosing between "this is red" and "this is soft" only because he thinks the problem can be resolved in the psychological realm of secondary qualities. However, it may well be a matter of primary qualities, which will be reflected in a physical reinterpretation of color (as spectral) and texture (as ~~normal~~^{topological}). Although a "formula" for shifting paradigms is itself an exciting prospect that could be further developed from this logic, we must finish the current project, which in terms of this method means subsuming positivism's self-posed alternatives, with the resultant presupposition being a "reduced" form of positivist discourse in the sense of revealing what positivists and their opponents can argue about.

9. An Application of the Rhetorical Approach: Carnap

In the hypothetical example sketched above, we perhaps ^{gratuitously} called our opponent "positivist." However, in what follows we have reconstructed somewhat more carefully Rudolf Carnap's 1931 "Psychology in Physical Language" as the positivist text from which phenomenological conclusions will be elicited. The paper roughly divides into a discussion of the senses in which physicalism differs from the received view in psychological research, which Carnap takes to be introspectionism, and refutations of possible objections such a psychologist might make against physicalism. We shall present our dialectical inquiry as follows: First, explicate the opposition posed by Carnap; second, determine with which pole the burden of proof lies, in order to understand the sense in which the received view is antithetical to Carnap's; third, derive the presuppositions centering the opposite and thereby transcend it.

Carnap opens by observing that the linguistic source of hypostatized entities, such as those allegedly studied by traditional psychologists, lies in mixing the material and formal modes of speech. This confusion can even be suspected of the physicalist thesis that all psychological sentences describe physical states, as if each psychological sentence must "pick out" (i.e. provide the truth or verifiability conditions for) a unique physical state. Rather, this isomorphism can only be guaranteed within the formal mode itself, such that for each psychological sentence would correspond a unique physical sentence. By "correspondence" we mean extensionally equivalent, or substitutable case-for-case, and so we can talk about these sentences "cross-referring" to one another. However, the material mode can never guarantee more than the sentences of physics and psychology "co-referring" to the same state-of-affairs, which is to say, they too are extensionally equivalent, but it is not clear that they would be equivalent in ~~nonextensional~~ ^{intensional} contexts since they do not co-refer by virtue of cross-referring. That they would not be ~~nonextensionally~~ ^{intensionally} equivalent is suggested in that ordinary talk about the interrelations of one's psychic states is often a misleading guide to their causal relations in the body (e.g., the James-Lange theory, whereby emotions do not cause visceral reactions but are epiphenomena arising from those reactions). In the formal mode, by contrast, nothing meaningful is added by saying that the cross-referential sentences co-refer, because "meaningfulness," or the possibility of a sentence being true, is conferred not by anything "immediately given" (such as sense-data to consciousness) but by the ability of the (protocol) sentence to be deduced from general sentences in what Carnap calls "the system language of science," conjoined with whatever translation rules are needed (since each individual is said to have his own protocol language).

Now the burden of proof lies with the material modist to show that there is good reason to think that reciprocal translation is not possible between psychic and physical states, and that it is only by virtue of common experience of the world that our sentences can be scientifically meaningful. Notice the following presuppositions in Carnap's presentation: First, the possibility of representationalism (i.e., language re-presents something: either another language or the world)--the formalist ^{modist} says it occurs through translation; the materialist ^{modist} says through experiencing the world. Second, the possibility of the "propositional attitude," or a strong subject-object distinction (i.e., language has a clearly defined extensional context, independent of the protocol language used, and a clearly defined ~~nonextensional~~ ^{intensional} context, dependent on the protocol language used)--the formalist ^{modist} says it has no effect on carrying out the reductionist program in psychology, while the materialist ^{modist} says its effects might extend to preventing any determinate correspondences between the sciences

Carnap then proceeds to set up two syllogistic models of scientific inquiry, "rational" and intuitive," relying on sentences being expressed in the formal and material mode, respectively. The major premise of each is a general sentence that is hypothesized (or abduced) as the law governing whatever observation sentences are deduced, which will then be used to predict. Serving as minor premise for each is the system of protocols in the scientist's language that determines what will count as a substitution-case (or physical instance) satisfying the variables (or theoretical entities) in the major premise. Thus, the minor premise incorporates Nagel-like correspondence rules in the formal mode and Bridgman-like operational definitions in the material mode. Furthermore, it determines the sense in which the protocol sentence (or the proposition expressed by it) refers to either a scientific sentence or a state-of-affairs: In other words, the minor premise makes signification in scientific inquiry possible (which happens to be Maurice Merleau-Ponty's reformulation of the transcendental question of phenomenology in The Structure of Behavior). Interestingly, Carnap says that a failure to predict must be negotiated at the level of the minor premise, which is to say, by considering which semiotic presuppositions may be at fault. However, the formal^{modist} differs from the material^{modist} in that the former will interpret the misprediction as a sign that the wrong hypothesis was abduced, while the latter will merely (or rather, can merely--since the meaningfulness of the observation sentence is not by virtue of its deducibility from the hypothesis) invoke the ceteris paribus clause and decide that the hypothesis was inappropriate for the experimental situation. So, in a sense, the empirical world itself is at fault for "misleading" the scientist as to the type of situation it was, and so the hypothesis remains intact but resituated (and still untested). Carnap associates ^{the} taking of misprediction^{to} ^{signifying} ~~inappropriateness~~ rather than falsehood with phenomenology, which, by his account, attempts to ~~intuit~~ essences that appear empirically in a more or less confused manner.

The burden of proof again lies with the material modist, who must now show why we should ever think that the world is biased against our theories such that we cannot identify the empirical situation correctly, let alone predict it. The implausibility of the material^{modist}'s position here stems from the following dialectically disadvantageous presuppositions: First, the possibility of referring to (or talking correctly about) things in the world (or sentences in other theoretical languages), via a sense/reference model--the formal^{modist} says it always happens, while the material^{modist} says that it is sometimes violated; in the former case, this means there are always determinate grounds on which to accept or reject an hypothesis, while in the latter there never ^{is}. Second, the possibility of misnaming as a type of error--a failure to predict ~~issue~~ either to a posteriori naming, on the formal model (in which I could

have named the event correctly if I predicted it), or to a priori misnaming, on the material model (in which I misunderstood the situation from the start and so, given the hypothesis selected, I could not have predicted it). Third, the possibility of adjusting the theoretical sentences which constitute the hypothesis to the observation sentences--either the adjustment merely amounts to resituating the hypothesis in a different empirical setting, on the material model, or the hypothesis itself is adjusted on the formal model, as Carnap provides in his confirmation theory in which conditional probability sentences are altered by outcomes.

At this point, Carnap considers "four typical criticisms" of the physicalist program and rebuts them. We shall take them in the order they are presented. The first objection is that because physiology is by no means as developed as psychology, it is impossible to establish correspondence rules such that mental states can be uniquely identified in the body (or, more precisely, as sentences about bodily states). Carnap's rejoinder is that the primitive state of physiological description is a contingent feature of the discipline that promises to account ultimately for all psychic nuances. For the present, however, this means that for a given psychological sentence, the set of possible translations in physiology is larger than would be desired for purposes of confirming hypotheses (cf. Quine's "indeterminacy of translation"). Yet once neural connections are completely mapped, the tables will be turned, since man's ability to introspect physical states via mental states is not sensitive enough to capture all the physical states that are actually occurring (e.g., what I may identify as a localized sensation of pain may be a complex of neurons affecting vast regions of my body). Presupposed here is the possibility that it makes sense to talk about the sciences realizing what they set out to do, or actualizing a potential, in more teleological talk. The difference is that the objector says that if physiology is not actualized by now then it never will be, while Carnap says that actualization is a gradual process rather than a determinate (i.e. either it is actual or it is not actual) state.

The second objection is that psychology is an irreducible science because among its primitives is the special feeling that accompanies all mental states that can be expressed as "I think that..." or "I feel that..." . From introspecting this subjectivity we discover how mental states are linked up to behavioral cues so as to enable us to infer these mental states in others through a charitable application of analogy upon seeing the appropriate signs. Carnap responds that the semiotic of intersubjectivity described by the objector is not in itself primitive, for it is not essential that the behavioral cues be associated with certain mental states that are in turn synthesized by some ego. These cues themselves form a self-contained system of signification that can be rendered on the stimulus-response model and are sufficient to

account for anything that could be duplicated on shadow semiotic as a "mental state." Presupposed here is the possibility that the ego (or the propositional attitude, in the formal mode Carnap usually uses) is at least analytically distinct from the collection of states it allegedly synthesizes. Both Carnap and the objector can introspect the ego analytically, but Carnap thinks he is only introspecting his own "frame of reference," as it were, while the objector thinks he has access to something more substantial.

The third objection is that understanding the mental states of others cannot rest merely on a system of behavioral cues because we derive more insight from the cues than their presence would warrant, especially in terms of being able to anticipate subsequent cues for a situation never before experienced (discourse, especially in regard to the uniqueness of the order and content of sentences uttered, is the paradigmatic case). And not only that, but we also are able to "read into" intentions and motives that never actually surface in the exchange of cues but nevertheless regulate how the exchange proceeds. A radical extension of this argument, which Carnap takes seriously, is the possibility of telepathy, in which the ratio of cues to insight is so low (the sender and receiver may be separated by great distances) as to suggest an autonomous semiotic of the mind. Carnap's response here is to point out that telepathy is not so much a pure version of our alleged everyday reliance on monitoring each other's psychic states as a degenerate version of our dependence on behavioral cues, for telepathy is much less reliable than ordinary behavioral exchanges and this in proportion to the absence of cues. Presupposed here is that there are criteria of knowing we have understood the mental states of others. Carnap differs from the objector in that he claims these criteria always refer to publicly observable behavior and can be expressed in terms of a translation manual, while the objector claims that the criteria take the form of counterfactual conditionals based on analogizing the cue of another^{to} the mental state the interpreter would associate it with, had he emitted the cue.

The fourth and final objection is that when placed in the context of how psychology is actually researched, the system of behavioral cues becomes an inefficient means of collecting information about subjects. If the psychologist intends to codify his findings in language, why not elicit them in language so as both to obtain agreement between scientist and subject as to what the latter experiences or thinks and to maximize use of language's ability to make subtle distinctions. In artificially restricting himself to non-verbal responses, the behavioral psychologist in fact makes the task of attributing mental states more speculative since the rela-

tion, say, between a contraction of facial muscles and an emotion is merely symbolic and requires an imaginative use of metaphor to see how that contraction alone can stand for all that is associated with experiencing an emotion. Carnap rebuts this with a series of criticisms, including the nuanatial strength of psychological language being merely relative to physiology's current underdevelopment, and the post-Freudian point that subjects are not necessarily the best monitors of their own mental states since such monitoring is selective in behalf of the subject (e.g. defense mechanisms) —and among what is suppressed may be information of value to the scientist. But Carnap finds his most potent rejoinder in what positivists have taken as the strength of physicalism, namely, if any psychological sentence is meaningful it can be replaced by one in physiology, etc. Only the state of our knowledge prevents such a reduction. However, were it tried the other way—translating every physiological sentence into psychology—the language of psychology would have to be greatly (and artificially, i.e. so as to add distinctions that make no difference in either ordinary talk about the mind or even in current psychological research) expanded. We need only here imagine how all the possible curves registered on an electroencephalogram would be interpreted. For Carnap this shows that psychology talks about a smaller part of the world than physiology by definition (and is thereby logically subordinate to it), while physiology's own limitations are merely empirical. Presupposed here is the possibility of two discrete languages, that of the mental and of the physical, which in the material mode could be rendered as a more general language/world distinction. Carnap differs from his objector only in that he does not grant the two languages the same ontological status, but he certainly grants them the same analytic status: Both are well-formed languages, but psychological sentences are only meaningful by virtue of being translatable into physiological sentences, while the reverse is not necessarily true.

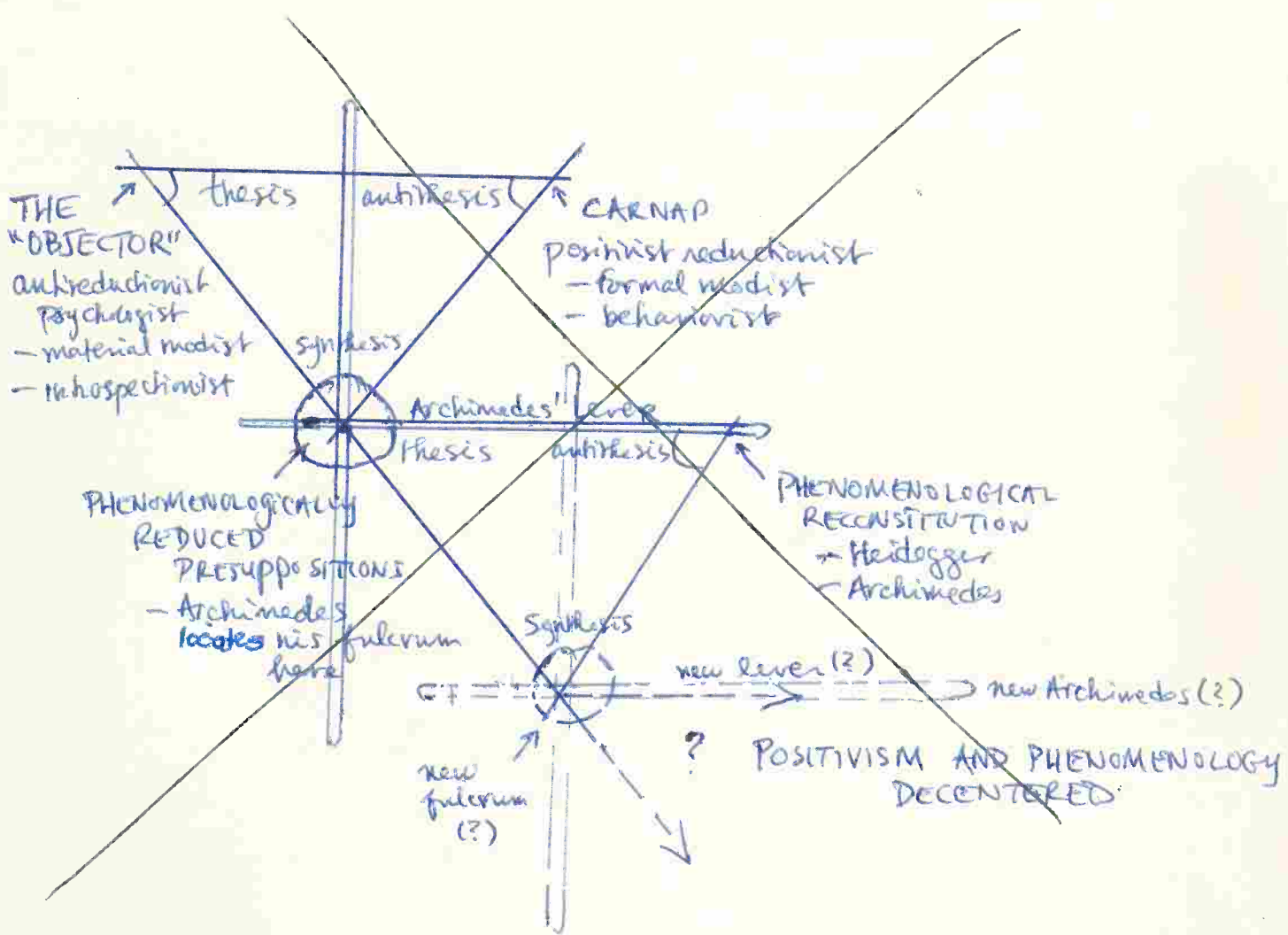
10. The Phenomenological Transcendence of Carnap.

So in what sense are the presuppositions identified above the products of phenomenological reduction? They center the opposition posed by the positivist such that thesis and antithesis appear relevant to one another: Carnap's rejoinders are appropriate only if these presuppositions are taken for granted and not themselves set up as theses for consideration, as the phenomenologist does by bracketing them. Now after these essential presuppositions are delimited, antitheses to them can be submitted, and this is the task of "phenomenological reconstitution," as Husserl terms it in Ideas: The ground required for the positivist figures to stand out is then presented. We can suggest Heideggerian groundings to each of the last four presuppositions as follows: ^(First) An opposition to a teleological view of science, pose the contingent nature of the history of scientific inquiry, wherein the scientist can justify his practice only in terms of the tradition he comes from and not the direction

research is going. Second, in opposition to an analytically distinct ego, pose Dasein, or human existence by virtue of its being-in-the-world. In that case we have an internal relations view recognizing no possible understanding of man independent of what ^{he} does in the world: Thus, man is only as real as the world is, and vice versa. Third, in opposition to ~~any~~ ^{the possibility of} knowing when intersubjective understanding occurs, pose the ontological version of the misunderstanding thesis, whereby meaning is intrinsically equivocal such that whatever coherence and consensus individuals experience in interaction (i.e. no manifest misunderstandings) is made irrelevant to the question of whether those ^{experiential} signs of understanding are understood by everyone as signifying in the same sense. Positivists assume that a ^{superficial} consensus entails a ^{deep} consensus of interpretation, ~~which does not bear on~~ ^{thereby not questioning} whether the parties have any genuine knowledge of such a consensus. And fourth, in opposition to a discretianist view toward languages (i.e. there are discrete languages identified by separate grammars), and especially language vis-a-vis the world (i.e. language is radically different from the world, and so can comprehend it only imperfectly), pose the "hermeneutic circle," whereby the idea of "changing languages" or "getting out of one's conceptual scheme" only makes sense insofar as the language in which those desires are expressed allows the possibility of such shifts.

Having counterposed the phenomenologically reduced positivist presuppositions with the phenomenological reconstitutions grounding each of them, we are now entitled to sublimate this opposition by providing the presupposition explicating the sense in which the reconstitutions just submitted are reconstitutions of the reductions earlier submitted. When this is done, the problem of relating positivist and phenomenological reductions will have been totally decentered and our attempted problematization made "irrelevant." We can capture this dialectic ~~diagrammatically~~ with an eye toward cashing out the Archimedean metaphor so often associated with transcendental thinking: Archimedes wants to uproot the opposition between Carnap and his objector, and so he locates his fulcrum at that point where their common presuppositions are grounded. Then he can place his lever across the opposition between those presuppositions and their Heideggerian reconstitution—and it is with Heidegger that Archimedes stands. But where should we place the fulcrum in order to uproot Archimedes' move?

(Diagram on next page)



11. Postscript

Of course, we could have proceeded the other way around and elicited positivist conclusions from phenomenological premises. Instead of Carnap, we might have chosen the Merleau-Ponty of The Structure of Behavior, who sets up behaviorist psychologists as his "objector." The presuppositions would still be phenomenologically reduced, since the phenomenologists, and not the positivists, have developed a methodology for isolating presuppositions. However, the phenomenological reconstitution would not occur in the name of Heidegger, but rather, in the name of Bachelard, as suggested in an earlier section of this chapter.

IV. IN SEARCH OF THE SOURCE OF TRANSCENDENTAL ARGUMENTS: THE INFINITE JUDGEMENT

(chapter two)

1. The Relation Between Affirmation and Negation in Classical Logic

In accordance with the law of the excluded middle, logicians since Aristotle have supposed that judgments or propositions have two mutually exclusive but jointly exhaustive "qualities": affirmation and negation. And in order for the negative quality to be interpreted as the complement of the affirmative one, the negation of "to be X" has been taken as "not to be X," or the contradiction of X. In light of this, what justification could Kant have for introducing a third quality, "infinite," usually rendered as the contrary of X, or "to be not X"? This question is of more than passing historical interest insofar as Hegel's dialectical sublation is "logically" grounded on this infinite quality. Recalling Aristotle's square of logical opposition, the contrary seems only to be a narrower form of negation than the contradiction: the former implies the latter but not vice versa. Given a thesis and its contrary, a third possibility is allowed (indeed, to suppose this is not the case is to fall into a common rhetorical fallacy), while tertium non datur holds when a thesis and its contradictory are proposed. Readers of Kant, especially Arthur Lovejoy (in "Kant's Classification of the Forms of Judgment") and Jonathan Bennett (in Kant's Analytic), have thus concluded that the infinite quality is a feeble attempt at saving the triadic structure of the forms of judgment presented in the Critique of Pure Reason by turning the species distinction between contradiction and contrary into the generic one normally reserved for affirmation and negation.

Now the thrust of this objection rests on the appropriateness of holding Kant's transcendental logic to the criteria of formal logic. Although it is true that Kant constructs transcendental logic out of the distinctions drawn in formal logic and that he even asks the reader on occasions to consider the forms of judgment empty of content, it does not necessarily follow that his task is that of the formal logician. Of course, the contentious point here is whether any activity other than that of the formal logician can be called "logic," and this is indeed the sense in which Kant must justify his task. The first step in this direction is to note the sense of ungroundedness in the formal logician's own distinction, as shown in the schizoid relation between his theory and practice toward negation. Although negation has been accorded equal status as a logical genus with affirmation, no good ontological reasons have ever been offered, and so when logicians are not schematizing the forms of judgment they have tended to assimilate negation to affirmation (or some "qualityless" form that reads as an affirmation). As we shall see shortly, Aristotle himself is a prime example, and this is all the more peculiar because Aristotle's analyses of grammar in order to eliminate pseudo-logical forms led him to isolate one fundamental form of negation, whereas his practice seems to suggest that negation itself is a spurious form. Hostility to regarding negation as an ontological genus comes to a head by the

late nineteenth century in the rejection of Alexius Meinong's theory of negative objects, which presupposed that Aristotle's logical purges of grammar had uncovered the ontological structure of the world. In contrast, Gottlob Frege went so far as to claim that the quality of a judgment is merely a feature of how a proposition is embodied in a sentence—a grammatical accident—and not a feature of the proposition as such. Thus, in "Negation," Frege argues that any proposition can be constructed as a negation or as an affirmation.

To see how the seeds of Frege's discontent are already sown in Aristotle's logical practice, we will briefly survey six senses in which negation is not treated as a logical genus on par with affirmation in Metaphysics, On Interpretation, and Posterior Analytics. First, negation is treated as a degenerate form of affirmation by virtue of its imprecision or incompleteness: "This is not X" does not express the sense ~~(or the ground for assertion)~~ in which it falsifies "This is X" (whose sense is contained in the very act of deixis), yet such a sense must be implicit in the judgment. Second, affirmation is treated as the necessary condition of negation, or, more precisely, if "This is not X" is assertible, then "This is X" must at least be a logical possibility and therefore have grounds for assertion itself. However, the reverse is not necessarily the case. Thus, negation is logically locked into the second moment of any dialectic. Third, negation is seen merely as a syntactic variant of an affirmation, so that "This is not X" implies "This is Y," which is not asserted only because the argumentative context concerns the existence or nonexistence of X rather than of Y. Fourth, negation is taken as an act of affirmation in that an inference is drawn from how the world positively presents itself, which is to say, negation asserts on the same warrant of evidence as affirmation does. For example, in order to have judged that it was raining or not, I must have performed the same act of looking out the window. Fifth, negation is taken as rejecting the suggestion that affirmation accepts, which may imply that the two qualities are merely alternate articulations of the same presupposition. And sixth, an affirmation is negated *de dicto* rather than *de re*. In other words, in judging "this" not to be "X" I am merely drawing a different conclusion from the same evidence and not presupposing some new piece of evidence which warrants that this is really "not-X," an implicit "Y."

While we do not intend to investigate the relative compatibility of the six Aristotelian practices, the tension, say, between the sixth and the third can nevertheless be attributed to whether the affirmation—of which the negation is seen as an imperfect version—is understood as the original thesis of the argument ("This is X") or as the deep structure of the antithesis ("This is Y") that itself could be posited as the thesis of some other argument. Once again, we witness the insecure status of negation in logical practice that allows the quality to slide into one instance of

affirmation or another.

2. Reconstructing Kant's Strategy For Transcending Classical Logic

Now Kant prefaces his transcendental deduction of the forms of judgment with a complaint about the mechanical use of logical concepts that confuses a "methodical" understanding of the logician's practice with a "systematic" one. On our reading, a methodical understanding is one that takes the division of concepts in logical theory as sufficient ground in itself, as if it ~~was~~ obviously represent^{ed} (or "mirrors") logical practice. Thus, Lovejoy and Bennett can only see architectonic desperation as the motive for dispensing with the dyadic account of quality. But as we have seen, affirmation and negation are not grounded in practice in the same sense as the theory would lead us to believe. This is not to say that Kant is thereby forced to argue that the theoretical distinction between affirmation and negation is not grounded per se, but that whatever that ground is, by discovering it, the logician can no longer have the same attitude to the dyadic account of quality as Lovejoy and Bennett still do. In phenomenological language, the logician will have then assumed a "transcendental standpoint" toward logic, whereby affirmation and negation are no longer seen as self-evident, but evident only in a certain sense, which is revealed in relation to its presupposition, which for Kant is the so-called "infinite" quality. In seeing the two opposing judgments as functions of the same transcendental judgment, the logician attains a systematic understanding of his practice.

We can distinguish two aspects of the systematic understanding of logical practice that Kant seeks: syntactic and semantic. Syntactically, Kant needs the ultimately primitive logical operator, or connective, from which affirmation and negation can be constructed as complex forms. Like Democritean atoms vis-a-vis their combination as sensible objects, the presupposed operator would have none of the attributes that the derived operators have. For example, just as a sensible object is divisible only by virtue of being a combination of atoms yet the atoms as such do not possess this property, likewise an affirmative judgment is negatable only by virtue of presupposing this primitive connective yet there is no sense in which the connective itself can be "affirmed" or "negated." (This can be seen as an explication of R.G. Collingwood's idea that "absolute presuppositions" can be neither true nor false.) Now it may be objected that a third operator need not be invoked as fundamental to the other two. Given the validity of substituting affirmation for double negation, why could not negation itself be considered primitive? First, even if negation were adequate to the task, it would not make the two opposing qualities possible as logical genera, since affirmation would then be reduced to a species of negation. Second, negation as a one-place operator is in fact not adequate to the task because it cannot build up the complex chains of inference that are generally

represented by such two-place operators as implication, disjunction, and conjunction. Once again, dissatisfaction with the primitiveness of affirmation and negation led late nineteenth century logicians on this syntactic trail, with Peirce arriving at the Kantian conclusion of grounding quality in the operator "neither...nor," the formal analogue of the infinite quality, according to which negation is represented as "neither p nor p" and affirmation as simply "p" or "neither (p nor p) nor (p nor p)". But in order to explicate the sense in which "neither...nor" is equivalent to the infinite quality, we must now turn to the semantic aspect of Kant's task.

In distinguishing the two qualities of a judgment, logicians have of course presupposed that there is some feature of the judgment, "quality," of which characterizations can be made. This presupposed "quality-in-itself" is the thing talked about when logicians ascribe affirmation or negation to judgments. However, it does not follow that the logician's ascriptions capture the identity of this presupposition so as to mirror logical practice. As we have seen, "mirroring logical practice" takes a certain degree of self-consciousness that not even Aristotle was able to muster in devising logical theory. It would perhaps be most useful, if somewhat counterintuitive, to regard "affirmation" and "negation" as proper names-cum-definite descriptions on the order of Frege's example of "the Morning Star" and "the Evening Star," with quality itself being the object of reference--analogous to Venus in this case. The counterintuitiveness of this move derives from the fact that we ordinarily regard logic as an invention rather than as a discovery, and so we assume that the logician has determinate control over how the universe of discourse is parceled out. In brief, the names should stay fixed on the things (~~there will be some things in a later chapter~~). However, this is exactly the intuition Kant needs to overcome in order to legitimate his introduction of the infinite quality. Of course, the primary problem for anyone trying to make a case for someone mischaracterizing what he is talking about (cf. someone not knowing what he is talking about), as indeed Kant must argue against Aristotle, lies in establishing the perspective from which such a judgment can be made. Frege is able to say that the Greeks were "really" talking about Venus when they said "the Morning Star" by adopting a standpoint from which the problem of mischaracterization has already (through the history of astronomy) been solved. This is very convenient but not very illuminating. Following Kripke, we might simply say that the "real" identity of Venus is established extensively and thereby eliminate the ontological problem of mischaracterization (since Venus' identity is no longer tied to language). But consider the following example: If I were to point to the sun and attribute to it the property of "revolving around the

earth," you would know what I was talking about and thus know that I was wrong, and in what sense I was wrong. Your knowledge of my error relies on there being, however, an available attribution, namely, "being that which the earth revolves around," that that is taken to mirror the reference. But what if the entire attribution language were to be in error? In other words, is there a sense in which you can still claim to be talking about what I am talking about, yet reject my attribution language as irrelevant to our supposedly common reference—for example, by saying that "revolution" has nothing to do with whatever the sun might be doing? This can be taken as a version of the problem of radical translation, and it serves to illustrate the severity of the problem Kant faces in trying to characterize what presupposes the language of quality (i.e. talk about affirmation and negation) when that language fails to capture systematically what quality is. It is this awareness that calls for the transcendental standpoint to be adopted. But since the transcendental deduction proceeds from a phenomenology of the actual (or empirical) to the necessary conditions for the actual being possible, whatever grounds the attribution language of quality—however misleading—must be placed in terms of that language so that its misleadingness is revealed. In other words, in the Kantian strategy, logic cannot simply be built up from "scratch," which modally amounts to building it up from the logical possibility of an alternative logic; instead, it must be developed out of what is already given as logical theory, namely, Aristotle. Now the infinite judgment captures this well by accepting neither the affirmative nor the negative judgment. So inasmuch as Kant may not be able to provide a positive account of quality-in-itself, he is still able to describe the irrelevance of the language of quality to that task. In short, what presupposes affirmation and negation as genera of quality is their inappropriateness to logical practice.

3. The Transcendental Construction of a Logic of Negation

So far we have not rigorously distinguished between a predicate and a propositional articulation of the infinite quality, and it is to this that we now turn. In Logic, Kant illustrates the triadic structure of quality with Euler diagrams, which portray the subject (S) as lying "inside" or "outside" the "sphere" of the predicate (P):



Notice that according to the first two diagrams, the sphere of the predicate is the sole perspective from which the subject can be regarded, and so if the subject is not fully determined inside the predicate (affirmative) then it is indeterminately outside it (negative); hence, the imperfect and uninformative character of negation.

However, the infinite quality establishes a second perspective from which the subject is fully determined by determining (i.e. setting limits on) the first predicate's ability to determine subjects. Whereas the ordinary determination of subjects by predicates may be described as "affirmation" or negation, this "meta-determination," as it were, of one predicate by another may be described in terms of "relevance" or "irrelevance." If a predicate is relevant to the determination of a subject, then affirmation and negation apply; otherwise, the infinite quality applies. This meta-determination, which Kant often calls "bounding the sphere of the predicate," is what logicians normally call the contrary.

As an aside, as well as in anticipation of our discussion of Hegel's construal of the infinite quality, we can see how the above Kantian moves provide some clues toward constructing a "logic of revolution." In the second part of Reading Capital, Louis Althusser locates Marx's "immense theoretical revolution", we might say, in a challenge to the analyticity of the classical definition of labor: "The value of labor is equal to the value of the subsistence goods necessary for the maintenance and reproduction of labor." Marx's argument is that this formula is incontrovertibly true of labor, taken in a certain sense, namely, as sheer power or energy. And since it is incontrovertibly true in ~~this~~ sense, there is no reason to think that without the intervention of a Marxist perspective this formula would not survive unquestioned. All that need follow is that certain other possible features of labor--say, the "human" features--would be systematically ignored. Thus, in order to reveal the "real contradictions" of ^{the} classical formulation of capitalism, the Marxist strategy must first be to reveal the incompleteness of the formulae and thereby presuppose that the status of the above formula, say, has shifted from analytic to synthetic--such that an historical counterexample (i.e. an alternative way of regarding labor) becomes a possible mode of attack. To return to the Euler diagrams, the consistency of capitalism rests on the "ploy" of taking negation to mean contradiction. To challenge the classical definition of labor would normally be seen as equivalent to doubting the unmarried status of bachelors: If we are not willing to accept such a semantic truism, then anything goes. And indeed, as the diagram for the negative quality shows, from a contradiction, any ascription of the subject to a predicate follows (i.e. no particular ascription)--hence the unbounded S. And indeed it is the alternative of conceptual chaos that entrenches the classical formula. However, our (and perhaps Marx's) intuitions about what is wrong with the classical formula are somewhat subtler than the negation diagram would lead us to believe: The classical formula, as it were, is virtually right, but it does not tell the whole story. But where is the rest of this "story" to be found? We need to look once again at the

source of our suspicions--the formula itself--and consider the history of the terms in dispute, especially "labor": The value of labor certainly has not always been the cost of its reproduction, even though the analytic nature of the formula prescribes that it must always be that way. Thus, by temporalizing the necessity ascribed to the classical formula (by including etymology in the semantics of "labor"), we can proceed to construct capitalism's inconsistency out of its incompleteness. So rather than openly negate the definition of labor, we negate its status as a definition (by virtue of not taking all the possible meanings of the term into account). The infinite quality then amounts to this "determinate negation." (It may be remarked here that when theoretical physicists ransack the history of science for "new" models of matter they are acting as Marx did.) The logic of these moves may be summarized as follows: If the negation of a position is relevant to that position's affirmation, then the two qualities are contradictorily related and follow the principle of bivalence: either P or else -P (i.e. -P follows simply by virtue of negating P). Such a negation is "indeterminate" insofar as it can only be defined in terms of the affirmed position. But if the negation is irrelevant to the affirmation, then the two qualities are contrarily related and follow the principle of the excluded middle, without bivalence: either determinately P or determinately -P (i.e. the negation of P is not equivalent to the affirmation of -P). Such a negation is "determinate" insofar as its truth is dependent on a demonstration separate from the one required to demonstrate that the affirmed position is false.

But to return to Kant, given the strictures of the transcendental method--in particular, that a systematic understanding of judgment must be derived from a phenomenology of actual judgments (or rather, the actual theory of judgments)--he must articulate the infinite quality in terms of the other two, which is to say, talk about relevance in the inadequate language of affirmation and negation. With this in mind, now consider Kant's allegedly "equivocating" and "incoherent" account of the infinite quality in the Critique of Pure Reason:

In like manner, infinite judgments must, in transcendental logic, be distinguished from those that are affirmative, although in general logic they are rightly classed with them and do not constitute a separate member of the division. General logic abstracts from all content of the predicate (even though it be negative); it inquires only whether the predicate be ascribed to the subject or opposed to it. But transcendental logic also considers what may be the worth or content of a logical affirmation that is thus made by means of a merely negative predicate, and what is thereby achieved in the way of addition to our total knowledge.

The inadequacy of the language of quality used in formal ("general") logic is demonstrated in that the infinite judgment is in a sense both affirmative and negative,

which goes against what would validate the complementary account of quality—namely, that only one quality is appropriate to a given judgment. By discovering this equivocation, the transcendental logician challenges affirmation and negation as fundamental to the quality of judgments. The nature of this discovery can be explicated first by turning to a perhaps more familiar analogue in the quantity of judgments, in which quantifiers rather than predicates are reduced to a more fundamental form that at the same time reveals the limits of the language of quantity.

Take the proposition "All ideas are veridical" and negate it (i.e. de dicto negation, which can be taken as appended to the quantifier of the subject or to the copula, but not to the predicate): "Not-all ideas are veridical." After having performed this negation, can we still say that ideas are veridical? The answer, of course, is yes and no: Some ideas are veridical and some are not—these being the two possibilities left open by the negated quantifier. Now the fact that such an equivocal answer is elicited indicates that the question itself is not well-formed, for the answer violates the presupposition of asking a question of that type, namely, that a determinate, bivalent answer can be given: yes or no. It would then seem that a reformulation of the question is in order. To guarantee an unequivocal answer the questioner would need to append a clause describing the set of circumstances (or "criteria") under which ideas could be determined veridical or not: "Are ideas veridical when they occur in a dream?" If no, this would be a consequence of the truth of "All ideas occurring in a dream are not veridical." The transcendental logician would, however, note the adhocness of this move since the reformulated question depends on already knowing the answer so that the question can be posed properly. As it were, the question is no longer a "real" question in that its presupposed possible answers—yes or no—are not equally possible. If it were counterposed that ideas occurring in a dream are at least sometimes veridical, then the meaning of "veridical" would be thrown into doubt as the import of introducing dreams in order to fix the reference of "veridical ideas" would be challenged. From a transcendental standpoint, the ideal of formulating a question so that one of a predetermined set of possible answers can be elicited reduces, on the one hand, to equivocation and, on the other hand, to *petitio principii*, once a reformulation is attempted. This suggests that not merely is the original question an ill-formed version of some appropriate question about the veridicality of ideas but that the "well-formed" question is itself inappropriate. Why? Because the equivocation is removed only by predetermining the actual answer of the question, which implies that the meanings of the crucial terms have already been fixed. But of course, the original intent of inquiring into the veridicality of ideas is that the answer is not already given in the presuppositions of the question—and if it is, then we had better move to an

inquiry of those presuppositions instead. Indeed, those presuppositions are revealed in the ad hoc move, as it were, from equivocation to analyticity, when the questioner must consider "under what circumstances" are ideas veridical. Thus, the problem of reformulating the question in terms of universal quantifiers ("all" or "none") in order to maintain a determinate bivalence of possible answers ("yes" or "no") is deceptive logical scaffolding for the real question that makes such a reformulation possible, namely, under what circumstances—or in what sense, to ask the general transcendental question—are ideas veridical. For Kant then, the language of quantity shifts from an explication of quantification per se (i.e. how much of the subject is contained within the predicate) to an explication of demarcation criteria (i.e. how does a given subject count as being contained within a predicate), which he calls the "singular" judgment.

Now let us turn to quality. Again take the proposition "All ideas are veridical." Previously, our quantitative negation was made possible by a singular judgment—"This idea is not veridical"—which transformed the originally universally quantified judgment into what Kant calls a "particular" one: "Not-all ideas are veridical." But what makes qualitative negation possible is the infinite judgment, which is appended to the predicate rather than the subject and thus is a de re negation: "All ideas are not-veridical." The difference between a quantitative and a qualitative reading of the proposition might therefore be seen as one of emphasis: "All ideas are veridical" vs. "All ideas are veridical." But after having performed the qualitative negation can we still say that ideas are veridical? Once again the answer is yes and no: If we insist on talking in terms of "veridicality" then we might be able to say something (awkward) about ideas, but the negation suggests that "being veridical" is a predicate inappropriate to talk about ideas. Given this equivocation, a reformulation of the question again seems to be in order, which in this case means translating veridicality into terms more relevant to talk about ideas: "Are ideas 'veridical,' which is to say, coherent with our beliefs about how the world is likely to appear to us?" Here veridicality—a concept largely associated with the correspondence theory of truth—has been recast on the model of a Quinean network of coherence. And again the reformulated question can be answered from knowledge of how the terms have been defined, or how the translated was effected from a less to a more relevant language of ideas. And so likewise we see that the possibility of asking a well-formed question about the quality of a judgment is dependent on this apparently ad hoc move of translation: In what terms—or in what sense—can the veridicality of ideas be talked about? Thus, the language of quality shifts from an explication of whether a given subject is contained within a predicate by virtue of bearing the predicated quality to an explication of how such a subject can be des-

cribed as being contained within that predicate. The latter, more Kantian task requires some principles of translation between ontologies. In the example above, "ideas," say, would have to be interpreted as virtually sui generis rather than as the impressions determinably effected by the "external" world. Thus, any possible quality attributable to ideas would arise from their combinatorial properties rather than from their being representations. In that case, veridicality may be translated as a combination of ideas believed with a high degree of probability, or "credibility." Now in what sense can "veridicality" mean "credibility", given the radical differences between a correspondence and a coherence theory of truth? As earlier, the transcendental logician must appeal to pragmatic criteria: For all their theoretical differences, the veridicalists and credibilists presuppose the same logical practice--so that even if both were shown to be inadequate attribution languages, they would be inadequate to the same reference, which could then be characterized as "acting as if ideas were veridical, or credible, being in mind that neither 'veridical' nor 'credible' is the relevant predicate for characterizing this activity."

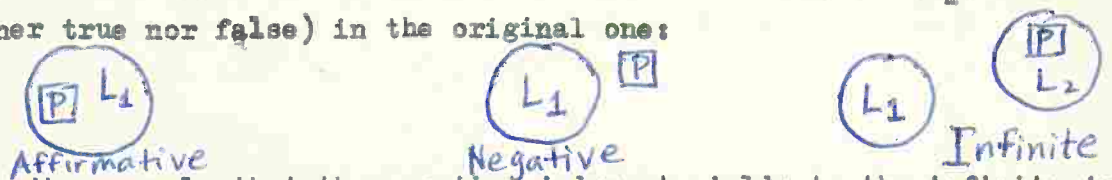
Whereas the predicate articulation of the infinite quality allows the transcendental logician to identify a well-formed question, its propositional articulation provides him with a basis for inferring truth-values, which, as in the previous case, will require a redefinition of terms. If we accept the joint denial as the syntactic correlate of the infinite quality, then under a bivalent interpretation of the propositional calculus it is impossible to speak of "neither P nor -P," for if "P" is false then "-P" must be true. Indeed, Kant himself recognizes in the Logic that within the domain of formal reasoning the infinite quality is not an autonomous form of judgment because the law of the excluded middle holds (and here Kant includes bivalence). In order for the joint denial to function transcendentially, as it were, "-P" must be interpreted as a proposition whose truth-value is independent of that of "P"--say, as "Q" would normally be interpreted in a bivalent semantics. In that case, "-P" is not implicitly verified when "P" is falsified but the former requires its own explicit verification. This requirement is reminiscent of Brouwer's professed Kantian interpretation of mathematical reasoning, which has since been advanced by Michael Dummett as "intuitionist semantics." However, it is not merely the affinity between Brouwer and Kant that grounds this reformulation of "-P." Remember, the transcendental logician is trying to ground the existent logical theory, originating with Aristotle, that defines "affirmation" and "negation" as two equal logical genera, which means that the demonstrability of both must be equal. If that is the case, then each genus should require its own demonstration, and so the proof of one cannot entail the disproof of the other. Of course, as we have seen in Aristotle himself, logical practice denies this theory, and the infinite judgment is meant to capture

this fact as what grounds the possibility of the theory. Logical practice, which resists the intuitionist's strict adherence to two genera of quality and thereby reduces negation to a derivative of affirmation, may be positively characterized in terms of the principle of bivalence in Dummett's sense (i.e. a semantic principle): Aristotle acts as if what is not true must be false—or that every proposition is either true or else false. Logical theory, on the other hand, whereby the intuitionist formalizes Aristotle's words rather than his deeds, may be positively characterized in terms of the law of the excluded middle, again in Dummett's sense (i.e. a syntactic principle, and since all interpretation must be interpretation of some set of signs, the semantic principle of bivalence entails the syntactic principle of excluded middle, but not vice versa; hence, Dummett argues, the latter can be accepted without being committed to the former): Aristotle says that every proposition is either determinately true or determinately false.

Now this propositional articulation of the infinite quality appears to have stood Dummett on his head, for he maintains that bivalence is ^econtrivance of logical theory rather than an attribute of (ordinary) logical practice. Dummett argues in the introduction to Truth and Other Enigmas that we act as if all propositions were determinately true or determinately false, thereby accepting the practical basis of the law of the excluded middle. However, ^{he continues,} we assert propositions only when there is sufficient warrant, and this practical notion of assertibility does not entail an unwarranted proposition is automatically false—indeed the growth of knowledge depends on this ^{not} being the case; hence, his rejection of the practical basis of bivalence. (~~Should~~ Notice that Dummett's project, like the transcendentalist's, is informed by the disparity between logical theory and practice, but Dummett sees the task in terms of revising the impoverished classical semantics of bivalence that inadequately interprets logical syntax, the form logical practice takes. Thus, unlike the transcendentalist, Dummett posits a semantically-neutral syntax that is the "thing" competing semantics are trying to interpret, or talk about. In contrast, as we have seen, the transcendentalist can talk only in terms of the inadequate semantics since there is no way of designating an uninterpreted system of signs.) Like John Dewey before him and Richard Rorty since, Dummett is inclined to view "truth" as an honorific title bestowed on assertible propositions, with "false" being quite distinct from "unassertible"—the latter, as it were, yet to be attributed a truth-value due to a lack of adequate evidence. Consequently, the value "undecidable" (Heyting) or "possible" (Lukasiewicz) is assigned to unassertible propositions in order to indicate their ambiguous position that nevertheless is between true and false (note the metaphorical power of the third truth-value as

the "included middle"; we know of no many-valued logics that breaks away from the notion that truth and falsehood are polar values that a proposition can take).

From a transcendental standpoint, Dummett and pragmatist logic in general err in regarding an unassertible proposition as a potential truth or falsehood in the language in which it is unassertible (this potentiality is manifested as the telos of the language's science: make the proposition assertible so that it can be shown to ^{be} either true or false) rather than as an actual truth or falsehood in some other language. In other words, if a proposition is unassertible, then it must be in the wrong language: Is "God exists" assertible? If not, then the transcendentalist would argue that the semantics and pragmatics (i.e. how meaningfulness is to be cashed out as evidence) of that language are inadequate to interpret the syntactic string in question. Under our Kantian reading, an assertible proposition is one that is relevant to the logical theory and practice of a given language and thus can be assigned a value of true or false. "God exists" is assertible in a language in which existence is subject to demonstration and with criteria for what would count as a theological proof. If all such possible proofs were exhausted without conclusively demonstrating God's existence, then, even though no refutation had been produced, speakers would bivalently act as if God did not exist because there is no remaining sense in which he could be shown to exist. But those who still believed in God's existence by virtue of there being no refutation would have to appeal to a nondemonstrable sense of existence which would then make "God exists" unassertible in that language--given its definition of "existence" and "demonstration"--but perhaps assertible in some other language. These moves can be seen as the propositional version of the Euler diagrams--whereas affirmative ^{the proposition (P)} is true in the language (L₁) and the negative one false, the infinite one is true in some other language (L₂) and unassertible (i.e. neither true nor false) in the original one:



Notice from the example that the negative judgment yields to the infinite judgment because of the tension between logical theory (excluded middle: the believers) and practice (bivalence: the nonbelievers)--the subject of the Hegelian contribution to the logic of the infinite judgment.

4. Beyond Kant to Hegel

The Hegelian contribution to the logic of the infinite judgment takes off from the observation (implicit in Kant's Euler diagrams) that a subject is underdetermined by a predicate (or a proposition's meaning is underdetermined for a language) when it is negated. The Hegelian wishes to add that this underdetermination is an unstable

state such that every de dicto negation ("not to be X") is an incomplete version of some de re negation ("to be not X," i.e. "to be Y"), and so the negative judgment naturally yields to the infinite one as the subject or proposition in question is determined by a more appropriate predicate or language. In short, falsehood is a sign of irrelevance, unassertibility--or at least inadequate assertibility; for any proposition false in one language, there is ^{another} a language in which it is true. The opposing view of falsehood, which might be subscribed to by a pragmatist who makes assertibility a necessary condition for any proposition being determinately true or determinately false, is that a proposition determined false does not refer, i.e. does not say anything true about the world. In contrast, the Hegelian would say that all false propositions say something true about the world, but the fact that they are "false" shows that the propositions have yet to be placed in the relevant discourses where the sense in which they are true would be revealed.

Returning to the example of a discourse in which "God exists" fails to be demonstrated by all possible theological proofs yet no refutation exists, we can sort out the differences between the believing Hegelians and the nonbelieving pragmatists as follows. First, remember that existent logical theory is incapable of judging between the two positions, since excluded middle says that any proposition is either determinately true or determinately false: All that has been shown so far is that "God exists" is not determinately true. However, judgements are in fact made under these inadequate circumstances, and hence the presupposition of logical practice being governed by bivalence, which prescribes a course of action even if logical theory presents an undecidable case, or a truth-value "gap." The pragmatist infers quite legitimately from the lack of proof that "God exists" is assertibly false; the Hegelian also quite legitimately infers that the proposition is assertibly true. However, both presuppose bivalence and so the pragmatist commits himself to the determinate falsehood of "God exists," while the Hegelian commits himself to its determinate truth. If we interpret "determinately" and "assertibly" in terms of the modal operators "necessarily" and "possibly," respectively, then both sides can be seen to start with an initial premise of "not necessarily p," where "p" is "God exists" and "not necessarily" means roughly "there is no proof of." The Hegelian would then reason, on the warrant of excluded middle, "possibly p," and conclude as a practical

inference once bivalence is added: "necessarily p." In contrast, the pragmatist would reason, also on the warrant of excluded middle, "possibly -p," and practically infer once bivalence is added: "necessarily -p."

Now both parties face a dilemma: Given the initial set-up, if the proposition is true, then how is it to be demonstrated? If it is false, then how did the proposition become assertible? The latter question especially concerns the pragmatist, who must resituate "God exists" within the one true discourse that aims to describe the world as it is but nevertheless can generate such false propositions. The answer, generally speaking, is to stratify the discourse so that falsehoods are read as signs of some state-of-affairs that can be expressed as a truth: For example, "God exists" becomes an understandable utterance from someone with a form of psychopathology that can be determinately identified (notice, in the mind, not in the heavens). Now we see the force of previously characterizing the pragmatist diagnosis of unassertible propositions as potential truths or falsehoods: Although propositions may pass from unassertible to assertible, and even from truth to falsehood, these moves merely amount to re-sorting the propositions within the one true language whose core truths (however fluid their identity) are justified by the falsehoods they are defined against, and which together define the limits (and hence the potential) of the world. Taken jointly, physics and psychology may be said to provide the ontological structure of reality and appearance, respectively: What is psychologically possible but not physically actual would then be the category into which falsehoods fall, and we can see the Aristotelian theory of motion, as it were, passing from a set of propositions solely in physics to a set solely in psychology. Notice that we presuppose for the pragmatist that the truth exhibits a kind of mental economy so that there need be no additional psychological reason why the physical truth should be as it is. Such a presupposition is certainly appropriate to Charles Sanders Peirce's belief that the possibility of scientific progress lies in the mind's receptivity to nature's truth by virtue of the mind being a product of nature. But further, we would argue, the possibility of pragmatism as a theory (or, more precisely, a criterion) of truth lies in there being some sense in which access to the truth engenders more efficient action, whether this be defined in terms of freedom from the anxiety aroused from acting against what one believes to be true (William James) or in terms of the relative ease with which a consistent research program can be

pursued vis-a-vis an inconsistent one (John Dewey).

On the other hand, the Hegelian addresses the first horn of our dilemma, for "God exists" cannot be demonstrated as true yet he maintains that the proposition is demonstrably (i.e. determinately) true. Notice this situation presents itself as a contradiction only under a bivalent interpretation of the law of noncontradiction, whereby the proposition is in fact not demonstrably true yet it is claimed to be demonstrably true. Juxtaposing the fact and the claim, however, would not be contradictory under a non-bivalent reading of the law, one analogous to our reading of excluded middle. In that case, "God exists" would have to be demonstrably false in fact and the Hegelian to claim it to be demonstrably true in order for a contradiction to arise. Also notice how the Hegelian moves away from the Kantian attitude toward the infinite judgment. Hegel attempts to resolve his contradiction by passing on to a new language, and toward that end he distinguishes in paragraph 173 of Logic the "positive" from the "negative" infinite judgment. The former is, as it were, the definition of a term in the new language that had been inadequately expressed in the old language by the latter. In other words--and this is especially apt for Hegel's own examples of "death" and "crime," what was considered a residue or by-product (earlier, in discussing Kant, we spoke of "ad hoc moves") in the old language becomes a leading principle in the new language. (A modern example of this may be the theoretical residue of Newtonian mechanics, the Lorentz contraction, becoming a leading principle in the mechanics of special relativity.)

In the case of "crime," it normally arises only in legal discourse and then only insofar as it appears as a cause for litigation. The status of crime outside the courtroom is left undiscussed; hence, for Hegel, assertions about crime are infinite judgments (the same applies for the status of "death" within biological discourse). We can distinguish Hegel's position from Kant's and the pragmatist's by considering what a "discourse on crime" would mean for each. For the pragmatist, it would be a socio/psychopathological account that succeeds insofar as it shows crime to be defined not merely as a (statistical) deviation from "normal" behavior but as a real deviation that can be gradually eliminated, much like error for Peirce or Popper. A Kantian would take the Durkheimian attitude that crime is the exceptional practice that proves the rule of law, and so although talk about crime is necessarily dependent

on talk about law, nevertheless criminal practice is the necessary condition of the law being regarded as such. If law mirrored actual social practice (i.e. no crime), then the state (as legal administrator) would be a superfluous addition to civil society. However, social relations are not naturally legal. We can see here the analogy to the Kantian derivation of the infinite judgment as the transcendental condition of quality. Finally, the Hegelian discourse on crime would not necessarily be any more comprehensive than the pragmatist's but its characterization of crime would not aim at "minimizing its referability": In other words, the pragmatist intention for having a special (unlike the Kantian) discourse on crime that describes in great detail criminal acts is to make them readily identifiable so that they can be eliminated more easily (e.g., "pathology" requires "cure"). Once again, notice the linguistic stratification that subordinates the potential development of criminal discourse to the justification of legal discourse. In contrast, the Hegelian discourse on crime has no a priori antipathy to its object of reference, for while it may have developed out of the descriptive inadequacy of legal discourse, criminal discourse need not have any a priori fixed relation to that discourse (thus, it may merge with it at some point or even disappear without trace, as Michel Foucault argues, in The Order of Things, with respect to discourse on man). At this point, the Hegelian parts company with the Kantian who would argue that the possibility of a more adequate language does not necessarily follow from understanding the sense in which a given language expresses its reference inadequately. In fact, Kant's adherence to the finality of the legal/criminal opposition is perhaps most vividly illustrated in the Science of Right's argument for punishing criminals by death as the only way in which the autonomy of crime can be respected; Hegel's own recommendation in The Philosophy of Right—reincorporating the criminal into society—illustrates, by contrast, his willingness to treat the legal/criminal opposition as fluid insofar as a person can pass between the two.

5. The Distinctive Hegelian Move

Having drawn the above distinctions between how the pragmatist and the Hegelian would resituate criminal discourse, it still might not be clear what difference it

makes whether such a discourse arises and stays within the confines of the "one true" language (as the former maintains) or it becomes relatively autonomous from that original language (as the latter maintains). We can tersely cast this difference as one of "argumentative attitudes"--or attitudes toward what is at stake in an argument--and in order to explore this notion it is best to drop Hegel's example of crime, which depends on normal, or legal, behavior being understood as what is "true" for (or, ought to be practiced in) a given society.

How would our pragmatist answer the question: What makes a controversy possible? He could dialectically pose two theories of truth that we naturally appeal to but are nevertheless at odds in their consequences. On the one hand, two viable arguments must be coherent, or true in their own terms, and this feature of coherence provides initial grounds for their assertibility (i.e. for setting up a research program in order to test the argument's truth). On the other, the deciding factor is which of the two arguments corresponds to how the world actually works. As a fallibilist philosophy that upholds the fluidity of truth-values, pragmatism may be said to pose the problem of verisimilitude to both parties, where "verisimilitude" is the relative closeness of representation (with no suggestion that the "closer" of the two is the the closest we can get). The intertranslatability of terms of the two arguments has been presupposed by the very fact of the controversy, and so we can imagine these arguments cast as coherent deductive structures, each generating a testable statement that contradicts the other. Then jointly agreed upon proofs are attempted or experiments conducted to see which statement refers, or is really talking about the world.

Now our Hegelian would not be content with holding that the translatability of terms between two coherent theories is ultimately what makes a controversy possible, for unless meanings (both intensionally and extensionally) are fixed within each theoretical language, we cannot be certain what constitutes a "correct" translation. Furthermore, even if such meanings were fixed, then either theory, as it were, would potentially have equal descriptive adequacy--and then it becomes a matter of convention which theory is deemed "true," which removes the problem of conferring truth from the realms of proofs and experiments as such. In forming his own response to

our question, the Hegelian would start by trying to account for why the pragmatist's proposal fails, even given the pragmatist's own ideal circumstances, namely, two theories with fixed terms allowing easy intertranslation. The reason is that proofs and experiments do not decide the issue of correspondence (i.e. the something over which the controversy takes place), for that is the very feature presupposed by the two arguments. While the pragmatist would say that both arguers speak only the truth within their own languages but one must be speaking falsehoods (or "falsenesses," given verisimilitude) about the world, the Hegelian would say that both arguers speak the truth about the world but one must be doing so in a better language. Thus, what makes controversy possible is reference—or, more precisely, co-reference (as opposed to the pragmatist's translative cross-reference)—and verisimilitude now becomes a matter of the more relevant language to that common reference. Proofs and experiments ascertain verisimilitude here on the basis of how each argument makes a postulated "independent event" (i.e. the outcome of the proof or experiment) relevant to its case.

Notice that since it has already been presupposed that the two arguments are talking about the same world, there is no longer a difference between the needs of a correspondence and a coherence theory of truth. Each argument thus addresses the Kantian-transcendental question of "In what sense does this theory represent the world" in the context of the Hegelian-dialectical controversy: "In what sense does this theory represent the world that the other one does not?" The first is the "new" problem of truth, i.e. relevance, and the second is the "new" problem of verisimilitude, i.e. comparative relevance. (We retain the problem of verisimilitude so as to ensure that this is not the last controversy.) The second question requires that the arguers negotiate their conceptual distance from one another as a means of deciding who is able to talk about the independent event more as if it were dependent on his theory. Rhetorically speaking, the independent event functions as a synecdoche of the theory as a "whole" (i.e. theory as all the possible events that can be identified within a universe of discourse). But this raises the question of what significance the more verisimilar description of the independent event has vis-a-vis the theory on which it is grounded: Does the verisimilitude transfer to the entire theory so that

it becomes a more verisimilar representation of the world as such (the Hegelian view, especially championed by Bradley), or does this success merely entitle the theory to project to another independent event for which there is no a priori reason why its description should be as verisimilar as the first was to its event (the view of, say, Popper)? The difference boils down to whether to be "at least partly true" is interpreted as "partly true overall" or "(entirely) true of a part," respectively. Only the former approach involves the use of synecdoche and is more in line with the ordinary implications of explaining an independent event more successfully, but the latter involves the logically more correct use of "true."

But to return to the mainline of the argument, once their conceptual distance is negotiated, the distinction between pragmatist and Hegelian discourses on crime becomes clear: It may seem initially that the pragmatist can talk about crime more relevantly because his discourse is intentionally dependent on a more comprehensive language of legal behavior. However, in measuring his distance from the Hegelian, it becomes evident that the presupposition of the pragmatist's references to crime are cast solely in terms of not being legal behavior, i.e. negative infinite judgments. At this point, the Kantian challenge to the Hegelian, of course, is to arrive at a discourse of positive infinite judgments about crime that remain judgments about crime.

6. Case Study: Hegel on Alienation

Hegel's most famous case of the infinite judgment is alienation, which arises as the third type of property-relation in the Philosophy of Right. Just as Hegel does not strictly distinguish between juridical and natural-scientific laws, neither does he do so for juridical and ontological conceptions of "property." In the Science of Logic, Hegel categorizes affirmation, negation, and the infinite as judgments of inherence. And as a universal analogy, inherence should be instantiated equally in both discourse on Right and discourse on Being. (We are reminded here of Kant's transcendental analogies of experience in the Critique of Pure Reason, but Kant himself distinguishes analogies that can be "detected in experience" from those that are true simply by virtue of their analogical form, such as a mathematical proportion. Hegel can be seen to reduce the former to the latter in a special sense,

soon to be discussed.) Of course, the question in the discourse of Being has been: How does property inhere to substance? And by extension, the question of the former then becomes: How does property inhere to owner (or that aspect of the owner that owns—for Hegel, "will")? Now the reader may well question the universal applicability of any analogy, arguing that the extension just made must be "tested for" rather than merely postulated. Our answer starts by reminding the questioner that just because, especially in a transcendental-dialectical method, the actual is the only "data" from which the possible can be ascertained, it does not follow that the actual is coextensive with all that is possible. And so just because the history of talk about "P inhering to S" has been conducted so far mainly in ontology, this does not mean that such talk is essentially ontological. (Yet the reader should not be misled into thinking that we deny the mediating function of history between the possible and the actual; in other words, all that is possible must be actualizable, or have the ability to become historical. Indeed, this may be the formal definition of the possible—merely formal, of course, because we have not specified any criteria for "actualizability." The point we want to avoid is that by virtue of being able to enter history, these possibilities must somehow mirror previously actualized possibilities. In avoiding this point, we echo the simple anti-inductive argument that the only reason we think that the future will be like the past is because we have much more evidence about the latter than the former.) And by the same reasoning, it should not therefore be surprising that extending the analogy to juridical discourse appears awkward. How exactly the limits of the possible are to be extracted from the actual concerns the efficacy of transcendental-dialectical arguments, and as such must be deferred to another time. However, we can say now that the limits of the possible are not defined by the ease of articulation, or naturalness, which sometimes falls under the rubric of "conceivability" and is often invoked by language therapists against Hegel's analogical extrapolations.

But is the objector correct even in saying that Hegel "merely postulates" analogies? Admittedly, Hegel himself seems to lend credence to this claim in that even though his categories arise dialectically according to the "needs of Reason" (e.g., a simple universal judgment "All grass is green"—used by Bradley—is not

sufficiently qualified to be true; consequently, another category must be introduced to make up for this deficiency), they nevertheless—simply by virtue of being categories—are applicable to all realms of discourse (or, the entire range of phenomena). However, in Hegel's defense, it should be noted that the objector poses his question in a manner foreign to transcendental thinking. For Hegel it is not a matter of whether he can universalize analogies or not, because he has already done so. Instead, we should ask: Given that he has universalized analogies, how did he manage to do it? Thus, the attitude of the reader should be that of demystifier (or detective) rather than of tabuist. We belabor the point to distance, once again, the transcendental-dialectical approach from an aspect of pragmatism--verificationism--that purports to derive its strength from the principle that whatever can be done has been done or can be done in the foreseeable future as an extension of current knowledge (in contrast, a weak version of verificationism is virtually a tautology: whatever can be done at all can be done at some point; or if a proposition is ever assertible, it must be assertible at some point). But not merely is this principle problematic on the grounds that it infers a future resembling the past from the past determining the future, for it also rests on what we will call the "chessmove" metaphor of inquiry, which underlies most forms of experimentalism and Popper's pseudo-dialectic of "conjectures and refutations."

As the metaphor's name suggests, the ability to "test for," say, whether an analogy can be extended into foreign realms lies in the inquirer making the opening move (a question to this effect, perhaps designed as an experiment) and "Nature" (or its surrogate) responding with another move, on the basis of which the inquirer makes his next move, etc. Notice that these metaphorical "moves" can be read either empirically or analytically: Waiting for Nature's next move is obviously like awaiting an experimental outcome; but similarly, the inquirer may be waiting for some semantic confirmation in the conventions of ^{scientific} usage. Also notice that the chessmove metaphor is especially appropriate to Quine-like holist theories, if we imagine that either player (the scientist or Nature) is attempting to carry out a global strategy, yet each move forces the other player to alter some part of his own strategy in order to master the strategy of the first player (this first player, Nature, may be imagined

as a computer with a determinate number of sophisticated strategies at its disposal so as to match out intuitions about the constancy of "Laws of Nature," as well as some of Peirce's remarks about the ends of scientific inquiry being the ultimate theory)—however, what that next move will be is underdetermined by the previous move. And since each player is trying to master the other, we retain the intent to falsify that is central to Popperian methodology. Indeed, Imre Lakatos, the radical Popperian, offers a more vivid formulation of the chessmove metaphor, if we read "move" for "theory and "strategy" for "maze of theories":

It is not that we propose a theory and Nature may shout NO;
rather we propose a maze of theories and Nature may shout
INCONSISTENT.

The problematic core of the metaphor is the "waiting" between moves, which implies that not only is Nature something different from the inquirer but that it is also something discrete, or "independent of his will," as Hegel might put it. As with the notorious case of the morning star and the evening star designating the same planet Venus, we should not conclude that two different descriptions necessarily describe two discrete entities any more than that two identical descriptions necessarily describe one unique entity. Here Hegel departs from Schelling, who accepted the first stricture but not the second. And at this point it may be worthwhile to consider Schelling more closely. Schelling's philosophy of science, "Nature-philosophy," is grounded in "Identity-philosophy," which stipulates (to use modern logical jargon) that all propositions are extensionally equivalent (with Reality in its entirety), with apparent differences in truth-conditions arising solely from implicitly different propositional attitudes. For example, descriptions of rocks and descriptions of human beings are only different in the perspective adopted, or the "voice" used, to talk about the one real world. According to the teleological outlook of Nature-philosophy, the voice of man is the most relevant one to Nature insofar as ~~by~~ ^{through} anthropomorphism the world becomes the most comprehensible. Intimations of this view can already be found in Aristotle and Leibnitz. However, it is not strictly entailed by Identity-philosophy, which is primarily a logical theory, traces of which can be found in Bradley's thesis that all true propositions are predicated of reality as their implicit subject and even ⁱⁿ Frege's view that all true propositions

refer to Truth. Although Hegel was initially attracted to Schelling, he was soon disturbed by the massive self-deception and seemingly unnecessary controversy that philosophy and the sciences would have undergone in history, were Schelling correct. Of course, Hegel proceeded to show the necessity of dialectic arising from a phenomenology, rather than a metaphysics, of history—a difference that may be characterized as one between a "bottom-up" and a "top-down" approach toward what actually happened. Readers may attribute Schelling's position that two identical descriptions necessarily pick out the same unique entity to a failure to contextualize such descriptions. For example, to think that all people named "Tom" partake of the same essence merely by virtue of having the same name seems implausible—but notice this is only because in our "reflective moments" we presuppose a conventional relation between signs and referents. However, when ^{we} actually do use such signs—rather than just talking about them—we do presuppose Schelling's view: Say you are talking to me about Tom. Unless specified otherwise, I will assume that this is the same person throughout, as if the name carried his essence. More pointedly, say you and someone else are discussing "Tom," and I only know one: It may well be some other Tom, but I will assume that you are talking about the Tom I know. Notice that when my "misunderstanding" is revealed, you will correct it by using a more appropriate name—e.g. "Tom Jones"—as if you had not conveyed the essence properly the first time. Such incidents may be said to form the "microcosm" of transcendental reasoning in general. However, the idea of the name (or description—we use the two interchangeably) bearing the essence of a thing goes back to Plato's Cratylus, especially its discussion of names being appropriate to a thing by virtue of conveying its feel, sound, etc. Contemporary post-structuralists, like Jacques Derrida and Gilles Deleuze, invoke this ordinary practice of presuming "homonymy = synonymy" to discuss the "unconscious" of philosophical discourses, which is manifested in the semantic changes that occur through etymology. Derrida's famous example is "difference-as-deferment" ("differance" in French) to convey the sense in which, since Parmenides, change has been associated with what needs to be explained away; hence "deferred." So we can see the post-structuralists as providing a rejoinder to Hegel's claim that

Schelling's Identity-philosophy neglects the actuality of history.

But we must now return to the Hegelian critique of the chessmove metaphor of scientific inquiry: The presuppositional structure of the scientist-Nature dialectic reveals that each pole has been defined merely as not being the other; hence, a negative infinite judgment and, hence, a sign that scientific inquiry is being conducted in the "wrong" language. But then what is the "correct" language? In approaching this question, consider first our reason for wanting to capture Quinean holism in the chessmove metaphor: Following Pierre Duhem's The Aim and Structure of Physical Theory, Quine construes the underdetermination of theories by evidence to mean that the scientist can choose whether to alter the essential core of the theory or merely background information (say, as a violation of ceteris paribus) as a result of an anomalous experimental outcome. However, as Hegelians, we argue that there is no "decision" to be made here, for the theoretical language in which the outcome is identified—say, as an "anomaly" (but also including the phenomenological description of the event)—already suggests what will be done, and it is just a matter of the scientist reflecting on the presuppositions of that language (though he might not see it that way) to discover the possibilities open to him. This practice might be better cast as the scientist paying attention to how he has designated the outcome in order to see what he must say next (where "must" is interpreted in a quasi-deductive sense). Quine's voluntarism suggests a picture of the scientist weighing the outcome against the theory as a whole to see which sort of comparison represents Nature best. But if a priori the outcome is not relevant to any particular aspect of the theory (such that identifying the outcome does not entail the truth or falsity of any particular theoretical statement), then does this not suggest incommensurability between the language in which the outcome is expressed and the theoretical language? If so, there are some interesting transcendental questions to pose, since outcomes must be incorporated within scientific theories in some sense. Yet Quine sees this just in terms of a judicious assessment of the evidence so as to enable the scientist to make his next move. But the upshot of this piece of "commonsense" is to maintain a discontinuity between the "logics" of discovery and justification, since an experimental discovery

can be theoretically justified in any number of ways. In contrast, Our Hegelian selves would say that the sense in which a discovery has been made predetermines the sense in which it can be justified. And so the problem of "underdetermination" is not the openness of how to justify an outcome, but the openness of how an already justified outcome attained that status within the theory. (We would attribute Quine's position to a belief that because the scientist draws up, or "invents," his theory, he therefore knows the ontological commitments he has made, such that whatever is not anticipated--i.e. a supposedly independent event--must be handled ad hoc as it suits him.) The closest classical forms of reasoning come to our position is Peircean abduction, insofar as it starts from something that has already happened and tries to ascertain the most plausible causal hypothesis. And although abduction professes to deal purely in empirical matters, this difference should not overshadow the strategy it shares with transcendental-dialectical arguments, which perhaps is revealed most clearly in the probabilified form of abduction, Bayesian inference: Given the event in question, without which of the available candidate-hypotheses would that event have been least likely to occur? (Notice the correspondences: the possibility of the event = the event's greater probability; the dialectical definition of necessary conditions = the elimination of candidate-hypotheses with an eye toward which one most contributes to the event's probability.)

Notice that we have answered the objection that Hegel uses analogy too freely by criticizing the metaphor of inquiry--the chessmove--that informs such an objection. But how do we now propose to understand the analogy that grounds Hegel's tripartite structure of property-relations, of which alienation forms the third part? Consider the following scheme of property-relations:

- A. taking possession of the thing (affirmative judgment)
 - 1) grasping it physically
 - 2) forming it
 - 3) marking it as one's own
- B. using the thing (negative judgment)
- C. alienating the thing from oneself to another (infinite judgment).

To recapitulate the problem: We are faced with a rather arbitrarily chosen, yet systematically presented, set of property-relations. The pressing question, of course is why this scheme and not some other. That such a question is raised suggests the

intuitive awkwardness of the scheme, as if ^{it} had appropriated some other discourse to say what there is yet no available discourse to say "it" in. What is that other discourse, or language? Once that language is found, we can move from the Hegelian-dialectical question back to the Kantian-transcendental one: How does the analogy across the two languages work, or in what sense can such an analogy be drawn? The transcendental argument would thus be framed as principles of translation and demarcation (as outlined in the above discussion of Kant) presupposed in order for two seemingly unrelated discourses to be analogizable, whereby the "appropriate" one confers meaning on the "appropriated" other.

Hegel speaks of the will being "embodied" in a thing by taking possession of it; the totality of things one possesses fully embodies his will. The presupposed language, as we have suggested, is ontology, with the following analogy obtaining:

will : thing :: substance : property.

"Embodiment" can therefore be "pretranslated" as "determination," in the sense of the totality of essential properties determining a substance as substance. Hegel then classifies modes of embodiment in terms of how the owner (not just his will) relates to the thing that becomes his property. The classification is a pretranslation of the alternative solutions to the "problem of universals," or how substance is comprehended by man so as to become "a piece of his intellectual property," as it were. Notice that epistemology re-enacts the ontological analogy above with a new twist:

owner : property :: man : substance as (man's) property.

The subsumed three participles are metaphors often used to describe realism, conceptualism, and nominalism, respectively: The realist grasps substance directly, the conceptualist forms it psychologically as an idea, and the nominalist marks it conventionally as a sign.

Hegel identifies use with the negative judgment in that the will cannot be embodied in the use of a thing since the will subsists even after the use to which the thing is put has ended. On the basis of previous pretranslations, "use" can be read as "accidental property" in ontology. But also there is a clue here as to how cluster, or disjunctive, theories of meaning (e.g. Wittgenstein's "family resemblance" become associated with so-called "use" theories of meaning (often attributed to the

later Wittgenstein but probably more appropriate to John Searle and speech-act theorists): Defining substance as a fixed and exhaustive sequence of conjoined properties, as in Hegel's pretranslated A, presupposes that the epistemological question of substance (i.e. its identifiability) is subordinated to the ontological question (i.e. what it is in itself), also as in A. Even the nominalist—as Michael Dummett as most recently pointed out in chapter ten of Truth and Other Enigmas—concedes the fixed reality of substance as such; the argument is merely over whether our knowledge of substance (or, how we identify particular substances) has any necessary relation to substance as such (e.g., by virtue of being a copy of it). On the other hand, if the ontological question is subordinated to the epistemological one, as in B, then the emphasis shifts to rules of use as constant among knowers through which enter and exit substances that are more loosely formed from a set of disjointed properties, no one of which is essential, but any of which can identify the substance by falling under the appropriate use.

At this point, let us return to the juridical analogy: When property is possessed, the will is defined by virtue of its possessions, and so we can imagine a polis in which properties are fixed and owners fluid relative to them, such that they attain the status of role-occupants. The problem of universals then becomes "post-translated" as the sense in which the occupant is entitled to his role: divine right, competition (i.e. the prospective occupant actually contributes to his entitlement), and lottery may be seen as the analogues to realism, conceptualism, and nominalism. On the other hand, when property is merely used, we imagine a polis in which owners are fixed (in the way they can relate to each other) and properties are fluid relative to them. This polis would probably be governed by Adam Smith's "invisible hand." Now the infinite judgment arises as the presupposition of the affirmative and negative judgments, and indeed we see that what presupposes possession and use is the possibility of property changing hands (or hands changing properties), which is alienation. But the distinctively Hegelian move from here is to conclude that "alienation" shows that the discourse on property-relations is inadequate to how property-relations are actually conducted—and this provides the link to the next

division in the Philosophy of Right--contract--the dynamics to the previous discourse's statics, as it were.

And what would the ontological analogue be for contract? We would submit an historical-causal theory of identity. Consider Saul Kripke's description of the theory in "Naming and Necessity":

An initial baptism takes place. Here the object may be named by ostension, or the reference may be fixed by description. When the name is "passed from link to link" the receiver of the name must, I think, intend when he learns it to use it with the same reference as the man from whom he heard it.

To return to the juridical sphere again, although the discourse on contract and the discourse on property have a common reference, namely, the possession of certain properties or the use in ^{certain} contexts--either of which at a specified point in the history of the propertied thing, the discourse on contract is a more appropriate way of referring insofar as for any (i.e. nonspecified) point in the history of that thing reference to it can be made only by virtue of the terms of the agreement that allowed the thing to pass between hands. And just as talk of definite descriptions and contextual usage are not eliminated from Kripke's account but only subordinated to the level of symptoms of what really grounds talk about what he calls "essence," so too talk of possession and use are reduced to symptoms of what Hegel calls "Right," or rational social relations. Indeed, this captures the concept of sublation, of which alienation is the negative expression (i.e. as the synthesis of the antithetical possession and use) and contract the positive expression (i.e. as the thesis of the new discourse). Kripke claims that disputes about the name to which a thing is entitled can be settled by tracing the history of naming, or designating, back to the thing itself. A contemporary theory of social order that rests entirely on the alienation of property as the medium of rational social relations, Robert Nozick's (in Anarchy, State, and Utopia), appeals to the same principle in arbitrating between two parties who claim ownership over the same "holding," as he calls it: Trace the contractual histories of which each party represents the latest moment; only one history will lead back to the "baptismal" demarcation (perhaps a land-survey map) of the holding. Liberals have criticized Nozick on the grounds of there being major

disruptions in the contractual record—both intended (fraud) and unintended (war)—which render his genealogical approach simplistic. Furthermore, Nozick is accused of concentrating too much on the legitimacy of obtaining property at the expense of whether it was legitimately transacted: Just because the contract laws are obeyed in a given transaction, is that sufficient to justify a particular buyer dealing as he has with a particular seller? If the buyer is defined as an entrepreneurial capitalist and the seller as a wage-laborer, then it might be thought (as Marx did) that there are additional, albeit implicit, necessary conditions for the contract occurring as it does (say, with the laborer selling his labor for minimum subsistence) other than the terms of the agreement. Both these criticisms can be pretranslated to Kripke in the possibilities of slipped designation and inadequate criteria for referring, respectively: How is the "authenticity" of the historical record to be guaranteed if history is to decide reference? And, do a series of designations refer to the same thing merely by virtue of being in the series (or does being at a particular point in the history of naming affect the sense in which the thing has been named)? The reader will perhaps not be surprised to learn that Hegel's discourse on contract in the Philosophy of Right subsequently yields to a discourse on wrong.

7. Towards a Revival of Analogical Reasoning

If the above exercise in analogical reasoning has been at all successful, then additional questions are raised as to the grounds on which analogy has been deemed an illegitimate form of inference. Perhaps the classic "refutation" of analogy is David Hume's argument against regarding the world as a machine with God as its maker in Dialogues Concerning Natural Religion. But upon turning to Hume's actual argument, we find that his spokesman Philo relies on the implausibility of the mechanistic analogy beyond the superficial similarities drawn by the believer in its behalf and on the claim that even if the mechanistic analogy were plausible then other analogies would still be equally plausible to capture God's relation to the world. The reader may notice that Hume is casting aspersions on the value of analogical reasoning rather than giving^a proper refutation. In defense of Hume, it might be said that he is merely trying to show that analogy is not a valid form of deductive inference, which is true enough—but the force of his "arguments" seems to do more: It appears

to be a defect of analogical reasoning that it is unable to exclude other possible analogies from contention. Aside from analogy hardly being unique in this respect (especially vis-a-vis what is entailed by the premises in a deductive argument), it is doubtful whether this is even a defect from the point of view of exploring conceptual possibilities. And, of course, the plausibility of an analogy is very much dependent on the degree to which its development is permitted; hence, our earlier thesis that an analogy should be regarded as a *fait accompli* whose *modus operandi* has yet to be discovered, rather than as an experiment in which "implausible" translations between particular terms in the analogues constitute a falsification. It is in this latter context, as a form of inductive inference, that analogy is usually placed. But even then analogy is considered a poor form of induction insofar as it supposedly discourages new ways of seeing things since its guiding principle is to explain the unknown in terms of the known, such as light in terms of corpuscular movement. (Notice that whereas entrenchment--in the form of plausibility--expelled analogy from deduction, the very same notion of entrenchment--this time within the analogy itself--threatens its status in induction.) This criticism relies on the "known" analogue being unaffected by whatever may be learned in developing the "unknown" analogue. However, were the analogy treated hermeneutically, such that both analogues would be illuminated through mutual explication and so as to allow the possibility of learning something "new" about corpuscles from studying light, then novelty could be accounted for. Thus, the implausibility of regarding God as a machine-maker may be due just as much to our not understanding how a machine is made as to how the world was created. And it may even be that in reciprocally working through the analogy in an hermeneutical fashion, "machine-language" yields to some more relevant discourse, whereby the analogues themselves are transcended.

We have tried to exemplify the above approach in working through Hegel's dialectical method in the Philosophy of Right on two analogical axes: ontological vs. juridical interpretations of "property," which grounds Hegel's general scheme, and possession vs. use interpretations in the juridical interpretation of "property," which grounds how he moves within that scheme. And as for the latter axis, the two dialectical poles, or hermeneutical analogues, were shown to be articulating a common

reference, designated negatively as "alienation" and positively as "contract."
 The negative designation arose when after so much reciprocal explication possession and use began to reflect their analogical codependency by assuming each other's defining characteristics, thereby revealing the lack of real difference between them as analogues and suggesting that another way of dividing the universe of discourse be drawn. However, such dialectical, or hermeneutical, maneuvers are not simply a philosopher's contrivance but exhibit the largely unchecked tendency of analogues to lose their ontological distance as they continue to be associated with each other over time. We tried to give an encapsuled sense of this fusion in moving back and forth between cashing out "property" in terms of what adheres to a substance and in terms of what one owns. When dialectically juxtaposed in this manner, initial semantic gulfs no longer seem so great.

In conclusion, we should like to illustrate as provocatively as possible the fusion between analogical poles, such that it is no longer clear which pole explicates (what is understood "literally") and which one is explicated (what is understood "metaphorically"). Consider our discursive talk about deductive reasoning. We would maintain that at least until the development of a propositional calculus on which logical forms could be computed, the propriety of an argument had to be judged exclusively on whether it could be analogically mapped onto certain leading physical notions, like "containment" for implication and "inherence" for predication. Indeed, we would go as far as saying that George Boole's 1841 The Laws of Thought marks a transition in the history of logic from a "realist" view of reasoning in which arguments are measured against such physicalistic intuitions to an "instrumentalist" view in which their degree of truth is calculated—a transition parallel to the one Gaston Bachelard identifies in the history of science that occurred when the theory of substances was replaced by the theory of atomic weights. And from our thesis it is not difficult to understand why Aristotle's defense of the world having a logical structure is more compelling than, say, Carnap's: Logic in the latter's sense had become an autonomous system whose link with the world was no longer presupposed but required a separate argument. Notice that for all the radicalness involved in tying

the validation of arguments to analogical reasoning, we still presuppose that it is ~~possible~~ possible to tell the arguments from the analogues, and, in fact, this divisibility would be a necessary condition for logic eventually becoming a self-contained calculus. But is this divisibility any more than an ability to parse names? Is there a real ontological difference between implication and containment? Perhaps the question amounts to asking whether logical relations can be discussed intelligibly in non-spatial terms.

Because nowadays we most naturally construe deductive reasoning as a calculation, we easily admit the relation between the notation of logical syntax and the proposition expressed by that notation as a purely conventional one—a "symbol" in Peirce's sense. Curiously, Peirce himself did not admit this, maintaining instead that syntactic structure bears an "iconic," or mirroring, relation to the world. Unlike other contemporaries of Boole such as William Stanley Jevons and John Venn, Peirce was motivated to develop the "existential graph"—a geometric picturing of logical arguments—not to aid the computation of truths but to demonstrate the kinds of primitive physical and psychological relations we must be committed to in order to speak of, say, "A implying B." Peirce took the structural isomorphism of logic, the mind, and the world as unproblematic, on the grounds of this being the most parsimonious explanation for why it is virtually impossible to survive and not to regard the the world as rational or to think in accordance with the rules of deductive inference. Peirce's latter-day Aristotelianism has been subject to much criticism, among the most recent being that of the Italian semiotician Umberto Eco, who remarks in A Theory of Semiotics:

Anyway, to make up part of a class is not a spatial property; it is an abstract relation.

We have underscored the part of the sentence that casts aspersions on its propositional content. Eco seems to be arguing that there is a real difference between the ontology of spatial entities and that of abstract ones, but he just does not seem to be able to express this difference without implicitly speaking of an abstraction, class, as if it were subject to spatial predicates. Once again we see the kind of analogical fusion that has been highlighted in this paper. And as we have diagnosed this condition,

when analogues become indistinguishable, the remedy is not to return them to their "rightful" semantic places in a move of "clarification," for even since the calculus has become the paradigm of deductive reasoning the physicalistic idioms have crept back in whenever logic is raised as a topic in discourse. The only difference now is that we are less likely to realize these physicalistic intrusions and certainly less likely to exploit the conceptual possibilities they offer for a unified metaphysics in the manner Peirce did. It may be objected that Eco is simply not expressing himself very precisely and that physicalistic language can be extracted from discourse about logic and still render logic intelligible. The burden of proof, however, is on the objector to ^{actualize} this possibility. But we are skeptical about his chances of success insofar as the concept of "structure" that is the defining feature of logic is primarily a relational term presupposing something that ^{the logic} is or could be a structure of (e.g. the world), and it is here that analogical reasoning is sure to occur.

V. THE ROLE OF TRANSCENDENTAL ARGUMENTS IN PHILOSOPHY, SCIENCE, AND HISTORY
(chapter three)

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1. Transcendental Arguments as Failed Deductions and Inductions

A peculiar feature of discussions about the "validity" of transcendental arguments--that is, arguments attempting to provide the necessary conditions for something being possible--is that criticisms generally center on such arguments being bad cases of either deductive or inductive reasoning.

When transcendental arguments are regarded as a form of deduction, the model is a logical grammar of axioms and rules of inference that supposedly correspond to the regulative and constitutive principles of cognition in Kant. This grammar is then said to be the suppressed premises that must underlie the deduction of any theorem, which is taken to represent a state-of-affairs in the world. Whereas such a grammar resided in God with Leibnitz, it was articulated from the standpoint of the "transcendental ego" in Kant and Husserl. And in our own time, the ego has yielded to the early Wittgenstein's formalized language whose propositions limit the possibilities of picturing the world. This approximates what Richard Rorty (in "Transcendental Arguments, Self-Reference, and Pragmatism"), for one, thinks the ideal transcendental argument would ^{look} like, if it did not fail by deductive criteria. In short, he shows that with changing scientific paradigms have come different grammars that nevertheless at the time of their use were sufficient to understand the world. However, none of the axioms or rules have been infallible across history, and consequently none can qualify as a necessary condition for cognition, an essential feature of the transcendental argument. Furthermore, in order not to allow himself the neo-Hegelian access of saying that by revealing the limitations in previous grammars we get a "clearer" picture of what ^{the} rules and axioms must be, Rorty couples his pragmatism with an historicism which stipulates that even "possible experience" in the Kantian sense varies across paradigms, and so even though one may historically compare the grammars of two paradigms there would still be no grounds for measuring differences of refinement in their rules and axioms (which could then be taken as a measure of verisimilitude in general)--if only because part of what presupposes there being two paradigms is that what was possible to experience in one impossible (in the sense of "inconceivable" "meaningless," "unassertible," rather than "false") in the other. To proponents of universal rationality who argue that only "material conditions" prevented Newton from seeing the limitations of his mechanics such that if given a chance Einstein could

persuade him of special and general relativity, Rorty would probably say that such a counterfactual demands hypothesizing that Newton no longer adheres to the presuppositions of his own paradigm, which amounts to saying that Einstein could persuade Newton only if Newton were not essentially Newton. Thus, on the one hand, Rorty shows the deductive failure of transcendental arguments in their fallibility, i.e. they do not preserve truth across the history of inferring. But then, on the other hand, rather than showing this failure to be due simply to the falsity of such inferences (which would allow for a self-correcting inductivist or neo-Hegelian historiography of Reason), he follows Kuhn in saying that the domain of possible experience is itself changing. In that case, the universality of transcendental arguments is ruled out in principle, which reduces their status to the ideological structure of the arguer, and hence Rorty's claim that transcendental arguments are necessarily "self-referring." Therefore, the transcendentalist is set up as a would-be deductivist in a world in which deduction not merely fails but is not even relevant.

When transcendental arguments are regarded as a form of induction, the ideal is usually Peircean abduction, with the "deduction" often ascribed to such arguments being understood as the "deduction from phenomena" Newton claimed the experimental scientist made when finding invariant relations among phenomena. A transcendental argument then, if successful, is a "metaphysical prediction," circumscribing what can happen rather than what will happen in the world. The difference between this interpretation and the deductive one above is perhaps best illustrated in the Leibnitzian concept of "hypothetically necessary" laws, which presuppose that the world could have been other than it is, but given that it is as it is, certain fixed relations must hold between phenomena. A transcendental argument should, in the statement of these necessary relations, explicate the sense in which this world is unique among all possible worlds and thereby provide some justification for why this world and not some other has been actualized—by God, for Leibnitz. Like other pieces of inductive reasoning then, such an argument should add to our knowledge, but in a way ordinary empirical induction cannot; hence, a special faculty of "intellectual intuition" has been postulated. In addition, since the laws "deduced" from the

phenomena have themselves only a metaphysically contingent status (insofar as God was not originally compelled to actualize this possible world), the modality of inductive reasoning is retained. Jonathan Bennett (in "Analytic Transcendental Arguments"), for one, seems to expect conditions like these to be met by transcendental arguments. The transcendentalist wants to forestall the Humean problem of induction by arguing that the way we do in fact understand the world, which includes being skeptical about what the future will bring, presupposes that the skeptical possibility is not actualized. In other words, we can question whether the future will be like the past only because the future is in fact largely like the past. The validity of this "fact" can be interpreted not only in accordance with a coherence theory of truth (i.e. the world "makes sense" only if this fact is presupposed) but also with a correspondence theory (i.e. there are some well-grounded phenomena of which "inductive regularity" could be an appropriate description) and a pragmatic theory (i.e. regardless what we may say, we act as if inductive regularity obtained in the world: Hans Reichenbach's justification-through-vindication). Notice the sense in which this transcendental argument itself seems to be inductive: The act of doubting the validity of induction is statistically aberrant from how we "normally" act in the world. And since the argument reveals the presuppositions of possible experience taken as a unity, they are most cogently attached to our most probable, or normal, experience. Here we have a basis for reinterpreting Kant's synthetic a priori judgments. But is it not an equally "brute" fact about the world that the future is not always like the past, and that these exceptions often arise unexpectedly? In fact, could they not arise at any time? And likewise, don't our actions presuppose a "minimax" strategy of making the most of the worst possible situation? In that case, the problem of induction would then presuppose that it is a real problem, representing the world as it is. However, our intuitions seem to favor the earlier interpretation, but why? Bennett ultimately follows Peter Strawson in believing that the force of a transcendental argument stems actually from its underlying analyticity; It is a piece of deductive, not inductive, reasoning. Thus, stating the problem of induction presupposes its falseness in the sense of entailing it, such that if the entailment did not obtain, "the problem of induction" would be a meaningless expression.

So in the end, ^{since} ~~transcendentalism~~ ^{appeals solely} ~~to~~ our semantic intuitions, it cannot significantly add to our knowledge and as such is demoted to a form of linguistic analysis.

2. Problems with the Above Treatments of Transcendental Arguments

Taken together, the deductivist and inductivist critiques of transcendentalism have the arguer say either too much (and thereby implicate his own special interests) or too little (and thereby offer nothing of interest to his audience). But we now must point out several problems that arise in trying to construe transcendental arguments in terms of deductive and inductive criteria.

Let us start with what precisely such arguments claim to provide the necessary conditions of--"possible experience," as it has often been called after Kant. The expression consists of an uneasy marriage of modal and epistemic terms. "Experience" is specifically epistemic because its meaning takes into account the receiver or possessor of the datum; it is a subject-oriented term, whose object-oriented correlate is "appearance," which usually arises in ontological lexicons as an instance of some "underlying reality" revealing itself. Notice, however, that "experience" and "appearance" are merely subjective and objective in their orientations, since they presuppose the interaction of subject and object but imply no commitments to the character of that interaction taken in its totality (i.e. from no particular perspective). It should also be noted that from the claim that experience/appearance represents a perspectival difference it does not follow that these perspectives have any determinately different empirical locations, just as it does not follow from exclusively alternate definite descriptions (again consider "morning star" versus "evening star") that they are necessarily descriptions of discrete objects. The force of this point is to resist imagining experience being "located" in the head and appearance being "located" in the object of experience. Schelling's animistic, or "anthropomorphic," Nature-philosophy, for example, is made possible by giving what empiricists would normally call "objects" (non-human beings) subject status, which is akin to having a character in a novel assume the voice of the author. For the transcendentalist, the gravest error lies in presuming that these differences of orientation are only

possible in virtue of their being "conventionally" (in the sense that Schelling is not) tied to certain empirical locations, for that would be to hypostatize the subjective orientation. How? The experience/appearance distinction is (indeed, according to Kant, must be) applicable to any possible world, but in each world subject-and-object-orientations will be apportioned differently. In the world of Schelling's science, every being is accorded a subjective perspective and so technical domination is metaphysically ruled out of court, since rocks exercise constraints over men just as much as men exercise constraints over them (notice that in order for every being to have subject status it must also have object status; hence Schelling's "identification" of subject and object). However, in secularized post-Cartesian science, only man is accorded the status of subject (we say "secularized" so as to rule out the neoplatonic extension of subjecthood to angels), and the rest of the world reveals itself as objects for man's disposal. This, the world in which we uniquely experience ourselves as subjects, is the only world that a pragmatist like Rorty recognizes, and so a question about the necessary conditions of possible experience is taken to be a question about man's cognitive framework. Now matters are admittedly somewhat complicated by the phenomenological method governing the transcendental argument, which requires the arguer to show that experience/appearance is not necessarily tied to Mind/Nature yet at the same time must be derivable from it, since it is through the latter binary that the former binary is manifested in the world--and the transcendentalist does (~~is~~) inhabit the same world as the pragmatist. Thus, the Kantian question may be reformulated: What must any possible subject have, irrespective of its empirical identity (which may be God, man, or rock), in order to be oriented as a subject? In short, the "logic of orientations," as it might be called, is independent from but instantiated in the "logic of empirical relations." There is no analytic correlation between the two logics (e.g., it is not a contradiction to talk about "the experiences of rocks"), but only a synthetic one that is discovered in phenomenological inquiry.

If we were to regard metaphorically the metaphysics of the transcendentalist and the pragmatist as types of physics, then both--albeit in different senses--would be entitled to the name "relativist." The transcendentalist recognizes that a world

must be constituted from a frame of reference, and it is his task to "deduce" what that frame of reference must be for the world to appear as it does to us who occupy it. The phenomenal world therefore offers "clues" as to the frame's identity in the same way that a photograph of the heavens offers clues as to where the photographer must have been. In Hegel this form of "negative anthropology" (cf. negative theology) receives its dialectical expression as "knowing oneself through what one is not," a theme repeated in Heidegger, Maurice Merleau-Ponty (especially "What is Phenomenology?"), and (as Jacques Derrida has shown in Of Grammatology) even Claude Levi-Strauss. But in presenting the transcendental deduction as a distinct form of inference, Kant is suggesting not merely that this procedure is necessary for defining our frame of reference, but that it would have to be undergone in order to define any possible frame of reference, by virtue of the "fact" that the world can be constituted only from one such frame.

The pragmatist's relativism goes no further than to admit that the transcendentalist performs a negative anthropology--with the emphasis on the "anthropology." Instead, he would claim that the need for defining a frame of reference is endemic to our historical "frame," as it were. Rather than constituting the world from different vantage points, the pragmatist acts like the spatiotemporal solipsist William James associates with our subjective awareness of the world--the "specious present" that can never be transcended. Evidence for this picture of the pragmatist can be found in Rorty's impulse to diagnose transcendentalism as a "passing phase" in the history of humanity, suggesting that Kant and his confused predecessors were nightmares in the stream of Western man's intellectual unconscious. The reader will notice that "Mankind" is Rorty's constant perspective, which becomes the focal point at the end of Philosophy and the Mirror of Nature for transforming the philosopher from legitimator to interlocutor among disciplines. This stands in sharp contrast to latter-day transcendentalists, like Michel Foucault, who in The Order of Things who freely admits the contingent nature of "Man" as a voice in the history of Western discourse. (We suspect that the static ^{appearance} of Foucault's "history of idea-systems" is partially the result of trying to translate the course of shifting frames of reference, or voices, into the stream-like temporality of

ordinary historiography that is exploited by the pragmatist.) Hegel is Foucault's progenitor here in naming history "The History of Reason," where "Reason" is understood as the rational discourse of the Greek "logos." Indeed, "the cunning of Reason" illustrates how the deeds of men--like celestial bodies--are continually resituated as frames-of-reference, in the form of the world-historic people, change. In fact, for Hegel the best kind of history causes such a shift in perspective. Likewise, Heidegger's use of "Dasein," being-there, reveals his interest in man only insofar as man occupies the frame-of-reference from which the world is constituted. That Rorty thinks he finds an ally in Heidegger demonstrates, once again, the pragmatist conflation of the logic of orientations, in which "Dasein" is a term, and the logic of empirical relations, in which "man" (or "human existence," as "Dasein" sometimes is unfortunately translated) is a term. But this conflation is itself a product of not according transcendental arguments unique status as a form of inference.

A fundamental feature of transcendental arguments that remains particularly clouded by attempts to subsume them under ordinary deduction is the logical form of the "presuppositions" which compose such arguments^{and} which often have been reduced to "suppressed premises." Even our account of the inductive approach to transcendentalism revealed that its arguments were cogent in spite of the indecisiveness of inductive reasoning only because of suppressed analytic premises. Initially, the logical distinction is relatively simple to draw: The premises of an argument entail, or are sufficient ground for, a conclusion being true; the presuppositions of an argument are the necessary ground for a conclusion being either true or false (i.e. the conclusion's possibility). Since presuppositions ground possibilities (which is to say, dialectically related actualities), it may be suggested that this modal difference signifies a difference in the discursive region each covers: A controversy is grounded by presuppositions, while a thesis is grounded by premises. However, if presuppositions were taken to be premises, then the historical shifts in the composition of the logical grammar invoked by the pragmatist against the transcendentalist would easily follow: Since the totality of axioms and rules of inferences are merely sufficient, some of them might not be necessary and therefore eliminated over time--hence the critique provided by inductivist historiography. Moreover,

there may be alternative grammars sufficient to ground the same set of theses. But most importantly for the pragmatist, the same grammar may be sufficient for theses additional to the ones the arguers wish to determine, but which only arise upon articulating the grammar--this formally captures the dynamics of incommensurability. We will call this last point the "overdetermination of deductive systems," which is the "dark side" of the Leibnizian principle of sufficient reason in that more is entailed than the arguer inferred. Now admittedly Kant and other transcendentalists have endorsed the principle of sufficient reason, which would seem to place them under the deductivist critique. However, an examination of Kant's sole use of the principle in the Critique of Pure Reason (to derive the transcendental conditions of causal succession) shows that sufficient reason is really a metaprinciple, specifically, the criterion according to which a possible transcendental condition, or presupposition, is sufficient to count as part of the necessary conditions for a given possible experience, like causal succession. Thus, while ordinary deduction may be the "metalanguage" of transcendental arguments, it is not the "object language" in which the arguments (i.e. the controversies) are conducted.

Related to the pragmatist objection to sufficient reason is Rorty's use of Wilfred Sellars' critique of the concept of "givenness" against the transcendentalist. In essence, "the myth of the given," as Sellars puts it, is the alleged correlation between principles of logical and causal priority, such that what "validates" an experience is ultimately to be found in the origin of the experience rather than solely in the coherence of its relations with other experiences. Consequently, coherence is by itself insufficient as a theory of truth and must be supplemented by the correspondence theory. On the basis of this myth, for example, Descartes is able to distinguish the seamless illusion of the evil demon from the real world created and maintained by God—and, more importantly, to think it matters to know which of these two worlds we inhabit. Both Rorty and Ian Hacking (in Why Does Language Matter to Philosophy?) argue that in the eighteenth century controversies between rationalists and empiricists such a myth fused problems of logical and causal justification in the concept of "idea" as mental representation. In asserting the status of innate ideas, rationalists were in effect psychologizing the logical

thesis that there is an inviolate set of axioms (e.g. those of Euclidean geometry) from which the structure of the world can be deduced. In this context, certainty or self-evidence was taken to be a feature of necessary truths. Whereas rationalists claimed that the inviolability of innate ideas derived from their axiomatic status, empiricists--appealing to the incorrigibility yet ungroundedness of sense-data--simply reversed the relation. As Hacking points out, the "heyday of ideas" continued into Bertrand Russell's ontology. In particular, note the sophisticated mirroring of his sense-data metaphysics in Analysis of Mind and the combinatorial logic of Principia Mathematica: Just as there are no longer qualitative differences among sense-data (Russell calls his position "neutral monism," with subjective and objective perspectives being the products of sense-data combinations), neither are their categorical differences among logical terms (Russell renounces the Aristotelian subject-predicate logic for one in which truth-values are determined purely by the relations established by the connectives). According to Sellars and the pragmatists, the fallacy behind the myth of the given is the supposition that correspondence needs to be shown in addition to (which presupposes that its criteria are different from) coherence. As Rorty puts it, this search for correspondence begets redundant "foundationalist" philosophies, like the doctrines of innate ideas and sense-data--transcendentalism is likewise implicated. Notice that this criticism expects the transcendental argument (indeed, metaphysics in general) to embody the virtues of both deductive and inductive inference: preserve truth and increase knowledge. It fails inductively because it merely duplicates (perhaps more abstractly) knowledge attained by the sciences, and deductively because such knowledge is corrigible, a fact that the scientific method does not hide but the quasi-logical structure of metaphysics does.

3. Transcendental Arguments versus Science?

Once again, the apparently powerful criticism articulated above rests on conflating the logic of orientations with the logic of empirical relations. And in this case failure to separate the two leads the pragmatist to accept the "givenness" of scientific inquiry, which would not be the outcome of adopting a transcendental attitude. Consider one of Rorty's conditions for a metaphysical realist argument

(of which the transcendental argument is a species), as expressed in the article cited in the beginning of this paper:

The legitimation is thought to be something which can be achieved in an armchair, and without special consideration of the details of the knowledge-claims being legitimated.

What is the force of ascribing to the metaphysician the ability to argue "in an armchair"? And what are these "details of the knowledge-claims" that he is neglecting to give "special consideration"? Presumably, these remarks are addressed to the self-professed claim of metaphysicians of the past (Hegel being perhaps the most notorious example) to be able to reconstruct rationally the ontology of the world without recourse to the special sciences. Put this way, the claim does seem rather implausible, although it would explain the special faculty of intellectual intuition and the principle of sufficient reason that sustain such rationalist metaphysicians. However, keeping in mind our distinction of the two logics, we can paraphrase the claim as follows: Whatever can be gained from engaging in the special sciences may also be gained from the dialectic of rational discourse. The point is, as with any other activity in the world, what science does is relevant to any ontological characterization, but it is not a priori determinately relevant; hence the openness of "whatever." In other words, until negotiated in discourse, it is not clear what aspects of scientific practice bear on what aspects of ontology. Is the experimental method itself a necessary condition for attaining the necessary conditions of "possible experience" (however broadly or narrowly this expression is construed, so as to cover both Kant and Rorty)? To answer yes gives empirical science the privilege of putting forth transcendental arguments. A more appropriate question for philosophers who think their arguments are buttressed by experimental corroboration or even historical evidence is the following: Does empirical specificity as such contribute to validating the argument in question or explicating its possibility in the manner of a paradigm-case? The alternatives may be seen as playing on the equivocal meaning of "demonstration": proof and exemplification. The pragmatist would probably answer that an empirical instance explicates the argument by virtue of validating it, while the phenomenological method of the transcendentalist would suggest that an

empirical instance validates the argument by virtue of explicating it (in this way the argument becomes a "real possibility").

Having drawn the battle lines, the pragmatist can then raise several contentious points against the trenchant metaphysician: What is the "ontological" status of subatomic particles, if their existence is inconceivable without experiments in cloud chambers? What would be the point of doing empirical science if it did not have any determinate ontological bearing? Would not the exclusive reliance on "the dialectic of rational discourse" turn ontology into sterile wordmongering, as indeed it did when such an attitude was prevalent in the Middle Ages? In addressing these questions ^{on} behalf of metaphysicians in general, the transcendentalist would emphasize how is not proposing an alternative way of doing science, but an alternative way of regarding ^{the} science already done that will alter how science is talked about and, more indirectly, how it is done.

In response to the first question, the transcendentalist would reject the suggestion that the discovery of subatomic particles would not be possible simply without the experimental technology of cloud chambers. Indeed, such particles would not be actually identified without the technology, but their possibility is also contained in the scientific discourse that goes looking for them and "knows" when they have or have not been found. (Of course, the process is dialectical insofar as the sense in which subatomic particles are "actual" will redefine their "possibility," whether this be taken as a range of possible numerical values or a conditional probability of their occurrence in a certain spatiotemporal region.) Rather than as "confirmation" or "corroboration," the transcendentalist would characterize experimental outcomes, whether positive or negative, as mnemonic "topoi": places that are marked off in order to keep track of what is being talked about in the scientific discourse. Greek rhetoricians employed this "method of places" in order to remember the ordering of their speeches. The method itself consists of reciting the speech in a familiar but controlled setting in which the number of surrounding items corresponds to the number of parts in the speech, so that a one-to-one association can be made. (Once again, the nature of the places to which the parts of the speech are assigned affects the way the speech is recalled, thus showing the dialectic of speech and memory parallel to that of theory and experiment.) The attractiveness of regarding experiments as

mnemonic devices lies in the variability of memory, which by analogy suggests that the significance of experiments is not rigidly designated in scientific discourse--as indeed the many instances (e.g. tests for the aether hypothesis in the late nineteenth century) of the same outcomes that could be taken either in support of or in opposition to a given theory testify. This variability is perhaps most evident in comparing two inductivist histories of science, probably separated by some years, which arrange the same series of experiments to chronicle the confirmation of two radically different theories (e.g. take a typical history of physics in our "Einsteinian" age and E.T. Whittaker's 1926 A History of Theories of Aether and Electricity, which culminates with a discussion of "The Age of Lorentz"). From the perspective of the topoi, we account for this variability in terms of the association between the parts of the speech and the assigned place shifting in memory, as well as in terms of several different speeches employing the same topoi. We would add that to ask which theory is best exemplified in a given series of experiments is to ask which speech is most appropriate to a given set of topoi. The answers to both questions would invoke what, after Kant, has been called "architectonic principles," such as simplicity (which, in the case ^{of the most appropriate speech}, would consist in the ease of recall). The reader should note that by placing the relation between theory and experiment within this rhetorical context, what may be reasonably construed as "aesthetic canons" (i.e. the architectonic principles) are given a primary role in theory appraisal rather than merely resorted to as "conventions" because attempts at showing "correspondence" prove unworkable.

The pragmatist's second question again seems to assume that everything falling under the rubric of "science" is determinately relevant to ontological inquiry. To explicate the transcendentalist's objection to such an assumption, consider the mnemonic topoi we have just been discussing: The pragmatist would claim that to import findings from the study of memory (however ancient) amounts to a psychologization of metaphysics, which is symptomatic of its dependency on the special sciences. (Indeed, the astute pragmatist may lodge a similar complaint against what, at certain points in this paper, must seem to be an appropriation of cognitive dissonance theory.) He would go on to argue that the metaphysician is just haphazardly reproducing these findings to suit his overgeneralizations, if he is not willing to probe

more thoroughly (via the scientific method) into, say, the neurophysiology "necessary" for such mnemonic devices to work. In that case, he would be a psychologist and thus able to shed the superfluous title of "philosopher." But remember, the myth of the given had detached causal from logical priority, yet the pragmatist insists here on deriving the significance of mnemonics from the source of memory. In contrast, in resituating the findings of science, the metaphysician is challenging the view that there is a determinate procedure for what to do and where to look in order to find "memory." Of course, the procedure one adopts will mold the sense in which memory has been or can be found, and this is of particular interest to the transcendentalist. The phenomenology of scientific practice is a "necessary" starting point only because it provides the most "natural" access to a topic. To ease the audience into a transcendental argument about memory, the arguer could begin like this:

There is a sense in which we already know what "memory" is: namely, we know the scientific and ordinary contexts where it is detected and used. But what makes it possible for such detection and use to occur? Again, there seems to be a ready answer: Possibility resides in the "source" of the thing--more precisely, in that which has the power to determine whether that thing is or is not brought into effect. In Aristotelian jargon, we might say that memory resides potentially in the brain when psychologists are not administering recall tests. And so the transcendental question seems amenable to a neurophysiological "reduction," as it were. Notice that seen in this light, the special sciences share with pre-transcendentalist metaphysics what Heidegger has called the "onto-theological" turn of thought, whose paradigm is Leibnitz's possible worlds residing in the mind of God. Indeed, it is only an a fortiori argument from Humean efficient causality, in which the neurophysiologist is interested, to a Thomistic cosmological proof for the existence of God--an insight dimly gleaned by children who persist in asking "Why?" after a chain of causes (or "reasons") has been given. That theologians and scientists still lock horns over the issue of "creation" reveals their common onto-theological perspective--and "perspective" is just the right word: Scientists and theologians can be seen as arguing from opposite ends of the "Great Chain of Being," which they presuppose as the picture of how the world works. But implicating the scientist with archaic metaphysicians and theologians is hardly a refutation in itself. We must ask whether the picture of memory the psychologist presents--to return to our case--is appropriate to what the psychologist is actually doing in "looking for memory." This question is approached by a phenomenology of scientific practice. Our first clue that the psychologist's picture may not be adequate is that "memory" is supposedly an "entity" (construed loosely, say as the quantity of nonsense syllables recalled) but dis-

covering "it" is a matter of construction, which falls under the rubric of "experimental controls." But describing this construction as a matter of "controls" is itself misleading, for it suggests that the scientist, who is in full "control" of the situation, cooks up the recipe for memory--a veritable microcosm of the ontology governing what he studies. Yet we also want to say that the techniques and technology he "uses" (including the experimental subject) participate as actively in the construction of memory as the scientist does. Why? Because we want to capture the idea that there are limits placed on what the scientist can do by virtue of these pieces of technology, and not some other, being there. Obviously, such material constraints are presupposed in scientific practice, and one might wonder why transcendentalists belabor this point: Because the discourse of science, once again, distracts us from this presupposition by talking about "controlled experiments," etc., so as to give scientists (and philosophers) who take this language literally the impression that they have technical domination over Nature, which encourages them to try to act as if they did, as well as to "persuade" others that they too should act as if the scientists wielded such power...

From these opening moves, we can see that on the basis of the "contradictions" generated by talking about scientific practice in terms of scientific discourse, such discourse will have to yield to some more appropriate way of speaking--and indeed the problem is one of choosing the right words, as the lexicons of Kant, Hegel, and Heidegger amply demonstrate. The possibility that such a task may become "systematic" in the same sense science is should be regarded only as remote as the possibility of developing an algorithm for writing the "better" novel, play, or poem. We say this with structuralist literary critics and semioticians in mind. But given the inherently aesthetic nature of the transcendental task, its units of discourse are probably better described as "judgments" rather than "propositions." Yet in characterizing the task as "aesthetic," we should not be taken as endorsing a subjectivization of scientific activity. The reference to structuralists and semioticians is made, in fact, to highlight their objective method for discovering what constitutes the "better" piece of art: Of interest^{are} not the attitudes conjured up in the reader of the text, for that would merely paraphrase the fact that the text was of high quality. Instead, these critics seek the techniques deployed in the text (perhaps unbeknownst to the author) that ground whatever response the reader may have to it. This "logic of the text," as the goal of critical inquiry is

often called, is actually a rhetoric insofar as it accounts for how the reader is made to perform a certain act or feel a certain way by a means other than telling him literally to do so. The method is "objective" in that while the reader responses to a text may vary with shifting tastes, the text itself remains the same, and so, as it were, it should be possible to map each of the readings onto the same textual structure (i.e. the so-called "logic of the text") as a logician might map a semantic interpretation onto a mathematized syntax. Thus, this objective aesthetic would ground all possible subjective aesthetics. In the case of science, the "text" would be scientific activity itself, or, more precisely, the most appropriate transcendental phenomenology of that activity. Once again, this is an "aesthetic" insofar as the phenomenology is composed of judgments ("the right words") rather than propositions. And for this reason also, the logic of the text will not be as clearly distinguishable from its subjective readings as a mathematized syntax is from its several possible semantic (propositional) interpretations. As we have just shown, the right words for expressing scientific activity can only be determined negatively, in terms of the critical distance the transcendentalist establishes from the conventional (i.e. subjective) characterizations of science by literalizing them to absurdity. This task is analogous to the one the logician would have to perform if he were given a set of semantic interpretations and told that they were alternative readings of one syntactic structure; his task would then be to discover that underlying structure.

This digression aside, the reader should notice that the possibility of the transcendentalist task as described here removes the metaphysician from the pragmatist critique that all he does is to mirror the activity of scientists, for while the transcendentalist certainly begins with a conventional understanding of science his method forces him to depart quickly from that understanding.

The third question posed by the pragmatist, which draws pejorative parallels between transcendental arguments and medieval dialectics, is informed by a modernist history of science that portrays the Renaissance as reopening the "Book of Nature" that had been tabued shut by scholastics who thought it blasphemous to tamper with God's handiwork through experimentation. However, this has been far from a unanimous view: Descartes, for one, found the Renaissance a philosophical step backward from the High

Middle Ages insofar as a "natural history" approach was cultivated that was unable to discriminate essential from accidental features of empirical observation. Nevertheless (and in spite of the work of Pierre Duhem and French ~~history~~ history of science), the view persists that medieval science was sterile, such that even in cases where major theoretical advances are conceded (e.g., the fourteenth century Oxford and Paris inquiries into kinematics), it is quickly added that due to the non-empirical bent of the science an "adequate" conception of acceleration and inertia had to "wait" until the Renaissance. The unreflective teleology of such a claim aside, what exactly constitutes the "non-empirical bent" ^{of} medieval science? We almost expect the pragmatist to say that the medievals "ignored" or "disregarded" the empirical world, as if they conducted their dialectics in the literally vacuous world of monasteries and universities. However, it is probably more appropriate to say that the medievals did not accord the empirical world any privileged status, which is to say, they did not fetishize it. Their examples, models, and warrants quite obviously are indebted to the world in which they acted as sentient beings. Notice the wording of this last sentence, for it offers a clue as to the perspective from which the medievals were theorizing, which is not so far removed from the transcendental perspective: The empirical world is a presupposition of the dialectic in that it makes possible the content that is accepted or rejected in the course of a controversy. And as a presupposition, it takes care of itself: The arguer need not "go out into" the world because he has no choice but to be already there. This is what it means for man to be a sentient being, i.e. a being with senses. Experimentation (of which alchemy was the most prevalent example) was considered an inessential refinement and idealization of this given empirical world that threatened to falsify it by placing too many constraints on the "natural order." In short, empirical experiments were seen as too unrealistic. Here "God" serves virtually as a Kantian regulative principle to confer a positive value on trying to understand the natural order "as it is"--which God created (notice the onto-theology)--rather than trying to alter it substantially: a stance not unusual for a scientist of any period to hold.

As an empirical instance arose in the medieval dialectic, its relevance to the argument was negotiated, and usually this took the form of considering what type of

sign the "fact" was a token of, with "conventional" signs being more negotiable (i.e. ontologically suspect) than "natural" ones. As Hading notes in chapters 4 and 5 of The Emergence of Probability, the treatment of evidence in probability theory owes much to this late medieval approach, which asks what we would call (pace Karl-Otto Apel) the "transcendental semiotic" question: In what sense does this sign (fact) signify (substantiate, support) this argument? In tandem with a question that might be asked of an hypothesis in abductive or Bayesian inference, the medieval dialectician would weigh whether the argument is any more "persuasive" (we deliberately gloss "probable" in this vague way in order to sidestep a discussion of what made an argument acceptable to the medieval dialectician) in light of this sign vis-a-vis some other signs that might have already been proposed or could conceivably be proposed. In the medieval cosmological picture, such were the really significant questions in that they submitted man's sentient being to the regulation of his rational being (cf. Kant on the relation between Understanding and Reason). Why "regulation"? Again referring to the cosmological picture, sentience is a property of man's animal nature which as such is indiscriminately captivated by what the senses take in (notice the implicit link between empiricism and hedonism). Reason checks this surfeit of experience by measuring the significance of other possible experiences against it--and it is in the context of generating these possibilities that experimentation--in the form of thought-experiments--becomes instrumental. Could the sign be varied in such a way as to increase the persuasiveness of the argument? And how persuasive would such a variation itself be? The latter question touches on the equivalent of "crucial experiments": When is the sign no longer essentially that sign (because too many variations have been performed)? In judiciously approaching the problem of variation, the medievals gave positive expression to their doubts about empirical experiments, which for them required too many variations. The medium for varying signs, of course, was rhetoric--especially tropes, which^{as} the Greek root suggests "twist" the sign: understate it, overstate it, ironize it, metaphorize it, etc. If, as a natural sign, the sign could not be persuasively varied without radically altering its "significance" (both in terms of meaningfulness and reference), then the argument

itself would be reassessed for its relevance to the sign. And to this end the scholastics (especially Peter of Spain and William of Ockham) developed a "logic of supposition" that treated arguments as hypotheses whose validity was subject to the introduction of contingent propositions.

To drive home our point, consider an example that Hacking cites, namely, the "deduction" of the fraudulence of the Donation of Constantine by the fifteenth century rhetorician Lorenzo Valla. The document in question allegedly showed that Constantine donated the Roman Empire to the Church after being miraculously cured of leprosy. Valla reasoned the fraudulence of the document without using any "evidence" in the modern sense of corroborative data. Instead, he pondered whether such an event could have happened, and concluded negatively upon imagining the conversation that would have had to take place between the Emperor and Pope Sylvester: The cure was not sufficient either for the emperor to give up his dominion or for the Pope to accept it. In addition, Lorenzo appealed to the unlikelihood that if such a document were authentically drafted it would have been composed in the style of the alleged Donation.

4. Transcendental Arguments as Science

What moral would the transcendentalist wish to draw from this admittedly potted history of medieval dialectics? First, we must readjust our historical perspective. Rather than sterile wordmongering, the medieval penchant for casting so-called "empirical" questions in terms of modal ones set a precedent for the substantive employment of logical principles that was tabued by the strong scheme-content distinction of syllogistic reasoning ~~but was later revived by Leibniz, Kant, Hegel, and in our own day (in different ways) by Dummett, Saul Kripke, and David Lewis.~~ The program of this "substantization" has been to make logic relevant to how the world works—but, as our earlier papers on Kant and Hegel testify, not necessarily as a means of mirroring its ontological structure. For example, the transcendental employment of logic can reveal the differences between professed logical theory and logical practice, and thereby suggest a revision of principles (as in the case of Hegel), which in turn would revise how the world is approached.

A related objection to medieval wordmongering is the implausibility of comparing

thought-experiments to empirical experiments even in terms of methodological rigor, let alone informativeness. Of course, the methodology of thought-experiments has not been nearly as investigated as that of empirical experiments, for which several reasons can be offered: the historical ascendancy of empiricism as the ideology of science; the convention of publicity surrounding empirical experiments (i.e. it is good form to record them) and, conversely, the convention of privacy surrounding thought-experiments (i.e. it is good form to work through conceptual possibilities before committing oneself to paper); the affiliated convention that the dialectics of thought-experiments are confined to one scientist's head rather than open to a forum of colleagues. This subordination of thought-experiments even affects how empirical experiments are regarded, especially in terms of the type of criticism to which they are subjected, as we will see shortly. But in defense of the scientific efficacy of thought-experiments, it might be said that they may anticipate anomalies that later arise in empirical experimentation by delimiting the parameters of a theory's applicability. Since the Renaissance, many of the rhetorical functions of variation mentioned earlier have been mathematicized--e.g. overstatement becomes the "upper limit" on a variable in an equation, such as the speed of light in relativistic mechanics, beyond which the mass of the moving body is indeterminate.

A fair hypothesis would be that the majority of professional critiques of scientific experiments concern problems of "confirmation" (i.e., Does this experiment demonstrate the hypothesis?) rather than problems of "relevance" (i.e., Is this the best possible experiment for demonstrating the hypothesis?). Again, we see the preference for the empirical over the modal. However, it is clear that the latter ^{critique} have been historically more significant to raise in that they are not merely parasitic on the experiments criticized, but they also propose changes in what Kuhn has called "disciplinary matrices". And if the Kuhnian difference between a "normal" and "revolutionary" scientist can be recast as the difference between the empirical and modal critic, then we can ask why is not all science, as it were, normally revolutionary? At this point, Kuhnian talk about the institutional nature of scientific education begins. But our interest is not in the identity of the cause but in its modus operandi: We would suggest here a "metaphysics of the institution" which posits

a radical difference between fact and possibility, such that a fact (as such) is real and possibility (as such) is not real. Of course, possibility may "become" real by becoming fact, and an experiment, as it were, "initiates" a possibility into its new ontological status. But until such initiation rites are performed, possibilities retain an inchoate state, much like Aristotelian potentialities, which reside (perhaps in the form of thought-experiments) in the shadowy realm known as "the scientific imagination."

Now the transcendentalist does not wish to deny the "reality" of facts, but he does wish to deny that facts are real simply by virtue of being facts (indeed, this would duplicate their significance in Rorty's pejorative sense); instead, facts are real only in relation to what else could be or could have been the case. And this is the sense in which possibilities can be accorded an ontological status on par with facts. The persuasive power of an experiment then lies not so much on the reliability of the outcomes—i.e. whether they are the facts of the matter—but on whether some other experiment could have been performed that "better" shows the relevance of the hypothesis to the data—the question of verisimilitude here being the optimal mode of expressing the hypothesis in terms of the facts. If the experiment is somehow unpersuasive, then it is not because the hypothesis is "false" but because it is not true in the sense the scientist supposed. We might say that the scientist has mismatched hypothesis and experiment (and therefore data) in the same way a foreigner mismatches an expression and its reference. The onus is then on the critic to determine an appropriate ~~experiment~~ for the hypothesis or an appropriate hypothesis for the experiment, the latter suggesting a revision in what Kuhn has called "exemplars." Notice that instead of being a point of contention, the correspondence of hypothesis to the world is presupposed by the transcendentalist in his capacity as critic: What he doubts is whether the scientist necessarily knows "where" the hypothesis belongs in the world, which may be simply a matter of readjusting boundary conditions on an equation or something more radical, like relocating the hypothesis in the psychology of the scientist himself. But the transcendentalist resists the connotations of the more radical move as placing the hypothesis in the realm of "the could have been true but wasn't," that this realm ought to be avoided, and that inquiry into this

realm is of a different (usually diagnostic) character from any other semiotic alignment of the world.

On the last point, we would ask the reader to consider the removal of an hypothesis from the data it purports to explain to the interests of the scientist (as, say, ideological critique or psychoanalysis does) as of the same kind as its removal to an analogous realm of data (as, say, projection of a well-confirmed theory does) or to some disanalogous data that normally falls under the same discipline and may be more appropriate to the hypothesis (as, say, the transcendentalist might do in looking for a new experiment to perform). If the reader finds these associations difficult, it is only because our semiotic prejudices interpret "appropriateness" itself as a type of mirroring or unmirroring between the hypothesis and possible data, or what after Peirce has been called "iconism." In other words, we normally think the best way of expressing (through experimentation) what an hypothesis signifies is by reproducing what it says its truth-conditions are (i.e. the structure of language represents the structure of the world). Consider this in terms of the famed Tarski truth-convention: To test the hypothesis "It is raining" we perform the minor experiment (in the sense of the discursive context tacitly defining the time and space for which the hypothesis is possibly true) of looking out the window to "see" (both in terms of sensory vision and understanding) whether it is in fact raining. Yet, to follow up Peirce's categories, we may also define relevance, or appropriateness, as an "indexical" relation between the hypothesis and data, the very procedure of those Marxists who "verify" (or more precisely, delimit verification so as to falsify beyond those limits) scientific hypotheses by examining the scientist's class interests, i.e. the "causes" behind making such hypotheses. But notice that even a non-political "sociology of knowledge" is treated as "gossip" in comparison to the iconic reference of the hypotheses. (One way of demarcating this difference between a science and its sociology is to say that the former deals with the use of an hypothesis and the latter with its mention.) An even worse fate has befallen "symbolic" relations between hypotheses and data, as expressed by theologians and poets who see the diversity of nature as grounds for a single hand or principle at work.

The point here is not simply that there are many modes of expression, for that too easily suggests either incommensurable domains of inquiry or a hierarchy of domains according to how an archetype is approximated (e.g., where the icon is archetypal, the index is more verisimilar than the symbol, since the latter—as a purely conventional sign—does not mirror at all). Rather, these modes of expression are vying dialectically to talk about the same actual world. In that case, we can measure the historical success of such a mode according to the "truth-claims" the other modes permit it to make about the world. Among the more radical theses that issue from this point include, first, that the genres of "imaginative literature"—especially poetry and drama—seem the most remote from making truth-claims not because they are intrinsically "fictional" but because they very early failed to maintain their dialectical ground in the face of opposition (as mythologized in the expulsion of poets from Plato's Republic), and since then they have developed an autonomous discourse—"fiction"—that is now difficult to relocate in the current dialectics over truth-claims, the parties to which (and their relative ^{dialectical} power) are captured in the hierarchy of the sciences that has remained constant throughout the history of positivism (from Comte to Carnap and Nagel). But placing drama and poetry back into the dialectics of truth-claims is "difficult" only in the sense that it is "difficult" to translate between two dialects, the speakers of which have inhabited different regions for several centuries (e.g., American and British English). Historically speaking, this thesis is not so far-fetched upon considering the poetic nature of pre-socratic philosophy, especially Parmenides. And in determining how poetry lost its voice in the dialectic of truth-claims, we need not only consider why the poetic medium became a less persuasive form of expression, but we may also turn to how the relocation of poetry as "imaginative literature" has haunted the truth-claiming disciplines that remain, as in the radical discontinuity between the logics of discovery and justification in the sciences, in which "logic" is taken as a pale metaphor for the fundamentally "imaginative" and "irrational" (or "unscientific")—yet crucial—process of discovery. Perhaps an adequate logic of discovery rests on readmitting poetry as a truth-claiming discipline that advances its claims on the basis of insight, metaphor, etc. Another early radical relocation of a discipline is suggested by Heidegger in What is a Thing, namely, the break between rhetoric and the science of number in demonstrating the "ta mathemata," or "things as they are already known."

Contrary to our historical intuitions, it seems that "mathematical" was originally a predicate of positive valuation--much like what the pragmatists believe "true" to be. And originally both the rhetorical derivation of suppressed premises and the presupposition of practical reasoning and the geometric derivation of theorems from self-evident axioms were viable means to "things as they are already known." However, with the discrediting of the sophists by Plato's Socrates, rhetoric was relegated to the "low road" of mere persuasion of ^{Fallible} opinion, while the science of number (and its geometric method) was granted exclusive access to the "high road" of demonstration of ^{certain} knowledge--and exclusive rights to the title "mathematical."

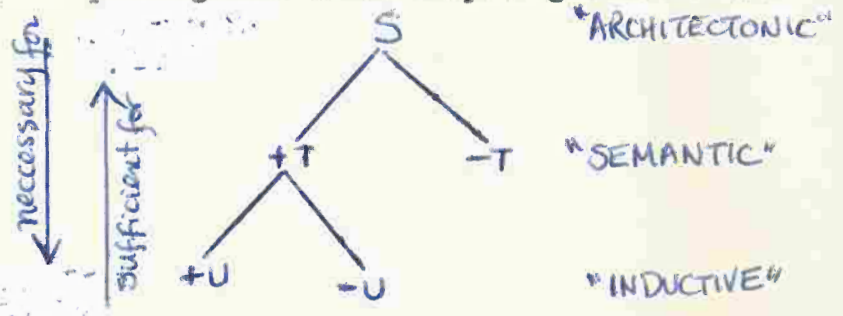
A second thesis to issue from ^{our} point about the dialectic of truth-claims is that there is no a priori reason for not regarding the hypothesis of a sociology of knowledge in competition with one of a "normal" scientist for explaining a piece ^{of} data, given that we have redefined "reference" so that it is no longer analytically iconic. That the science and its sociology are seen as having two discrete realms of inquiry is again not "essential," such that clear sense can ^{even} be made of the proposition that the best way to study the stars is by studying the sociology of the astronomers. This thesis runs a considerable conceptual distance ahead of "enlightened" Marxist approaches, which after demystifying the ideology of a scientist's hypothesis, proceed to spell out the hypothesis that more "objectively" "fitted" the data. Thus, on some Marxist accounts, Copernicus is held to be more "objective" than Ptolemy by virtue of having fewer ideological commitments to "distort" his perception. However, "distortion" (i.e. indexical or symbolic signification of hypothesis to data) here implies an "undistorted" (i.e. iconic) state-of-affairs, when it need only suggest a turn from a previous state-of-affairs, which itself was a turn, etc. We want to avoid the conclusion that because a science and its sociology study the same phenomena from "different angles," as it were, they are therefore incommensurable, for this would make any dialectic between them impossible--including the very dialectic that prescribed in the first place that the sociology of a science shall account for just those phenomena that the science itself cannot account for (i.e. the removal of the sociology from making any truth-claims about the hypotheses uttered in the science). As noted before, however inadequate the resolution of this dialectic may be from

the point of view of recognizing that a science and its sociology study the same phenomena, it nevertheless presupposes that the sociology has been at some point defined in terms of the science, if only residually—and so the two must have been commensurable then. To locate this discursive juncture at which the sociology was branched off from the truth-claiming track of the science, and henceforth made to appear incommensurable with it, is the task of a deconstructive history as advocated by Heidegger and Derrida.

Notice that in earlier talking transcendently about memory, we were looking for a language to express scientific practice—an hypothesis for the data. Just now we have examined the reverse problem of discovering the data for the hypothesis. In both cases, trial formulations—"experiments"—mark off the stages of this inquiry; but here also the transcendentalist is himself in the thick of scientific activity by virtue of trying to talk about it. But this is by no means to suggest, as the pragmatist would, that the transcendentalist could be talking about "nothing" in performing the thought-experiments of his "armchair" science. Indeed, only the pragmatist and the hypothetico-deductivist scientist are able to talk about "nothing" insofar as both believe that the mind is discrete from nature, such that empirical experiments must be conducted to see whether an hypothesis "fits" or "matches" the data. Unlike the transcendentalist, the pragmatist seems to think it more objectionable for philosophical activity to mirror scientific practice than for a scientific hypothesis to try to mirror the structure of nature.

Before leaving this topic, let us sketch the structure of a transcendental methodology of science that takes off from Gerd Buchdahl's exegesis of Kant's Logic in "Neo-transcendental Approaches to Scientific Theory Appraisal." We have argued that the logical structure of transcendental reasoning can be interpreted as either "A or -A entails B," where "B" is the presupposition grounding the possibility of A, or, contrapositively, as "B is necessary for A or -A." The latter reading suggests that B establishes the relevance of A to the dialectic, such that by presupposing B we are able to assert the indeterminate presence or absence of what A expresses. Now Kant (as refashioned by Buchdahl) divides his methodology of science into "inductive," "semantic," and "architectonic" components. The three components roughly correspond

to, first, the level of particular hypotheses and experiments, second, the level of general theories and background information that make sense of particular hypotheses, and, third, the level of normative principles against which competing theories are evaluated. We can construe these components as displaying a presuppositional hierarchy that may be diagrammed as on the right. "+U" and "-U" are the possible outcomes of an experiment (or the possible



hypotheses tested by that experiment). Judging that either +U or -U determinately occurs requires that background theoretical conditions remain constant—the so-called "ceteris paribus" clause: The experimenter presupposes untested factors that may be relevant to his experiment to behave as is normally expected of them. However, when a scientist argues from the Duhem-Quine Thesis that in light of an experimental outcome either hypothesis may be supported simply by showing that one of these background conditions was violated, he has shifted ground to the level of the semantic component. At the level of the inductive component, a constant T was necessary for deciding between +U and -U, but now the possibility of +T and -T has been raised—two different theoretical pictures against which the scientists can conduct his experiments. Deciding between these two pictures is made possible by an architectonic principle S, such as simplicity, and this level corresponds to Kuhn's change in paradigms. Thus, we see that the inductive component presupposes the semantical component, which in turn presupposes the architectonic component. The transcendentalist decides between two theories on the basis of which one better explicates the presupposition that makes it possible for the two theories to vie over the same dialectical space. In other methodologies, this "dialectical space" may be described as "the fact of the matter," "the solution to the problem," or any of a host of other largely honorific terms.

In earlier discussing how the transcendentalist does science, we raised the additional methodological possibility of architectonic principles themselves being disputed. Specifically, we challenged the notion of the hypothesis having to signify the data iconically. Two points need to be made here: First, in raising this

methodological possibility we seem to lend credence to the pragmatist's complaint that a transcendental or metaphysical science can only function at a level too removed from empirical observation to be of any use, and the image suggested here is one of the metaphysician infinitely regressing to the presuppositions of presuppositions, which have only at most a tangential relation to actual data. And indeed, the astute reader will have noticed that we have just defined theory evaluation in terms of whether a presupposition is satisfied rather than whether the world is satisfied by an hypothesis. Surely then, this criticism is fair insofar as science aims at discovering truths about the world and not about our minds or words. This apparently potent objection rides on the conceptual mileage gained by imagining an infinite regress to be something like a set of infinitely reflecting mirrors, and hence the spatial metaphors of "remote" and "tangential." Picturing the presuppositional "hierarchy" of transcendental reasoning as we have does not exactly dispel this image either. Other metaphors, especially "groundwork" or "foundations," also contribute to the spatial and temporal distance of presuppositions from the phenomena that they ground. However we must remember that a presupposition bears pre-eminently a logical relation to a proposition and, as such, coexists with that proposition, perhaps as an unconscious undercurrent or "deep structure." In this respect, a metaphor like "framework," in which the frame and the framed coexist, or "ground," as in the figure-ground relation, better capture the logical structure of presuppositions--and the latter metaphor, at least, seems to be the preferred interpretation within the phenomenological tradition. Positivists like ~~Richard Braithwaite~~ and Karl Popper who espouse an hypothetico-deductivist approach to science quite rightly find it unproblematic to talk of the conjunction of an hypothesis and background laws as entailing a theorem that expresses a predicted observation. Russell defined "presupposition" precisely as what is entailed by an argument, such that the truth of the predicted observation would be "presupposed by the truth of the hypothesis and laws. Strawson's refinement of the Russellian definition, which we find truer to the Kantian spirit, can be regarded as a variation on this entailment theme. Logically speaking then, there is no obvious difference between a presupposition and empirical observation--even in positivist accounts of

scientific activity; it is thus only the naturalness with which the regress-metaphor is taken that casts aspersions on the transcendentalist approach.

But a second point must still be made. Even before the scientific usefulness of getting at the "presuppositions of presuppositions" becomes a problem, we must presume that such a task is intelligible. But can we make historical sense of challenging architectonic principles? Has there ever been a point at which complexity, say, was considered an inherently greater theoretical value than simplicity? Notice that we are not including those cases, such as Lorentz's reformulation of Newtonian mechanics in light of the Fitzgerald contraction, in which the alternatives seemed to be a complex theory or no theory whatsoever. All things being equal then, has complexity ever been a desideratum for science? Probably not, yet there is no obvious sense in which, say, relativistic mechanics is "simpler" than Aristotelian mechanics, for the two share no common quantitative idiom according to which one can be measured as "simpler" than the other. What are we to make of this? If the architectonic principles are regarded as "essences" of scientific activity, then they must be regarded as "nominal essences." In other words, even if all successful scientific paradigms appeal to "simplicity," it does not follow that "simplicity" is instantiated or exemplified in the same way in each case. And even if "simplicity" has always been taken as the source of clarity in mathematical reasoning, it does not follow what actual mathematical practices this claim will be cashed out in terms of. Various philosophers of science, appealing to various cases in the history of science, have taken the extension of "simplicity" to be the fittest curve, the elimination of entities, and ease of comprehension ~~or~~ calculation. And as Mary Hesse has shown in her mythical dialogue between Norman Campbell and Pierre Duhem in Analogies and Models in Science, at least the last two extensions of "simplicity" can be interpreted at odds with one another, insofar as it may be in the best interest of comprehensibility that analogies remain in a scientific theory (Campbell) even though they technically add to the number of entities needed to explain a given phenomenon (a position repugnant to Duhem). We suggested in the previous chapter the reason for this discrepancy, namely, irrespective of what is thought to compose the essence of ^{some-}thing it is a matter of practice that the essence is presumed to be carried on the thing's name. Consequent-

ly, as long as the name "simplicity" receives constant mention by scientists (cf. paying lip service), a change in its use will not be noticed. It would make sense then to characterize the nominal essence^A of architectonic principles as "floating signifiers." But more significantly, the nominal essences of such principles suggests that historically it has been more important for the scientist to call his theory "simple" for whatever reasons than it has been for him to satisfy some definite description of a simple theory that all successful theories have had to satisfy.

As a parting comment on the possibility of taking transcendental arguments as a form of scientific inference, consider what might be the determinate difference between science and metaphysics. Our guess would be that it amounts to a difference in the concept of infinity each presupposes. Both metaphysicians and scientists strive to explain all possible phenomena. The former presume an actual infinity of cases, such that metaphysical explanations are for all possible phenomena taken as a totality, or a completed set. The untestability of such explanations lies not in an inherent lack of specificity--for they purport to cover exactly the same phenomena as scientific explanations do--but in the phenomena being collected in such a way as not to lend itself to easy testing. Testability presumes that cases are collected through inductive enumeration which, given the task of science, means a potential infinity. This is the method of the experimental scientist who projects his hypotheses on a case-by-case basis. However, the scientist is able to approximate the metaphysician by making probabilistic claims on a relative frequency model. For example, the scientist may argue that when all cases have been counted (i.e. when they are taken as a completed set) a certain percentage will conform to the hypothesis. Notice that this has exactly the same problem of testability as the metaphysical hypothesis does, for suppose the scientist hypothesizes that 99% of all possible cases of terrestrial motion violate Newton's Laws significantly. How can this be disproved? Once again, this is not a sign of vagueness in the statement of the hypothesis itself, since it is quite clear how the appropriate measurements would have to read in order to recognize that Newton's Laws were violated. However, there is vagueness insofar as the scientist has put no parameters on how many cases need to be counted in order to conclude that it looks as though his hypothesis will be confirmed or not. Thus,

testability is intelligible only within a finitude of cases. But insofar as science is trying to explain all possible phenomena, testability can never serve more than an heuristic role in sorting out plausible from implausible hypotheses. Once this is realized, the difference between the metaphysician and the scientist is greatly minimized.

5. Problems in Launching a Transcendental Argument

Rorty (again in the essay cited above) has a specific objection to transcendentalism, besides from the ones we have seen him make against metaphysics in general:

The scheme-content distinction is construed as a distinction between that which is better known to us (our subjectivity, roughly) and that which is less well-known to us.

Without reconsidering the inappropriateness of attributing to transcendental arguments a "scheme-content distinction," we would first note that Rorty has quite shrewdly cast the transcendental task as the working out of an analogy between the way the world appears to us and the necessary conditions for it to appear that way. However, "subjectivity" is a rather unfortunate description of the "better known" end of the analogy, since its popular usage suggests that the accessibility of what appears to us, phenomena, is due to its being more "immediate" in the sense of spatially proximate. To put it crudely, I know my own mind best because it is mine, which means that it is in my body and therefore the "closest" (notice the play on "most verisimilar" and "spatially proximate") thing to "me" (whoever "I" may be). In dispelling this Cartesian confusion, Kant shows that immediacy is more an attitudinal than a spatial relation to phenomena: Phenomena are regarded as familiar, or "commonsensical," and therefore unreflectively (and it may be added that part of what constitutes this unreflective attitude is the belief that the subject is the source of familiarity); transcendental arguments reflect on the presuppositions of such phenomena being accorded such an attitude. The result is that the phenomena are no longer regarded as familiar but as grounded; yet in order for the transcendental argument to have succeeded, something else must have been taken for granted and that then assumes the role of the familiar, unquestioned phenomena. And here we see how the dialectics of transcendentalism arises. Now in trying to assimilate the transcendental argument to ordinary deductive reasoning, Rorty neglects its dialectical nature, which leads

him to make the following moves: Since the transcendentalist is seeking necessary rather than sufficient conditions, they must comprise a unique set without which phenomena are not possible. This unique set of conditions will supposedly ground a species of realism, but the starting^{point} of the argument is patently idealist in its appeal to the incorrigibility of the subject's experience, which restricts the possibilities of how the world can be represented, as suggested by the picture of working through an analogy. It is no wonder then that transcendental reasoning produces the "distortions" attributed to ideologies!

There are many difficulties with the above account, not the least of which is the nature of this "uniqueness" requirement for transcendental arguments that has led Stephan Koerner (especially in "The Impossibility of Transcendental Deductions") and others to reject the very "possibility" of such arguments. The transcendentalist is portrayed as a latter-day Platonist seeking universal forms, while his opponents cast themselves as historical relativists. However, what is not clearly distinguished is the difference between the sufficient conditions for a set of conditions possibly being the necessary ones and the set of necessary conditions themselves. In other words, the uniqueness of the actual transcendental argument relative to a phenomenological account does not entail the uniqueness of its possibility. In short, there can be controversy over what is the appropriate transcendental argument. Indeed, controversy is itself a necessary condition of transcendental arguments. How? As suggested earlier, since the Principle of Sufficient Reason governs the permissibility of candidate arguments for necessary conditions, not all of them can succeed. This dialectical relation between what makes a transcendental argument possible and actual (the difference between satisfying sufficient and necessary conditions) makes controversy inevitable—and indeed in controversy the possibilities are themselves negotiated (by virtue of having to define themselves in terms of each other rather than in terms of the phenomenological account they aim to satisfy) so that the successful "one" is not so much the sole survivor as a sublated "mutant" which itself would not have been possible if the negotiations did not happen as they did. Our diagnosis of Koerner's neglect of the essential dialectics of transcendentalism would once again return to his reliance on deductive inference as a paradigm, specifically

the idea of controversy being merely an unnecessarily arduous way of arriving at the necessary conditions, which would ideally be "deduced" analytically from the phenomenological descriptions themselves. Indeed, this is what Koerner suggests transcendentalists ought to be doing--the "second-order" language-minding of ^{the} sciences.

Logically speaking, Koerner's criticisms of transcendental reasoning stem from a failure to see the contrapositive relation between the Principle of Sufficient Reason and the transcendental conditions themselves. This relation is revealed once we consider how are we to look for the necessary conditions of possible experience, if necessary conditions are defined in terms of their absence, namely, if they did not obtain, neither would the consequent. Presumably, we would have to contrapose and start by asking what presuppositions are the bounds of experience sufficient evidence for. In defining the "bounds of experience," or "the possibility of experience," the transcendentalist draws up a phenomenology of actual experience and what else could that experience be if it were not what it actually is. The answer to this counterfactual is not simply "anything" for the same reason that an experiment will not allow "anything else" as a determinate negation of the anticipated outcome. In both cases there are conditions, a background, presupposed true and against which it makes sense for particular events to happen or not to happen. From explicating these limits of possibility then, several competing sets of presuppositions will arise, and the transcendental argument--the actual necessary conditions--will be negotiated among the sets.

Readers may wonder at this point whether there is such a vast difference between, on the one hand, Sufficient Reason and transcendental arguments, and, on the other, the coherence and correspondence theories of truth. The astute reader may suspect that the actual transcendental argument is nothing but the one that best corresponds to the world (albeit given the alternative arguments available), while the Principle of Sufficient Reason merely provides the minimum criterion for a coherent picture of the world. And in support of the latter suspicion, the reader may cite Leibnitz's most effective invocations of Sufficient Reason, namely, against Samuel Clarke for defending the Newtonian view that (empty) space as such is sufficient for its own existence. Leibnitz's attack amounts to saying that the concept of empty space is

incoherent given the physical and metaphysical principles governing well-grounded phenomena. However, in order to resist such an analogy, let us sketch a transcendentalist critique of both theories of truth. The coherence theory may be faulted for portraying a theory in general as an enclosed quasi-deductive system which, if not allowing for strict entailment between propositions, at least delimits compatible from incompatible propositions. This picture suggests that propositions within the theory are articulated with an eye toward global consistency (hence the associations with "holisms" of a linguistic or epistemological variety). The difficulty here lies, given the self-consistency of deductive systems, in there being no grounds within the theory for conceptual change. The most the theoretician can do, as a Kuhnian normal scientist would do, is to explicate theorems implicit in the system. However, the transcendentalist would maintain that coherence is only a local feature of theories because, as pre-eminently discursive entities, theories are negotiated dialectically, primarily through the type of a fortiori reasoning examined particularly in the first chapter. Thus, a proposition uttered by an arguer must only be compatible with one uttered previously, which makes conceptual change possible through a global contradiction in the arguer's overall set of propositions, i.e. his theory. Seen this way, the usual Nagelian task of cross-referring expressions in two theories to show commensurability becomes not a matter of drawing equivalences but one of demonstrating the soritical moves that can be made a fortiori to argue from one to the other and back again.

As for the correspondence theory, an answer to be expected from post-Kantians has been that in principle we can never know whether our theory mirrors the structure of the world as such for we can only understand the world through our theory. The conclusion is to embrace a strong coherentist position. However, we resist this argument because it concedes the presupposition of the correspondence theory's relevance: "If there were a determinate way of deciding the truer (more verisimilar) of two theories, then it would be through a type of correspondence; however, since there is no determinate way..." The symptoms of this post-Kantian concession are seen in the degree to which relativism and even the arguments on behalf of a coherence theory are expressed as what must be resorted to under the limiting cognitive circum-

stances. For example, we have previously challenged iconism's monopoly on the concepts of reference and verisimilitude. The forcefulness of the sociology of knowledge has been especially impeded by the need to find a source of the image that is "mirrored" in ideology, since the discipline deals primarily in an indexical mode of signification. In other words, "where" precisely is the ideology in a scientific hypothesis or experiment? Scientists themselves employ iconic language ^{to say} that their hypotheses mean simply what they say, that the structure of their language reflects (or does not reflect, in a determinate sense) the structure of the world—where "the world" is taken to be some experimental outcome that (dis) confirms the hypothesis in question. They would go on to say that ideology may be read into the hypothesis, suggesting that the meaning of the hypothesis is not primarily ideological (or even "literally" ideological). Taking a hermeneutical tack, the sociologist may then attempt to divine a "deep structure" of ideological content, concomitant with the hypothesis, that is his object of inquiry. But rather than being taken as having any determinate location, this deep structure is generally understood as a "mere" metaphor, a sign that sociology is not much of a science. Sometimes the ideology is located in the thoughts of the scientist, and the deep structure is taken to be some cognitive or emotive "unconscious" of which the hypothesis is a distorted mirror-image. The sociologist must make such moves only because he concedes that the measure of truth must be correspondence to something, and so ideology must have its correspondent—in the mind, if not in nature itself. In contrast, the transcendentalist argues that verisimilitude is fundamentally a matter of relevance, to be negotiated in practice, and consequently, it is a priori possible to use the sociologist's explanation indexically to say that ideology resides in the experimental outcome exactly in the same way as the scientist would normally (i.e. iconically) say that the reference of the hypothesis resides in the ~~outcome~~. The difference ~~is~~ elided by the common use of "in" concerns the mode by which significance is conferred on the experimental outcome. To put the point prescriptively, we should regard the difference between calling a controlled experiment "a controlled experiment" and calling it "a moment in man's alienation from (and domination of) nature" as amounting to nothing more than the difference between calling the famous duckrabbit

Gestalt "a duck" and calling it "a rabbit." But we shall have more to say on this later.

To return to the mainline of our argument, the diagnosis presented of Koerner's misunderstanding of how transcendental reasoning works does point to a serious problem in coming to grips with transcendentalism in general: Unless a sufficient phenomenology of the world is spelled out, it becomes difficult to see the sense in which the necessary conditions have been provided for it. This is especially true if one applies the principle of charity to the transcendentalist and assumes that his phenomenology of a state-of-affairs is what the reader's phenomenology of the state-of-affairs would be. For example, to arrive at the impossibility of unique transcendental arguments, Koerner may have tried to take Kant at "his word" to have provided "the necessary conditions of possible experience." Now since Koerner's "possible experience" is informed by, among other things, relativistic quantum mechanics, Kant's Newtonian presuppositions seem ungrounded. The same can be said to characterize the many criticisms made of Juergen Habermas' account of the presuppositions of "late capitalism" in Theory and Practice, in which the conditions are virtually all that are spelled out--as if we were already familiar with what constitutes the phenomena of "late capitalism." Such criticisms revolve around a failure of the transcendentalist "to get his facts straight." Notice that although the criticisms are couched in such empirical terms, the question is not really over what is "the fact of the matter" but what is the most relevant way of talking about the fact of the matter. If there were a real question over what is the fact of the matter, then the arguer would be doubting the relevance of his opponent to the controversy, which would be to doubt the possibility of there being a controversy altogether. Actually, a second look at the expression "getting the facts straight" reveals its underlying transcendental meaning, if "straight" is taken as the operative word: Irrespective of whether they should have "known better," Kant and Habermas are accused of not seeing the facts from the appropriate perspective. Now the possibility of such a criticism is by no means eliminated once the transcendentalist provides a phenomenology of the relevant facts he is taking as given. To think otherwise would reduce transcendental arguments to just another piece of ordinary language analysis in which statements of facts entail their necessary conditions--"descriptive metaphysics," as Strawson has christened the

enterprise.

Instead, a developed phenomenology would focus the controversy by drawing differences where silence previously presupposed consensus. The phenomenology itself would become the currency in which the dialectic is transacted. So let us say that Habermas wishes to argue that the entrenchment of late capitalism in the West presupposes the prognostic failure of Marxist political economy. He may posit as given that all European revolutions have either been bourgeois or, in the case of Russia, non-bourgeois only by virtue of the society being pre-capitalist—and hence not a true proletarian revolt. Now the opponent would not want to question whether Habermas was true to the historical record, whatever that may mean, but whether the pivotal concept of "revolution" is the most relevant to use in this context. In what sense then does the Marxist theory of proletarian revolution bear on the phenomena under consideration? Notice that this question need not be raised only by a Marxist committed to "saving the appearances" of his theory against all possible refutations. In fact, following the practices of transcendental reasoning, deferring the relevance of Marxism from dialectical encounters like Habermas' by no means enhances Marxism's ontological status, for unlike the deductivist tendencies of metaphysical reasoning—and here we have in mind Frege's formulation of the sense-reference, or concept-object distinction—the significance of a concept is not conveyed by the states-of-affairs that must "follow" its acceptance, but whether, given a state-of-affairs, that concept can be derived as a description more significant than those provided by competitive concepts. Thus, since the idea of sense being the "route" to reference has been stood on its head, we no longer have Meinong's (or rather, Russell's) problem of talking about (having no concepts for) nonexistent objects: If the Marxist account of history is entirely vacuous, then it will be deferred from every dialectical encounter, which is to say, the nonexistence of Marxism's object will be marked by the absence of its concept. In other words, silence.

But to return to Rorty's main objection to the transcendentalist, can the allegedly idealist starting point of transcendental arguments generate realist conclusions? First consider the following metaphysical stance:

The world would not be what it is if we were not what we are.

A transcendentalist would embrace this thesis, but has he thereby committed himself to idealism? It all depends on how the meaning of the consequent is affected by the counterfactual antecedent being true: Suppose we were not what we are. To precisify matters, let us take this supposition to mean that there is neither rigid designation nor even counterpart designation of "man"—or more germanely, "man's mind"—from the actual world to the possible world in which the supposition obtains. Presumably, an idealist would conclude that it would also be impossible to designate any properties of a "substantive" world across these "formal" possible worlds. In that case—to borrow Kripke's derogation of Lewisian possible worlds as being "at the end of a telescope"—we would say that all the idealist "sees through his telescope" in this possible world is the ~~same~~ ^{lens} of his lens. Thus, for the world not to be what it is is for the world not to be at all. However, there is an alternative reading that does not negate the world as such (i.e. de re) but merely negates the truth of the proposition that the world would be what it is (i.e. de dicto). This view—associated with Leibnitz, Hegel, Peirce, and Heidegger—is a realism based on the doctrine of internal relations, whereby man is only as real as any of the other beings that enter into the relations that constitute a given world—i.e. all beings are equi-essential, or (as Leibnitz would say) "compossible." And not surprisingly, each of the metaphysicians mentioned defines the essence of man in terms of his position in the structure of internal relations of the world rather than in terms of his being composed of a certain substance. So, if man were eliminated, it may still be possible to designate a counterpart substantive world in the formal possible world, but this would only be a counterpart (i.e. not essentially the same world) since all the relations would have "shifted" to make up for man's absence—even though it may still be possible to trace these shifts. The idiom of "logical spaces opening up and closing" that is employed ^{by} both naive intellectual historians and more sophisticated ones like Foucault and Hacking seems to rest on this picture as well.

And while Fichte, for example, chose counterfactually to negate the world de re, Kant need only negate it de dicto, and this would account for the dialectical use Kant makes of "things-in-themselves" against the empirical realists, like David Hume, who championed the doctrine of external relations, namely, the world would be what it is

(the very things in themselves) irrespective of man's ontological status. Such a position is presupposed whenever something can be imagined to remain the same even if no one were there to perceive it. Several philosophers have argued that the objectivity of science rests on the intelligibility of empirical realism (in the last chapter we offer an account of objectivity that does not depend on this picture), but historically empirical realism has been most potently used against the need for a universal creator, since this position ~~makes~~ sense of matter having an ultimately independent existence from mind. However, the transcendentalist would respond that even though empirical realism eliminates the need for a first-order perceiver, it still presupposes a second-order perceiver, namely, the one who tells the empirical realist tale by virtue of seeing that no one else perceives the object in question and yet it remains constant. Thus, ^{even} empirical realism implicates the compossibility of the narrator and the world he talks about. And Bishop Berkeley then would interject that God's perspective is defined as second-order perceiverhood. But in any case, transcendental arguments are open to either idealist (e.g. Fichte) or internal realist (e.g. Kant) starting points, primarily because they do not deal in ontological questions concerning the source of "possible experience" (i.e. man's "creative" powers or the world's "self-sustaining" powers, depending on whether idealist or realist). To recall the frame of reference analogy, the transcendentalist can determine his starting point—his frame—only after he has provided a phenomenological account—the celestial pattern he sees from that frame. We would interpret Rorty's insistence on the transcendentalist's idealism as symptomatic of the pragmatist's conflation of "subject" as ^{the} empirical being uttering arguments, i.e. man, and "subject" as one perspective man can be regarded from as he utters those arguments.

The ⁿPopper of Objective Knowledge, for one, launches his attack on the plausibility of "idealism," which includes forms of Kantianism, by conflating the two interpretations of the metaphysical stance cited above. As a result, he misses the trappings of "idealism" that seem to form the starting point of commonsense ways of thinking about the world, especially as defined by ordinary language. Consider G.E. Moore's hand waving in the air as a "refutation" of idealism. The

transcendentalist would see an implicit argument in that gesture and thus ask Moore to give an account of what he has just done. No doubt Moore would say, "I waved my hand in the air." The transcendentalist would then consider the ontological commitments made in this statement--the subject determinately (i.e. out of his free will) affecting part of his body, which in turn is able move in a spatial container that is either empty or at least inert (such that there is no suggestion that the air "acts" on the hand). And most significantly, there is an implicit distinction between the subject and the subject's body, with the former not having any clearly defined empirical status. Indeed, what has been described appears to be a species of idealism! Strawson accepted as much in his exercise in descriptive metaphysics, Individuals, in which, for example, persons are qualitatively distinct from things. Moore, however, would respond that the transcendentalist has taken his initial statement too literally, in which case a more relevant discourse must be found to convey this seemingly "transparent" gesture: hence the dialectics of transcendentalism.

We can also see how Rorty's presumption of an idealist starting point for the transcendentalist affects his assessment of analogical reasoning--proceeding from the known to the unknown--insofar as Rorty thinks analogies restrict thought too much. Of course, if we regarded the "known" pole of the analogy as epistemically ultimate or certain (or at least unaffected by whatever is learned about the "unknown" pole, such that at best the unknown can be in opposition to the known), then Rorty's conclusion follows. However, in the previous chapter's discussion of Hegel, we considered a more hermeneutical and realist approach to analogical reasoning that portrayed the analogues as two arguments in dialectical negotiation: How would one get jurisprudence to talk to, or be relevant to, ontology? Naturally, the analogy itself, i.e. the ratios expressed between the terms and expressions of the analogues, is the presupposition of the dialectic's possibility. But we have also said that the presupposition lies in the theses of both parties corresponding to the world. Is there a discrepancy here? No, for "analogy" and "correspondence" are themselves alternative ways of describing the "picturing the world" that since the seventeenth century has been unhappily assigned to epistemology. The "picturing" lies not in some relation of "similarity" that primitively exists between the analogues, as is usually thought,

but in the ratio or "mode of signification" (as we earlier called it) that mediates them--the "genotypical picture," as it were, of which the two analogues are "phenotypes." Alternatively, and here the link with correspondence becomes more evident, we may say that the analogues are two orientations from which the analogic ratio can be regarded. And the link between analogy and correspondence is finally fused upon returning to the duckrabbit Gestalt: Just as it is correct to say that both "duck" and "rabbit" correspond to the figure, it is equally correct to say that the figure constitutes the analogic ratio of which "duck" and "rabbit" are the analogues, such that in the expression "duck:rabbit" ":" signifies both the Gestalt figure and the analogic ratio. Notice that unlike Russell Hanson's use of the duckrabbit in Patterns of Discovery to refute the theory/observation distinction, the Gestalt figure itself is not taken here to be a set of lines that is perhaps expressible in a language neutral to "duck" and "rabbit," but as the principles of translation (again not to be understood in terms of establishing strict equivalences) between the "duck-language" and the "rabbit-language" that are presupposed by the possibility of "duck" and "rabbit" being analogical readings of that Gestalt figure. As it were, it should be possible to "draw" the Gestalt figure that is presupposed by any controversy, and it would represent the "thing" that the parties implicitly "agree to disagree over," which is to say, what they take to be real.

Excursus: Taking Kant Seriously

Even if the reader is convinced that Koerner does not show the impossibility of transcendental arguments, he is still likely to agree with Koerner that Kant's own attempt at providing the necessary conditions for possible experience was falsified with the advent of Einstein and Heisenberg. The reader perhaps reasons that Kant's failure was due to his synthetic a priori method, which alleges that necessary truths may be divined simply by reflecting on the given phenomena. Such a method neglects the theory-laden nature of empirical observation so that in abstracting the necessary conditions of the phenomena Kant has unwittingly left the telltale signs of Newtonian science behind. The transcendentalist would find the reader's argument interesting insofar as it presumes that it is possible to tell when presuppositions have been transcended, for the reader argues ^{AS IF} we have gone beyond Newtonianism. In contrast

we shall argue that it is indeed possible to tell when presuppositions have been transcended, but by our criteria Kant is still historically correct in stipulating that our presuppositions are Newtonian.

Recall first that the transcendental conditions propose the relevant language in which the occurrence or nonoccurrence of something must be cast. Now let us take two clearly distinct relevance-languages for what may roughly be called "causality": Aristotelian and Newtonian. In characterizing whether A and B have a "causal" relation we may consider how the two events would be fitted either within an Aristotelian scheme in which a physical notion of causation is intertwined with explanation by sufficient reason or within the Newtonian scheme in which the causal relation is purely physical and efficient. One way of showing that the Aristotelian and Newtonian languages of causality are not dependent on one another is to look at physics textbooks after the general acceptance of Newtonianism: It is possible to discuss causal relations among phenomena without ever mentioning such Aristotelian principles as teleology and sufficient reason. Indeed, most contemporary physics texts begin their potted histories either with Newton or with some other scientist, like Kepler or Galileo, whose findings were directly relevant to the construction of the Newtonian world-system. Now given the purported transcendence of Newtonianism by relativity theory and quantum mechanics, this last observation seems somewhat curious. Why do we still need to talk about Newton today—even if only to point out where he went wrong—while we do not need to talk about Aristotle? What would be the problem with writing a physics textbook that, say, took seriously the contemporary thesis that Newtonian mechanics is a special case of relativistic quantum mechanics and thereby started off by introducing relativistic and quantum notions—and then much later deriving Newtonian ones once boundary conditions were placed for bodies moving at velocities considerably less than the speed of light, etc.? There would no doubt be a pedagogical problem, since, unless the relativistic and quantum notions are spelled out solely in mathematical language, the textbook would have to employ concepts, like mass, velocity, force, and especially cause, that are at best metaphorically relevant to relativistic and quantum effects but that are more intelligibly applied in the context of Newtonian mechanics. However, even when this pedagogical correct^{ive} has been made and the explication of Newtonianism is

placed before that of relativity and quantum physics, those aforementioned concepts will still have only metaphorical relevance to the discussion of modern physical notions (only now their selection as the appropriate metaphors has been justified). Yet these metaphors comprise the only discourse (at the moment) in which modern physics can be articulated as a physics (as opposed to as a system of mathematical equations). Perhaps quantum physics is most notorious for developing a "negative ontology" from this metaphorical discourse in which the defining characteristic of a quantum effect is its lack of causal efficiency.

Pierre Duhem, in arguing against the need for mechanical models in science, would say that the inability to map the mathematical equations of quantum physics onto Newtonian physical concepts is in fact a sign that scientific understanding has superseded the ordinary imagination which relies on the microphysical world working in ways analogous to that of the macrophysical world—as in the collision of billiard balls. Duhem, in effect, has given a modern justification for there being a radical difference between the nature of (macrophysical) appearance and (microphysical) reality. However, as Kant has demonstrated, whatever access we have to reality it is only through the world of appearance in which we normally dwell, and so we must consider whether it is the mathematicization itself or the albeit inadequate Newtonian analogies that permits the continuation of research into quantum physics. Given the liberality with which contemporary physicists appropriate notions like "spin" in attempts to isolate new "particles," it would seem that the analogies still govern the direction research will take. Duhem would attribute the difficulties encountered by the layman in trying to make sense of quantum physics to the sophistication of the science itself. However, taking a transcendentalist tack, we would argue that it is more likely that quantum physics simply suffers from being discussed in an impoverished physicalistic language and, as a result, discussion of quantum phenomena must be conducted in mixed metaphors—e.g., the wave-particle duality of light. This is not to say with Duhem that the remedy is to give up physicalistic language altogether, but only to give up the physicalistic language of Newtonianism that defines, say, "wave" and "particle" as the two available models for construing light, such that whatever theory of light is proposed must be explicable as some combination of features from

these two models. Thus, the transcendental conditions of contemporary physics are indeed Newtonian insofar as the scientific findings and theories can only be discussed in terms of the nonoccurrence of some Newtonian entity or relation. Recalling the transcendental formula of "B is necessary for either A or -A," relativistic quantum mechanics comprises the "-A" to the "A" of Newtonian mechanics, both of which are grounded in the same "Newtonian" relevance-language "B", which in turn is radically different from the "Aristotelian" relevance-language. In other words, we are able to say that the conceptual shift from Newton to Einstein and Heisenberg is not nearly as great as the shift from Aristotle to Newton. However, a shift equal to the latter will occur when it is possible to write an intelligible physics textbook that need not refer to Newton, just as it is possible now to write such a textbook that need not refer to Aristotle.

6. Problems in Relating Transcendental Arguments to Phenomena

To resume the mainline of our argument, to say that presuppositions are what two poles in a dialectic "agree to disagree over" is not to suggest that these presuppositions are consciously agreed upon. In order for transcendentalism to be distinguished from any other metaphysics, it is essential that ^{the} presuppositions are taken to "reside," as it were, in the "dialectical unconscious," with the dialectic itself the subject of phenomenological inquiry. Presuppositions cannot be legislated as a set of rules governing discourse, for then they are indiscernible from the premises of a deductive argument on which prioristic metaphysics are based. In this respect, Habermas practices only a pseudo-transcendentalism in constructing an "ideal speech situation," ^{one that} has been contaminated by Wittgensteinian and Austinian talk about "setting up the game," as well as by the usual Frankfurt School commitments to the Enlightenment concept of "Reason" as the dispeller of illusion. As a result, his account of the ideal speech situation, whose rules are "rationally" (i.e. consciously) agreed upon rather than strictly presupposed (i.e. unconsciously), is open to the usual objections of arbitrariness surrounding axiomatic approaches: Why these rules rather than some other set? (In the case of Habermas, these objections may even suggest a charge of Western ethnocentrism over what is "ideal.") From a dialectical perspective, however the need for such an initial consensus over terms is as ungrounded as the need for

the two parties to have some of their theses cross-refer (indeed, the former would be brought about by the latter): Whatever consensus is necessary for the dialectic to occur will be evidenced by the dialectic actually occurring, and it is there that the presuppositions will be discovered.

Now Habermas is quite correct in identifying equal access to the means of communication as necessary condition of the ideal speech situation, but it is important to realize that the "ideality" of the speech situation does not lie in its grounding some utopia, the phenomenological (i.e. historical) conditions for which have yet to be provided (or, for that matter, generated)—for then we would wonder how Habermas managed to "dream up" these presuppositions. Instead, the speech situation must be "ideal" in the Kantian sense of "regulative ideas" that ground the possibility of already existent states-of-affairs. The word "possibility" is key here, since the reader undoubtedly observes ideological coerced discourse around him and wonder how Habermas' egalitarian set-up can be "transcendentally deduced" from it. Consider Hegel's exemplary dialectic between master and slave in Phenomenology of Mind. The dialectic, of course, is that of social relations, and the point is that a master would not be a "master" if the slave were not a "slave," and vice versa. The legitimacy of the master's authority rests on some other role responding to, or recognizing, that authority. This is the Hegelian thesis of knowing oneself only in terms of what is not oneself. In less paradoxical terms, we may recall our distinction between the logic of orientations and the logic of empirical relations: The logic of orientations is established solely through defining differences in perspective; the logic of empirical relations assigns these perspectives, or roles, to empirically discrete entities, like people. Readers of Marx who have tried to link his historical determinism with a cyclical view of the dynamics of change generally suppose that master/slave, lord/serf, and capitalist/laborer merely represent the logic of orientations in different empirical guises. Of course, this is a very undialectical reading that attempts the perspective/entity binary to the scheme/content one. The more dialectical interpretation is that the way in which the master-slave relationship resolves itself historically "determines"—in the sense of "delimits possible effects" rather than "is duplicated by"—the sense in

which the next dialectic can present itself. Thus, the two logics are dialectically related to each other. For Marx, the historical (or at least historiographical) ground of this dialectic would probably be technology—especially in its contribution to the means of production—which, unlike "knowledge," can more plausibly account for the sense in which the legacy of a previous dialectic determines its successor, namely, in terms of available techniques and artifacts that limit the practical possibilities of the successor. This "plausibility" may ^{in fact} only amount to the relative ease with which we can understand how recombining old techniques may lead to new inventions vis-a-vis how recombining old ideas may lead to intellectual breakthroughs. Indeed, since the latter seems to be as prevalent as the former—at least metaphorically, it may merely be an historiographical convention that the expression "recombining ideas" cannot be explicated adequately.

In any case, not all the practical possibilities are historically realized, due to the organization of labor around a specific mode of production. For example, Marx repeatedly points out that a presupposition of the capitalist mode of production is the socialist organization of labor. This is one of the "internal contradictions" of capitalism that will eventually lead to its downfall. Nevertheless, this Marxist presupposition plays precisely the same role as Habermas' ideal ^{speech} situation, when understood transcendently. A feature of the capitalist mode of production is the increased division of labor, which makes the task of each laborer more limited and thereby more dependent on the work of the other laborers. This historical "given" is sufficient for a more egalitarian distribution of power, as socialism promises (notice the pluralism of Sufficient Reason at work: naturally, capitalism has also been "deduced" from the historical given), and so Marx is insistent on preserving the capitalist technology that made the historical given a practical possibility. The plight of "false consciousness" is that the laborers do not see the full extent of their possibilities, which lie in the necessary conditions of their engaging in capitalist social relations. The situation resembles one of a man who is physically able to open the door to his cell, but does not attempt to do so because he has been persuaded that the door is locked. We can see the function of ideology here as stabilizing the existent mode of production by having the laborers (and all else con-

cerned), as it were, speak a language that is inappropriate to the world they are talking about insofar as it persuades them that they cannot do what they in fact can. An example of "language persuading" the laborer is the very definition of "laborer" as a subordinate. The task for the Marxist counter-ideologue then is to persuade the speakers out of their language by using it against itself. We shall eventually return to the prospects of drawing the distinction between transcendental and ideological limits in terms of the practically possible and the conceptually possible, but let us first return to Habermas.

Although "utopia" ~~is~~^{is} "ideal" may be more comprehensibly defined as "the most appropriate characterization of what presupposes a given historical situation" (we are reminded here of Georg Lukacs' definition of the class perspective of the proletariat), such a definition by no means makes ~~it~~^{it} any more accessible. To explicate the inaccessibility of Habermas' ideal speech situation as an "ideal" in this sense, consider an actual dialogue in terms of the logic of orientations and the logic of empirical relations. Habermas' utopianism stipulates that the two logics can be made structurally isomorphic. What would such a condition amount to? Taking "equal access to the means of communication" as the leading ideal condition, is it fulfilled in actual discourse? Empirically speaking, no, and this can be readily shown upon reviewing the transcript of a dialogue: One person will have dominated the discussion, got his way, and generally coerce the other; perhaps it works both ways in somewhat different senses so that neither person is ever actually "permitted" to say what he intended before initiating the dialogue. But perspectively speaking, the ideal condition is being fulfilled by virtue of being presupposed. The defense for this position merely reinterprets the previous datum: The two parties (we refrain from empiricizing the perspectives adopted by the two persons; earlier we made a similar move by speaking of the conditions for a master being a "master," i.e. assuming the role) are, as Leibnitz would say, "compossible" for the dialectic-- neither party would have acted as it did if the other did not act as it did. Thus, in the logic of orientations there is a sense in which both parties are equally responsible for what either party ends up saying. ^{But} ~~and~~ considering the coercive nature of actual empirical discourse, in which a dominant party is easily identifiable, this

claim seems highly counter-intuitive. Before justifying it, however, let us now reconstruct Habermas' proposal that actual empirical persons have equal access to the means of communication.

Here is an ideal speech situation: A group of ideological uncoerced people agree upon the rules by which discourse will be conducted, including how truth-claims will be assessed. What do they have to say to each other then? Suppose one of them wants to convince the rest of the validity of an experimental finding he has made. If all the rules and criteria have been fixed a priori, then it seems that the scientist has very little to say to his colleagues, for he knows just as well as they do what needs to be done in order to prove his claim. He can then privately construct the appropriate arguments and demonstrate--not discuss--his claim. In other words, if the scientist abides by the rules, then his colleagues have no choice but to admit his claim. Indeed, given the deductivist set-up of the ideal speech situation, the discussants will never be able to utter anything other than theorems or contradictions. This could be seen not only as impracticable but also undesirable, and thereby not worthy of the effort it would take to instantiate the utopia. But notice that Habermas can get his way only if it is possible for each person to "know just as well as the rest" the rules governing the ideal speech situation. This "knowledge" amounts to not merely knowing the rules but, in addition, knowing what is to count as a rule-abiding behavior for every possible circumstance. Presumably, this knowledge will be evidenced by the proper use of the agreed upon speech-act protocols, which means that agreement over the rules is inferred from no disagreement. But earlier, in examining criticisms of Habermas' own account of capitalism in Theory and Practice, we noticed that their source lay in both Habermas and his critics using the principle of charity in thinking that the other meant what he would mean if he were referring to the history of capitalism. Charity can thus be seen as a sign of the consensus and correspondence presupposed by dialectics. But charity is also a necessary condition for "misunderstanding" because it is only in accordance with the principle that a discrepancy between two parties can go undetected--until their two perspectives develop into full-blown opposing theses.

7. The Strategy of Transcendental Arguments

In order to reflect the aforementioned feature of charity, the transcendental arguer must not merely demonstrate (or refute) the validity of his own (or another's) thesis in the straightforward deductive sense, but in his demonstration he must also account for the possibility of his opponent's arguments, which must share the same presuppositions as his in order to be a relevant antithesis. "Accounting for the possibility of the opponent" cannot mean defining his arguments residually (e.g. as error or pathology) within the initial arguer's position, for that would not be treating the opposition as a genuine possibility. It may mean, however, that the initial arguer will have to resituate the arguments of the opponent such that the latter is seen to have been "really" talking about something different after all, which nevertheless can be derived from the initial arguer's position. Such a "resituation" would offer a Hegelian reading of "not disagreeing" in terms of "the negation of the negation" not returning to the initially argued position (as would arguments that invoke the error of the opposition in order to lead it back to the truth--the initial arguer's position) but advancing the opponent to a different position. It will be understood more clearly now why we have preferred to talk about the dialectic in terms of one position arguing "more relevantly" or "more appropriately" than the other. As it were, the opponent is shown to be not quite relevant to the dialectic in which he has been placed.

Now this last sentence expresses the tension inherent in regarding the "party-hood" and the "person-hood" of an arguer as coextensive throughout the dialectic: Although the start of the dialectic presupposes such coextension, either party can succeed only by separating ^{the} partyhood from the personhood of his opponent. Thus, while the empirical person naturally remains intact at the end of his dialectic, his significance, his partyhood, has been displaced to some perhaps future dialectic. This process need not be seen only in terms of two debaters, but also in terms of one voice in a discourse suppressing another voice by rendering the latter's empirical phonemes meaningless, or only meaningful if they refer to something else. This is the fate to befall "Unreason" in Michel Foucault's Madness and Civilization and subsequent works. They differ from other accounts of the origins of psychiatry in

that Reason and Unreason are treated as two equal parties of a dialectic rather than as two unequal sets of empirical people. Foucault begins his transcendental history by observing that well into the Renaissance madmen in the guise of "fools" were allowed to roam freely among the saner members of society. This undetected difference represents the consensus that presupposes the future dialectic. However, by the eighteenth century, nascent psychiatrists inferred from this undetected difference that people could easily pass from a sane to an insane voice without social disruption, which was transcendently undesirable insofar as this easy passage challenged the sense in which rationality was a necessary condition for civil society--a classic Enlightenment doctrine. The problem was solved quite simply, from an empirical point of view, namely, by incarcerating insane people. However, every new candidate for the asylum had to be negotiated from being handled in the usual legal-rational manner: If sane people were judged to have committed crimes or indecent acts, then the presuppositions of civil society would again be threatened since one could conceivably be sane and uncivil. Thus, the special discourse of the psychiatric profession developed to show how apparently lucid murderers "in fact" did not know what they were doing and should therefore be committed rather than executed. So we see here that psychiatry could not displace the significance of the insane voice merely by displacing insane people. The reason for this eighteenth century problem no longer being so acute lies in rationality no longer ^{being} regarded as a necessary condition for civil society. And as far as the development of psychiatry as a profession is concerned, Freud can be seen as shifting the "empirical coordinates" of Reason/Unreason from people in general to the individual person--hence ego/id.

But on a more mundane level, the model of Foucault's project and other truly transcendental speech situations is perhaps the most common form of actual discourse: talking past one another yet still getting "somewhere" at the end of the discussion, the natural outcome of the principle of charity. Usually put, charity appeals to what one party would mean if he said what the other party was saying. Earlier we spoke of transcendentalism in terms of the "frame of reference" metaphor. Suppose each arguer occupies a distinct celestial body. Now one arguer describes to the other the pattern of stars he sees (and let us suppose that the celestial bodies are not assigned names but only can be referred to as a pattern, which is analogous to the way--we also

assume--discourse is understood, namely, as manifest behavior without any special access to what it "really" means). It is not unreasonable to conclude that for the second arguer to see the ^{same} pattern of stars as the first, he must be seeing different celestial bodies, since from the second arguer's frame of reference the ~~same~~ celestial bodies that the first sees would appear as a different pattern (if at all). Yet this is charity at work. On the basis of this metaphor, we can now recast the dialectic of transcendental reasoning as follows: Begin with two different maps taken from two different stars purporting to locate the same celestial body. Keeping in mind the frame of reference from which the maps are drawn, each may be correct in its own right. However, the dialectical nature of transcendental reasoning presupposes that one map somehow "more relevantly" depicts the celestial body than the other. But to make such a claim stick, each stargazer must also say what the other map locates. This is done "charitably" by seeing what the other map locates when interpreted as a pattern within one's own frame of reference, namely, a different celestial body. It may be objected that portraying the resituation of the other argument in this manner constitutes misunderstanding it and presupposes that the resituating-stargazer is not operating from a frame of reference at all, but instead has absolute vision. But what else could he have done, given that he is operating from a frame of reference? To speak less cryptically, given their transcendental commitments, could the forces of Reason in the Enlightenment have done anything other than start speaking psychiatrically when faced with the subtle pervasiveness of Unreason? Admittedly, the model as it stands is too artificial in that the frames of reference themselves would shift as the dialectic takes place, but it still provides a tentative picture of how new discourses are generated through displacement, which Habermas' axiomatic "one map/one star" utopia cannot offer.

There are finally good methodological reasons for keeping the logic of orientations separate from the logic of empirical relations and preferring the former to the latter. Once again, consider a dialogue. What does each empirical person contribute to it? The commonsensical reply is "what he actually says," which presumes that parties and persons are coextensive. But is that an appropriate account of what is going on? How do we account for the fact that people rarely say what they

intended to say^{and} are quite often surprised by what they end up saying? Habermas' answer would probably be that this reveals the coercive nature of an unchecked dialectic, which would be remedied by the ideal speech situation whereby the persons are allowed to speak their minds freely. Presumably, this means that each person has a unique set of intentions (to match his individuality) he wishes to communicate but is prevented from doing so by the distortive conditions of the dialectic. In their ideal form, these intentions may legitimately express desires--say, to become a lawyer--which are socially inculcated. However, distortion arises if the person has "no choice" but to become a lawyer if he also wishes to survive, which eliminates what may be called the "aesthetic considerations" of being a lawyer--all things being equal, would that person find being a lawyer best suited to him. (Notice the mixture--so typical of Frankfurt School thinking--of classical economics and Kantian ethics: The person can be a moral agent only if his wants are not needs.) But how would we go about finding what^{are} the person's "aesthetized" intentions, which is to say, his "real voice"? Addressing ourselves to a specific dialogue, we could search for what that person would intend outside its dialectical constraints. However, such an inquiry would be reminiscent of the search for the thing-in-itself. Looking for a common denominator in several dialogues in which the person has participated will not do either, because in each case perhaps the dialectical situation constrains in the same way--systematic distortion--so as to be the real source of whatever unity of intentions seems to be present in the person.

These impasses suggest that perhaps the person is not the unit of dialectical inquiry. Instead, we would follow Foucault in saying that empirical persons are merely conventional markers for keeping track of the dialectical movements which are spelled out (literally) in the discourse. The different voices, or parties, can be disentangled ("deconstructed" is often used here) from texts, with each voice passing through several persons and orienting them in a determinate way. In Habermas' person-centered analysis, we might speak of someone "contradicting" what he said earlier. For Foucault this would mean that the person had adopted another voice (i.e. the equivocal person would be analyzed into univocal parties). Thus, as we said earlier, the same empirical person may find himself in a different discursive region after a transcen-

dental argument, and this is precisely the position speakers normally find themselves in after having said something other than they intended. Methodologically speaking, for a philosopher to adopt, say, "Kant's voice" means that the philosopher's text exhibits a confluence of voices similar to that exhibited by, say, the Critique of Pure Reason, which in turn can be disentangled, etc.; hence, the Foucauldian task of "archaeology," as outlined in The Archaeology of Knowledge. The reader may now appreciate that vulgarizations of Hegel's "Absolute Spirit" descending on world-historic individuals" are not entirely without foundation; neither is Foucault's notorious claim in The Order of Things that "man" (read: person) as an object of inquiry has come to an end; and neither is our own claim that just because empirical persons utter discourse, it does not follow that they are the most appropriate units for studying discourse.

6. The Metalogical Status of Transcendental Arguments

In criticizing Habermas' ideal speech situation, we have suggested that at least part of its inaccessibility lies in treating discourse as a ^{quasi-}deductive system. Now the usual source of an objection like ours is the inapplicability (usually due to artificiality) of a formal mode of inference like deduction to the substantive matters of informal reasoning that comprise actual dialogues. Indeed, lack of ontological commitment has been taken as a virtue of deductive reasoning that allows it to be the language in which any possible metaphysics or science must ultimately be cashed out. Often such a metaphysical or scientific theory is persuasive only insofar as deduction can elucidate its "underlying structure," which means in practice a reduction of the theory's propositions to variables and constants that can be interpreted by a self-consistent semantics. However, this principle of the "substance-neutrality" of logic, despite its entrenchment in the Aristotelian Organon and re-entrenchment in Hume's matters-of-fact/relations-of-ideas distinction, does not account for the peculiar intuitions most logicians have had in considering "truth." For example, substance contaminates logical form when epistemic considerations enter, as in the possibility of propositions changing truth-values with the growth of knowledge, while form is kept pure when considering the truth-value of the proposition as such, regardless of one's epistemic relation to it. Put this way, we see that the call for

substance-neutrality is not the strict purging of "content" from "scheme" but the purging of a particular kind of content, which is perhaps most tellingly revealed in the ease with which Bernard Bolzano, Gottlob Frege, and Karl Popper (in his discussion of "World Three" in Objective Knowledge) can derive a Platonist metaphysics from the "merely" logical principle of "recognition transcendent truth." When this metaphysics is embodied historically, as in Peirce's system of propositions that would be recognized as true by the ultimate inquirers, we see that the temporal perspective from which this truth would be observed is the infinitely displaced future. (If the reader does not see how Peirce "historicizes" the natural Platonism of logicians, he should refer to our earlier discussion of ultimate difference between scientific and metaphysical activity. In that context, Peirce would be construed as the "scientist" to the logician as "metaphysician.") And although most logicians would want to resist Peirce's move, they would nevertheless be hard-pressed to explain why (given the supposed indifference, or irrelevance, of logic to time), ever since Aristotle raised the problem (in On Interpretation) of the truth-conditions of a proposition about tomorrow's sea battle, the following counterfactual has been taken as more plausible than its rivals:

If a true proposition within a deductive system were tensed,
it would be in the future perfect.

This counterfactual is so persuasive in fact that it affects how we treat a deductive system normally. For example, deduction is associated with apriorism, which implies that the truth-values of propositions are already fixed and just need to be reached by using the correct order of inference rules (i.e. demonstration). Peirce himself has reproduced this move metalinguistically by contending that there is one interpreted deductive system capturing the structure of the world, such that if the unformalized propositions we believe true cannot easily be translated into a logical syntax--say, because their logical form generates paradoxes or makes what follow from them indeterminate--then, ~~simply put,~~ they are not the correct propositions, and so inquiry must continue. All these treatments of deduction involve covert appeals to the future perfect insofar as by the time the logician or scientist discovers the truth of a proposition or a deductive system that truth will be there, "waiting to be discovered," as it were.

Our point is that even though the future perfect interpretation of logical truth is not correct in the eyes of logicians, it is less incorrect intuitively than, say, the strong pragmatist interpretation in which propositions change truth-values as knowledge increases. We would hypothesize that the plausibility of the future perfect interpretation can ultimately be traced to the Aristotelian ontology of actuality and potentiality, whereby our knowledge is seen as an incomplete actualization of the truth, which may be embodied in the fully articulated deductive system; hence the characterization of deduction as preserving truth but adding no new knowledge. But in any case, a hypothesis of this nature points to the conclusion that "form" is just another kind of substance, and so in displacing deduction's ontological commitments we should be able to displace deduction as ordinarily understood. In uprooting these presuppositions, we would then make the "logical space" necessary for a coherent account of transcendental reasoning that is not parasitic on deductivist modes of expression. Indeed, this can be seen as Hegel's task.

It would appear, however, that transcendental logicians were not the first to be dissatisfied with the presuppositions of deductive reasoning, and toward this end inductive reasoning was formalized. Yet "induction" is more a family resemblance term (containing, e.g., analogy) than a specific mode of inference insofar as its forms share only the feature of being "nondemonstrative," or not necessarily preserving truth across inferences. In other words, induction is defined in terms of its not being deduction. And transcendentially speaking, we would add that induction is therefore only as real a possible mode of inference as deduction is; so rather than addressing deduction's presuppositions, induction assumes them. We can show this as follows: First, note that unless we understand the connection between the demonstrativeness and unformativeness of deduction, it is difficult to see the rationale for pursuing a professedly undemonstrative form of inference like induction. However, the residual nature of "undemonstrative" was initially used by Aristotle to denote at least two distinct non-deductive practices. On the one hand, our intuitions provide content for syllogistic premises, which themselves remain undemonstrated but from which conclusions are demonstrated. These intuitions may be seen as having a more (in the case of physical principles) or less (in the case of logical principles)

hypothetical status, so that depending on the explanatory power of the conclusions drawn, they will gain or lose plausibility. Readers will recognize a nascent form of Peirce's abductive inference here, and this procedure is not even much different from how Carnap initially set up the hypothetico-deductive method. On the other hand, Aristotle also discusses undemonstrativeness in terms of propositions (describing states-of-affairs) that are not always true, or even if they are always true it is only by virtue of considering case after case. There may even be a priori reasons why any stronger assertion of the proposition is impossible. This approximates the usual enumerative paradigm of induction and as such it underlies "objectivist" approaches to probability based on frequency, whereas abduction underlies "subjectivist" approaches based on credibility.

However, with Francis Bacon these two types are fused in the assumption that the credibility of an intuition grows in proportion to the number of experiences of its kind, which leads Bacon to advocate experimentalism as a mean of refining the way in which an hypothesis is selected. We saw this attitude earlier in the pragmatist's thesis that the facts "speak for themselves," or are sufficient testimony of their own evidentiary worth, such that transcendental objections that the credibility of these facts is separate from their sheer quantity (and rather, are dependent on what else could have been the case) are dismissed. But notice that in dismissing the transcendentalist, the pragmatist doubles the value of facts by having credibility mirror frequency. The fusion of the types of "undemonstrativeness" is completed with Hume, who resituates the "intuitive" aspect of abduction in the indeterminate realm of "habit" and reabsorbs the rest of that inference into the modern univocal concept of induction from which the classic problem of justification derives, whereby the identity of a future event cannot be "derived" (on an analogue with "deduced") from an enumeration of past events, which serves to render induction an impotent form of inference. However, this problem did not cast any aspersions on the value of induction as a means of arranging the historical record as such, and so frequentists like Peirce and Reichenbach spoke of a probabilified induction offering a veridical account of the ultimate distribution of types of events—once the historical record has already been written. But notice the metaphors most often used in this context,

including "in the long run" and "asymptotic convergence," which with only a little effort can be translated into the deductivist principles of "recognition transcendent truth" and "verisimilitude," as Popper's vacillation between inductivist and deductivist idioms demonstrates.

Yet it would not be quite precise to say that, in being drawn to the same future perfect "picture" as deduction, induction perfectly mirrors deduction, for this would not square with Hume's absolute distinction between matters-of-fact and relations-of-ideas, which are arranged inductively and deductively, respectively. Instead, we have here a "cracked mirror," which is to say, a bad analogy between induction and deduction, whereby the terms of deduction are initially posited and induction must then fit the ratios. And rather than working through the analogy hermeneutically, the terms of deduction are kept fixed so that induction can at best approximate them. But since induction cannot fit many of the ratios (e.g. demonstrativeness), its side of the analogy remains incomplete. And rather than drawing a better analogy (which would, say, transform deduction in light of how induction fails by deductive criteria) Hume simply leaves it at that, and so the fact that induction intends to mirror deduction is obscured by the fact that it does not. And as successive attempts at "solving" the problem of justification has shown, induction, though described as an autonomous form of inference, is in fact treated as a bad form of deduction.

What can be called the "deductivist telos" of the history of induction has gradually made it more difficult to articulate a "logic" of abductive inference, and hence the view that discovery (of the correct hypothesis, given the phenomena in question) is fundamentally "irrational"--the thrust of this term being to resituate abduction in the psychology of the individual, which is to say, the source of this "aberrant" thinking (cf. psychopathology). Even in his interesting attempt to accommodate the Peirce-Hanson view of abduction within Bayesian inference, Wesley Salmon (in The Foundations of Scientific Inference) admits to an unorthodox reading of the probability calculus. In addition, the most plausible terms in which to express the "first principle" of virtually any history of scientific change seems to presuppose the deductivist telos:

Only if truth is preserved, does knowledge grow.

This principle can be rephrased as follows:

Meeting the aims of deductive inference is necessary for meeting the aims of inductive inference.

And as we have seen with Hume, this principle does not entail that deductive success is sufficient for inductive success. Historicists like Rorty accept the principle just as much as the positivists do, only the former argue that since truth is not preserved, knowledge cannot be said to "grow." Of course, the problem here is not that the implication expressed by the principle is invalid, but that by talking in terms of "preserving truth" and "increasing knowledge", we cannot easily raise transcendental or abductive questions about what makes such a principle so plausible. This point is illustrated as follows: When posed with questions like the ones we have been raising, "naturalists" like Quine become philosophically speechless and ask us to "look at" the history of science for ourselves, a move reminiscent of Meere's gesticulatory refutation of idealism--and equally dubious. The transcendentalist wants to ask, "And in what sense does this picture represent your principle?" Failing an answer, the transcendentalist tries to piece together the naturalist's silent semiotics phenomenologically: Knowledge does grow in the sense that the volume of writing increases over time, and truth is preserved in the sense that we can trace a genealogy of our present scientific concerns to the past (and do that in any number of ways). No doubt the naturalist will suspect the transcendentalist of excessive literal-mindedness, as if the former's picture had been described solely in terms of its composition and not its theme. The naturalist will then interject, "It isn't just that more things get said, for that would mean that everything we say is knowledge, which wouldn't take into account the independent existence of the natural world that orients scientific inquiry and falsifies some of ^{the} things said in the name of 'science.'" Rather, knowledge grows exactly by preserving truth, which makes sense if we imagine an evolving organism that develops or sheds extensions in order to adapt more perfectly to its environment." Since the naturalist has now appealed to an evolutionary picture, the transcendentalist will note that from among the possibilities for such a picture (e.g., Lamarckian, Darwinian, Haeckelian), a highly teleological one is selected, suggesting that the scientist-as-organism can determinately increase his chances for survival by mastering the rules of Nature.

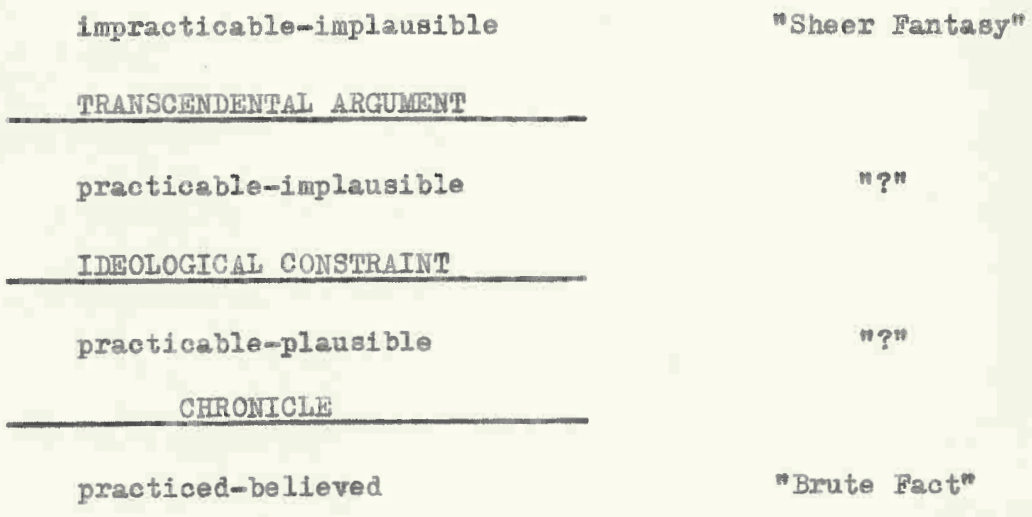
But the transcendentalist doubts that this is the most appropriate way of characterizing the history of science, for it assumes that if one intends to preserve truth, or "survive," then truth can be preserved in the same sense that was intended. The problem of applying charity brings to mind the difficulties here, which suggest, once again, that a new language is needed whose sense does not so heavily rely on the misleading deductivist notion of "preserving truth."

9. Towards a Transcendental Historiography

The time has finally come to address the problem of ideology and transcendental arguments. It will be recalled that Rorty was at the start of this paper attributed an ironic interpretation of transcendental arguments as ideology: The limits discovered are only of the arguer's own possible experience. However, as we then saw, Marx allows us to draw a distinction between practical and conceptual possibilities, the former being transcendental and the latter ideological. (By "conceptual possibility" we shall mean "plausibility," since there is an obvious sense in which every possibility must be conceivable, if not conceived.) The interest in drawing the distinction is not simply in vindicating transcendental arguments, but also in capturing the sense in which historians would like to say that even if, for a given period, we had a complete record of everyone's beliefs and activities, we still would not have accounted for everything they could have plausibly believed or put into practice. Indeed, the practice of historians presupposes that such distinctions are intelligible: If the record is lacking, reconstruction is based on interpolating a practical possibility subject to plausibility constraints; historians seem to be able to discriminate between what a text could have and could not have meant (and also an authentic from a bogus text); there is more or less defined talk about someone not being able to see what was within his reach (i.e. a practical possibility that was not plausible); and, perhaps most notoriously, there is rather loose talk about what would have happened if two spatiotemporally disparate persons met up with one another. Yet however poorly defined these speculations may be, an historian at least intuitively knows when his colleague has overstepped the bounds of plausibility and practicability, the latter being somewhat more obvious than the former, if only because the historian simply needs to look at the science and technology (or "material conditions") available in a certain period to determine whether there would be sufficient counterparts to

what the historian judges as necessary for producing, say, an automobile; however, there may be some additional reasons preventing some of the practical possibilities from being realized and hence the conceptual possibility of the automobile would be diminished. In such deliberations, the historian parts company from the mere chronicler and aligns himself with the philosopher and novelist. Furthermore, we would follow Max Weber in claiming that "history" becomes discernible as a discipline (and thereby can possibly derive "laws," which is to say, sort out the relative significance of events) only insofar as it can address rigorously questions of the factual vis-a-vis the counterfactual.

The difference between transcendental and ideological conditions for a given period implies that history has an ontological structure, which we shall represent as four tiers divided by three boundaries: The lowest boundary--the chronicle--demarcates the practicable and plausible from the practiced and believed; the middle boundary--the ideological constraint--demarcates the practicable but implausible from the practicable and plausible; and the highest boundary--the transcendental argument--demarcates the impracticable and implausible from the practicable but implausible. The highest tier may be called "sheer fantasy" and the lowest "brute fact," but what about the intermediate two tiers?



Much depends here on what we mean by "ideology." First, we must be careful to distinguish a belief not held in fact from one that could not have been held, and toward that end we suggest that a belief is implausible only if it is one of a set

of possible beliefs in the same historical period that are made impossible for the same reason, which is to say, they are systematically eliminated from serious consideration. (Conversely, to entertain these possibilities would be to challenge systematically entrenched beliefs, much like the "core" of Quine's "web of belief.") In this sense, ideological constraints are "negative transcendental arguments," conditions for making something impossible. The archetype of ideology then is the law of the state. But perhaps more interesting are the "gaping silences" in the historical record where beliefs the historian normally takes for granted would be supplied, but if supplied would make what is actually said impossible. For example, in the context of Ptolemaic internecine disputes over the number of epicycles, the historian is permitted to ask "Why epicycles at all?" only if he intends to set the conceptual limits on Ptolemaism, which demands that he step out of their dispute. We shall return to this point later.

With the notable exception of Lukacs in History and Class Consciousness, Marxist accounts of ideology have been unable to approach the problem of plausibility because such terms as "distortion" and "false consciousness" are still very much understood as what allows the historical actor to think that he can do more than he "really" can (as opposed to our own emphasis on the actor thinking he can do less than he "really" can, or plausibility falling short of practical possibility), especially in terms of the amount of freedom he exercises over his own life. In that case, the Marxist wants the actor to realize "positive freedom," which Hegel characterized as "the recognition of necessity," or the extent to which the actor's life is determined beyond his control. One of two attitudes follows: Either the actor makes the most of his determined state and thereby rids himself of illusory and ultimately destructive desires (the path of the Stoics, Spinoza, and Freud, but not that far removed from Karl-Otto Apel's view that hermeneutic interests enter after the scientific ones have defined the laws of human behavior—a strategy modeled on social policy research) or, having identified the source of control, the actor orients himself and others toward overthrowing it (the path of revolutionary Marxism). Given the initial set-up of the problem of ideology, the second alternative seems highly implausible, since the revolutionary impulse itself may be attributed to hubris.

Also notice that the set-up presupposes that the same piece of knowledge--say, the laws of human behavior--can be appreciated by different ideologies, which suggests at least the detachability of knowledge from ideology. And this, in turn, is made possible by individuals, having recognized necessity, assuming self-control. In other words, they can adjust determinately so as to minimize pain, etc. The reader will recall our previous discussion of naturalism and its difficulties. These difficulties arise, in this case, from conceiving as absolute (at least for a historical period) the transcendental argument which expresses the recognizable necessity, such that any historian can arrive at them (ex post facto) as he would "the fact of the matter."

In contrast, we view ideology as knowledge (of material conditions, i.e. all that can be known about the world in a given period) regarded from the perspective of its self-delimitation. The notion of "self-delimitation" can be best conveyed by imagining a witness who systematically omits certain pieces of information (but does not necessarily utter a falsehood) so as to lead the jurors to interpret his testimony in a manner considerably different from how they would interpret it, given all the information. The transcendental argument resides in the knowledge of the witness, with the ideology being in the way he restrains his use of that knowledge in order to exercise more control over the jurors, who represent the actual historical actors. The analogy suggests two questions about ideology. First, presumably, the witness had reasons (or "motives") for systematically misleading the jurors. Likewise, we can consider the interest of knowledge in restraining itself: Why would certain practical possibilities be systematically prohibited? Second, in picturing the analogy, we as spectators to the proceedings must wonder how do we know that the witness is not only not telling all that he knows but that he is also systematically concealing information. And so as historians we need a strategy for quite literally "reading between the lines."

On the first point, let us analyze the analogical psyche. In the mind of the witness there are several competing voices that can be distinguished only insofar as they constrain the expression of knowledge differently; similarly, talk about "the interest of knowledge" can only make sense in light of other possible interests. For example, capitalism is an ideological restriction only by virtue of there being

way of controlling

another ~~mode~~ whereby the means of production ~~can be controlled~~, namely, socialism; otherwise, capitalism is indeed the science (the one systematic form of knowledge) of political economy, a point repeatedly made by Louis Althusser. Thus, we want to avoid construing interests as something in addition to (and therefore detachable from) knowledge, which even Habermas' use of Kant's "regulative ideas" connotes, if not understood as a modern analogue of the scholastic use of "intention," namely, the drive within knowledge that orients it toward its possible manifestations. But we also do not want to claim that there are competing forms of knowledge, each with its own guiding intention, for this would amount to literally alternative worlds. Instead we conclude that, as with the mind of the witness, knowledge as such is driven by competing intentions, which are resolved as one form of ideology or another. To take a less overtly political example of ideology, consider what it means to offer a persuasive argument for a given thesis. The reflective arguer realizes that there are several lines of development his argument may take, each of which would capture some aspect of his thesis, but all of which would render his thesis incoherent when taken together. Since he is paramountly interested in being persuasive, the arguer systematically eliminates lines of development ^{that} have been previously shown "false" or "unproductive" (insofar as being false or unproductive is unpersuasive). The resulting argument manages to direct the audience's attention to the strong points of his thesis without revealing any of its shortcomings. This argument would be an "ideological resolution" of the interests of knowledge. Notice that our reinterpretation of "interest" accounts for how the historian find plausible certain beliefs that were not impracticable for a given period, yet the historical actors themselves would find them implausible, for they would have to alter too many beliefs already held plausible—an ideological shift—in order to accept the historian's. But as we shall see shortly, this does not mean that the historical actors are necessarily "locked into" their ideology.

The second point of the witness-analogy is somewhat trickier, since the systematic nature of ideology militates against easy detection. However, one of the themes of transcendental reasoning is that in an argument that purports to offer the necessary conditions for the possibility of a state-of-affairs, there must also be an account for the negative possibility represented by the dialectical opponent. As we have seen this means resituating the opponent in some other region of discourse

that keeps him away from what he originally contended yet keeps him consistent with the "victor." In psychoanalysis, Freud's study of "slips-of-the-tongue" and Wilhelm Reich's study of "character armor" (the forerunner of body language) make this same point for a semiotic sphere more comprehensive than language: Like defeated arguments unfulfilled desires get deferred to where they can be vented to the advantage of the dominant "reality principle," and these displacements may vary in significance from nervous ticks to artistic creativity. (Note the analogous roles played by dialectical sublation and psychic sublimation.) These are the types of signs we might "read off" the witness to detect deception. For example, he may suddenly avert his eyes from the jury when answering a question. But how does this translate historiographically, when the objects are not behaving witnesses but printed pages--and the problem of knowledge resolving its interests ideologically is reduced to the less animated task of disentangling the strands of meaning that compose an inherently ambiguous text? Here we return to our archetype of ideology: law. In particular, let us consider the kinds of laws that prevent things from being said--many of these are to be found in the religious sphere as sanctions against uttering profanity, such as God's name. Of course, such laws would not be necessary unless the objects denoted by the profanity were frequently conjured up in at least "significant" discursive contexts. Thus, euphemisms are fashioned to substitute for the profanities. Now euphemisms are not merely another name for the object. Admittedly, they are cast so as to remind the listener^{of} what is "really" being talked about, which usually implies mentioning some qualities associated with the "ineffable." However, euphemisms also remind the listener that what is said should be taken counterfactually--the thing being referred to is something other than simply a being with the mentioned qualities. Euphemism is thus not only the closest that rhetoric has come to formalizing evasiveness but is also a species of metaphor that bears an interesting resemblance to analogy. We would argue that the realm of the practicable but implausible--i.e. possibilities grounded by the transcendental argument but made impossible by ideological constraints is the metaphoric and can only be expressed by the historical actor euphemistically; while the realm of possibilities under the ideological constraints--i.e. the plausible is the literal.

The attractiveness of adopting the metaphoric/literal distinction lies primarily

in the "floating" yet complementary application of the binary. The binary "floats" insofar as through the course of history expressions tend to shift from one pole to the other, yet for any given period the historian is usually able to determine to which pole should an expression be assigned. However, there are some difficult cases, and then the historian must engage in dialectics with the historical actor that far surpass what the "hermeneutical understanding" of ^{Friedrich, Schlegel, Schleiermacher} Wilhelm Dilthey, ~~Robin Collingwood~~, and their followers ^{has} considered methodologically viable. Take the case of a recent interview with Foucault, in which the interviewer supposed that he made a thorough study of geography (as had Fernand Braudel and other historians of the Annales school) because so many Foucauldian concepts--e.g. "discursive regions"-- seem to appropriate terms from that discipline. Foucault denied even having geography in mind, but the interviewer was not convinced and proceeded to produce examples of Foucault's rather precise and systematic use of geographical terms. In the end, Foucault was forced to show how in fact several key facets of his work were inappropriate to geographic conceptions such that other metaphors had to be employed. The interviewer then criticized Foucault for misleading his readership who supposed that he was engaging in ^{an} "intellectual geography" of sorts. To this Foucault admitted that there was no available language to describe what he was doing, and so he had to contrive some means of expression. We have here an episode from the "twilight zone" of ideology, where in discussing Foucault's (non)use of geography the virtual and the veridical meet. Notice that the interviewer does not presume that Foucault necessarily knows what he is trying to do. Instead, Foucault must explicate the sense in which geography being a more or less effective source of metaphors is crucially different from its being a proper methodological tool. Although Foucault merely showed counterexamples from his own texts rather than actually explicating how his examples differ from the interviewer's, nevertheless by defining his own position dialectically to his antagonist's we are able to ascertain what constitutes a plausible use of geography in historical analysis--for in "deceiving" the interviewer Foucault reveals just how close to plausibility his professedly metaphoric use of geography is. But of course, Foucault's use is only virtually plausible because it can be shown as part of an adhoc patchwork of disparate discourses. The transcenden-

talist would suggest that if Foucault were painstakingly interrogated on all his metaphors and forced to show in what sense they are not to be taken literally, then we would go a long way toward defining the presuppositions of Foucauldian discourse—why this patchwork and some other—which would provide the necessary conditions for a more appropriate formulation of what he is "really" talking about.

There are lessons here for the historian and the philosopher trying to overcome certain presuppositions that have become historically entrenched. Because presuppositions can be discovered for any piece of discourse, it is too quickly concluded that an Archimedean point is impossible. Although presuppositions are indeed universal, no particular one need be absolute. However, for the most entrenched (and therefore the most interesting to challenge) notions, there appear intuitively to be so many necessary conditions which are themselves tied to the necessary conditions of other notions that even establishing coordinates, let alone locating an Archimedean point, seems to be a hopeless task. Consider trying to find the transcendental argument for deductive inference in order to overcome it. The reader will wonder what conceptual apparatus would be left. But the Foucault example teaches us that it is not necessary to discover all the necessary conditions, but only those necessary conditions that are themselves necessary for distinguishing, say, a virtually plausible from a really plausible account of deductive truth. Thus, rather than trying to ground every possible deductive inference, the transcendentalist would be looking for, as it were, the most plausible type of error one can make in characterizing deduction, i.e. one from which virtually every important feature of deduction can be understood, yet still the deductivist would say that at least intuitively such a characterization ^{must} be taken as having no more than metaphorical status. We earlier offered an example of such a metaphor in the counterfactual about deductive truth being articulated in the future perfect. And why cannot deductive truth be regarded exactly in this way, as opposed to the time-irrelevant manner in which it is usually cast? The answer to this question would help draw up the limits of deduction's plausibility as a form of inference (i.e. how must deduction be construed to be plausible), to which another set of limits can be opposed.

The historian would engage in the above enterprise in trying to discern the necessary difference separating, say, a "normal" and a "revolutionary" piece of

scientific research from the same period that were nevertheless of roughly equal experimental adequacy. Kenneth Schaffner, for one, has compared the architectonic differences between two such theories--namely, Lorentzian and Einsteinian electrodynamics before 1920,--and concluded, in effect, that a simpler presentation of the same material (Einstein) was more persuasive than one that could be more easily linked with other accepted theories (Lorentz). But of course, the difference between Lorentz and Einstein has since 1920 turned out to be not merely a matter of presentation, for the Einsteinian "presentation" has been taken as the material of which subsequent physical research has been built. We would say that architectonics apply to scientific theories as classical rhetoric applied to political speeches. But furthermore, since the historian is able to distinguish between transcendental and ideological conditions for a particular period intuitively, he can now use an approach ^{similar} to the one we have been advancing to determine the limits of the "historically plausible." Indeed, the historian can take advantage of his ability to see practical possibilities where the actors could merely utter metaphors, in order to set up possible arguments where he tries to persuade a given historical actor to act as if these metaphors represented the world as it actually is (for that period), which is to say, to take the metaphors literally. This attempt to actualize the full conceptual horizon of a figure from the past goes beyond the ordinary techniques of hermeneutical understanding and, at the same time, captures the full depth of the historian's task. Like the Marxist counter-ideologue trying to persuade the workers of the "reality" of socialism, the historian would to start with beliefs held by an historical actor and use them as the basis to argue a fortiori toward the limits of plausibility for that actor. When would the actor detect that what the historian presents as a "natural extension" of the former's position is in fact an implausible belief? That would be where the ideological constraints lie.

VI. THINKING OUR WAY OUT OF THE REPRESENTATIONALISM OF LANGUAGE (AND THE LANGUAGE OF REPRESENTATIONALISM)

(chapter four)

1. Realist and Nominalist Perspectives on the Relation Between Language and Mind.

Although we ultimately intend to design a blueprint for a general theory of signification, let us focus here on the most widely considered semiotic system, language. An appropriate question to ask is what activities has the study of language been historically associated with. Answers would center on the task of "representation," which can be analyzed in terms of the reformulation and preservation of thought, with "communication" defined as the linguistic reformulation of thought for the purpose of preserving whatever truth may be conveyed, that is to say, its propositional content. The genealogy of this task can be traced from the opening paragraphs of Aristotle's On Interpretation to Gottlob Frege's "On Sense and Reference." Within the history of representation, two periods can be roughly distinguished according to the proximity of language to thought.

The first, "realist" period prevailed until the advent of the British empiricists Francis Bacon, Thomas Hobbes, and John Locke, and the second, "nominalist," period follows from them. During the realist period, philosophers instructed the speaker to order his mental images--the stuff of thought--before putting them into words so that the audience is presented with as faithful a reproduction of his thought as possible. During the nominalist period, philosophers, arguing that mental images were either wholly mythical or reducible to the very system of signs comprising language, counseled the speaker not to be bewitched by his own instruments of thought, a captive of which he must to some degree always remain. Of course, the realists had not denied the bewitching nature of language, but upon turning to the relevant works, such as Aristotle's On Sophistical Refutations, we find that there is a clear distinction between the bewitcher and the bewitched: The sophist knows his own mind and so quite self-consciously aims at bewitching the audience, who assume that the words of his speech faithfully reproduce the train of his thought. It is because the line between language and thought can be clearly drawn that Plato had been able to distinguish the philosopher from the sophist on the basis of purpose rather than of skill. The nominalist, on the other hand, is unable to make such a distinction because thought and language are inextricably bound, if not identical. We might say that in principle it is impossible for the nominalist to be a sophist (or a liar) and hence the problem of skepticism is a real but insoluble one: It is real insofar as the nominalist, like the realist, presupposes the primary activity of language to be representation; but it is insoluble because there are no criteria of validity outside the manifested words, which the ontological distancing of thought could provide for the realist (and thereby allow someone like Descartes to entertain beings--God and angels--who can represent the world to themselves in pure thought

without resorting to the imperfections of language, a standard ~~which~~ which can then be used to measure man's discursive understanding of the world).

Notice that depending on whether thought is ontologically "distant from" or "close to" words, language adopts the qualities of mind or vice versa. In the case of the realist position, language acquires the clarity and veridicality of thought in representing the structure of the world and, not surprisingly, speech becomes the paradigm of the mind's mastery over its own expression. As for the nominalist position, however, thought takes on the rigidity and equivocality of the linguistic sign in the face of meanings shifting over time and, also not surprisingly, writing becomes the paradigm of the mind's confinement to the ciphers impressed upon it. Some philosophers, like Leibnitz, have tried to develop the best of both worlds in the form of a "universal characteristic" or "combinatorial science" whereby in knowing the limits of the mind's linguistic confinement one may also know all there is to know about the world by articulating all the logico-grammatically correct sentences (hence the ambiguous status of, for example, the Principle of Sufficient Reason as a law of thought and a law of nature). But a strictly nominalist psychology may be found in the Freudian theory of the unconscious in which the relation between the significance of the memory trace of an experience situated in consciousness and its significance when resituated in the dream-world of the unconscious is similar to the relation between the meaning of an etymologue and that of its modern cognate: The trace (or word) itself has remained virtually unchanged (hence we can speak of "retrieving a memory" or "tracing the history of a word"), yet its significance may have been altered drastically. And just as Hobbes reconstituted mind in the image of language, and Freud turned that reconstituted mind into the subject-matter of an autonomous science, so now Jacques Derrida has imported Freud's nominalist psychology back into the study of language so as to discredit once and for all the realist notion that semiotics begins where psychology leaves off, both being subsumed under the discipline of "grammatology"--the science of writing.

2. Derrida's Attempt at Transcending Representationalism.

We raise this point in order to situate Derrida's purported anti-representation- alism as the ironic moment in the history of representation. To explicate this point, consider the closing pages of Philosophy and the Mirror of Nature, in which Richard Rorty propounds a division of philosophical attitudes that arises from contrasting the style of Wittgenstein and Heidegger, on the one hand, and that of the "mainstream" academic tradition--a division that Derrida institutionalizes in his own writing. ~~First~~ ^{First}, there are the academics who try to speak truth- fully about the world (and, so says Rorty, merely duplicate scientific activity on

a more abstract level). Then, there are those who claim to be merely "saying things" that may be more or less illuminating, but not by virtue of referring to a particular state-of-affairs. Of the latter group we can only ask whether their words evoke a greater understanding of the world in general-- a "philosophical mood" perhaps--much as the words of a poet might. Derrida would fall into this group because his superficially academic prose--which in Of Grammatology ranges across the history of attempts at providing a unified science of signs--masks a fundamental inability to master the subject-matter and subsequently, by example, shows the significance of such an "incompetence" for doing philosophy in general. By "mastery," of course, we mean the realist sense of representation whereby the mind, by virtue of its distance, is in full control of the signs it uses to put forth its thoughts. This paradigm of mastery is presupposed in the ability of the philosopher to sort out positions on an issue and separate the true from the false within each; so even if a given philosopher is shown to have judged incorrectly the relative merits of the positions, his antagonist is at least able to show where the philosopher erred and by how much. This ability to treat every philosopher as a contemporary is safeguarded by the preservation of truth across inferences and the possibility of logically substituting synonyms (e.g., "What Plato called 'x' we now call 'y'."), and, in addition, is presupposed in taking the "form of argument" as the unit of philosophical discourse. However, Derrida's aborted exposition of the history of semiotics reveals the illegitimacy of all these moves: Even though perennially there has been philosophical discussion over the nature of signification, with participants defining themselves for or against their predecessors, the course of this discussion cannot be described in terms of the vicissitudes undergone by a well-defined set of positions concerning a well-defined set of problems. Derrida shows that philosophers have presupposed that the relatively invariant empirical presence of words like "sign" over the centuries mirrors an invariance of the meanings of such words. This presupposition has recommended that philosophers employ the principle of charity and presume that unless the context is obviously aberrant, the use of, say, "signum" by the scholastics is taken to mean what a modern would mean in using "sign" in a similar context. But in assimilating "signum" to "sign," the philosopher would almost by necessity be reducing the plausibility of the scholastic position since it would no longer be situated in a relevant context.

The upshot, of course, is to give the philosopher the illusion of making rational progress from absurd origins--an illusion dispelled in Derrida's inability to tell a coherent story about what is at stake in solving the problem of signification. (Indeed, the indeterminacy of the problem's reference is tantamount to asking "What is all the fuss about?")

Nevertheless, for all its anti-historicist spirit, this method of anachronizing the past is not obviously an impediment to solving philosophical problems (a position which has been most notoriously advertised in the history of positivism). But here Derrida's nominalism enters, for if it were possible to decide freely how to interpret "signum," we would then return to the realist paradigm of thought sorting itself out before being embodied in words. The nominalist counterpoint is that "signum" already carries a range of possible meanings (if not a univocal meaning) by virtue of its previous contexts. Most exemplary are the metaphorical associations words like "correspondence," "similarity," and "reference" have had with "speaking" (especially the dialectic of question and answer) and "reflecting", which determine how the words may be currently contextualized--even though the metaphorical roots themselves are officially disparaged. These metaphors can be seen to function in the manner of Freud's repressed desires insofar as they are the sublimated force orienting philosophical discourse. We shall later resurrect what is of value in this notion.

Having presented Derrida's allegedly "anti-representationalist" view of language, we now ask whether it deserves that title. Representationalism has gone under such rubrics as "mimesis," "iconism," "copy theory,"--whereby thought is the "original" and language is the "copy." But does the nominalist reversal of these roles make the resulting semiotic theory any less representationalist? Whereas philosophers in the realist vein follow the forms of argument "behind" the texts of their predecessors, Derrida shows that whatever forms may be inferred from philosophical discourse lie solely on the textual surface--the possibilities for anachronistic paraphrasing being delimited by the letter of the original. And, to revise Rorty's division of philosophical attitudes, the difference can be seen not so much as one between the referential discourse of philosophers uttering truths and the nonreferential discourse of philosophers evoking moods but as one between the univocally referential discourse of one group of philosophers and the equivocally referential discourse of the others. And equivocality is precisely what follows once the nominalist position obtains and thought is said to copy the signs that become referentially opaque once removed from their original context. But notice that there is ultimately only a "quantitative" difference between the univocators and the equivocators--or the plain-talkers and the oracles: What Russell conveys "one of" and Wittgenstein "many of" per utterance is the same thing, namely, a definite description that attaches to the world as a label would and that in no way compels the conveyer of that description to act so as to maximize its truth (a view that would be closer to our own). To invoke Platonic notions, we might say that the conveyer assumes the role of a detached contemplator who passively observes whether or not the label sticks to the world. On this view, the question whether language is fundamentally literal (i.e. univocal) or metaphorical

(i.e. equivocal) becomes largely an internecine dispute that takes for granted that language is essentially descriptive, the thesis of representationalism. Thus, metaphor may be redefined as an elliptical set of definite descriptions, and thereby capture the reader's intuition of Wittgenstein being "too compressed" to be easily understood. (Those familiar with the opening of Aristotle's Poetics will recognize the difference between Wittgenstein and Russell in that between the poets and the historians--the former artists imitate life in its totality, while the latter do so in its particularity. Thus, we would expect poetry to convey many meanings at once, but history only one.)

3. Indeterminacy as the Philosophy of Science's Attempt to Transcend Representationalism.

The main problem with accepting the presupposition of descriptivism is that it creates an artificially radical language-world dichotomy, which would be necessary for any "copying" of one by the other to occur. This artificiality is manifested in the host of underdetermination theses that have been proposed to account for the difference between "saying the right things" and "doing the right things." The paradigm is, of course, the quantum leap from "is" to "ought," which under the influence of Neo-kantianism (and especially Max Weber) became the leap from "fact" to "value," and in our own time has subtly resurfaced within the philosophy of science as the leap from "theory" to "observation." This last dichotomy--advanced by Willard Quine, Russell Hanson, and Thomas Kuhn--deserves closer attention because it would not have been possible if observation, the classic archetype of contemplative passivity, were not regarded as a genuine activity. Historically, the shift in observation's ontological status can be attributed to the ascendancy of Kantian over empiricist theories of perception that followed the experimental success of Gestalt psychology in redefining perception in terms of how the perceiver organizes the perceptual field. This is probably the key move that separates contemporary philosophers of science from their positivist forebears who remained wedded to observation as the impression of sense-data on the brain. However, the positivist concept of theory has not undergone a similar transformation, and so we find Quine, for example, talking about how to "adjust" a theory in light of new observations we happen to make. Likewise, the incommensurability of theories becomes a particularly ominous problem because two theories are presumed still to be two sets of sentences (inscribed on pieces of paper) that may or may not be semantically convertible. In other words, theory, which classical positivism portrayed as relatively more "active" and "value-laden" (theories were supposedly constructed from the sense-data as instruments of inquiry)

than the given observations has now attained the passive status of descriptive language in general. Whereas positivists like Carnap classically drew a sharp distinction between theoretical languages that by virtue of their logical form and empirical content enable scientists to predict and control the world and natural languages whose syntax and semantics merely individuate and describe the world, the underdeterminationists after Quine have treated all languages as if they were natural languages, and hence the traditionally linguistic problems of radical translation, meaning-variance, and cultural relativism have been imported into the philosophy of science: If a theory is little more than a systematic picture of the world, then what is there to choose between competitors? The problem takes the form, all things being equal: Why speak French rather than German? Also taking a cue from the linguists in solving this problem, Kuhn especially sees no difference in principle between theoretical languages on their own terms, and so the normal "activity" of scientists gets characterized as the adhoc adjustment of the dominant theory—a least effort (or "most entrenched," after Nelson Goodman) approach. Genuine activity, revolution, is cast as a Gestalt-switch, which is to say, a perceptual shift that theory will afterward explicate and legitimate. This is quite different from the more classically positivist account of Popper in The Logic of Scientific Discovery, who describes significant scientific change in terms of the availability of a better theory whose structure allows for better explanatory control over what is already known as well as for a greater predictive horizon for collecting additional data.

~~Indeed, in disavowing the relevance of the meaning of scientific terms to the truth of scientific theories, the Popper of Objective Knowledge epitomizes the classical positivist position.~~

Notice that both Popper and Kuhn agree that the history of science is primarily a history of theories and not of observations. It is on whether "theory" is to be interpreted as an active construction or a passive description that they disagree. Also notice that from our critical perspective, both philosophers suffer from the deficiencies of the underdetermination thesis. Popper's underdetermination of theories by observations is revealed in the possibility of a crucial experiment, which requires a set of theories that are of equal observational adequacy prior to that experiment. Kuhn's underdetermination of observations by theories is shown in the possibility of a theory being sufficiently inert so as to permit a radical observation (say, of the outcome of an experiment) that entails the negation of the theory. We can diagnose the primary deficiency of underdetermination theses as a conflation of narrative perspectives in recounting the history of science. More specifically, the passivity of either observation or theory suggests that scientists have a choice in the theories they construct or the observations they make. Perhaps it would be better

to say, keeping Popper and Kuhn in mind, that "the better scientists"—whether it be through their critical rationality or ideological affiliations—find a situation in which a choice can be made, namely, where the observations and theories no longer play a determinate role in what is the scientifically correct thing to do or say. Now this may indeed be the existential experience of revolutionary scientists who think they voluntarily import meta- (popper) or extra- (Kuhn) scientific concerns in making an unprecedented move. By "voluntarily," we do not want to suggest that the scientist could have necessarily imported meta- or extra-scientific concerns other than he did; we are disputing here not whether there are alternative forms of reasoning nor whether a scientist can escape social determinants. However, we do dispute the voluntariness of the relation between the extra-scientific factors and the scientific ones: Meta- and extra-scientific factors are not merely imported but must also be importable to the science, and this means considering the presuppositional limits, or transcendental conditions, of a revolutionary thesis, say, being plausibly scientific. In the case of Kuhn's radical observer negating the dominant theory, we would say that the theory could have been negated only in a certain range of ways; as it were, the theory contained the seeds of its own destruction. But the metaphor of "seeds" is itself somewhat misleading because there is no logical compulsion to say that what is importable to a scientific theory must be a priori importable, and, as it were, the revolutionary scientist would be then one who cracks the code for revolution that had been implicit in the theory all along. We need only say that importability must be negotiated between the scientist and the theory when the revolution is attempted.

In short, in challenging the voluntariness of the choice a revolutionary scientist has, we are challenging the thesis of "conventionalism," which suffers from what we will dub "the fallacy of misplaced contingency." According to this fallacy, if there is no history of relevance, say, between an extra-scientific concern and a scientific one, then the extra-scientific concern can be imported in whatever way the scientist sees fit. This reasoning is fallacious for the following reasons: (1) It assumes that only the scientist is active and that the theory into which the extra-scientific concern is imported is passive, and so, given the limits of the extra-scientific concern itself, the scientist can largely do what he wants. (2) Although the scientist might feel such freedom, this is not to say that such freedom actually exists; and there is no good reason for the historian of science to limit his own horizon by adopting the narrative perspective of the scientist. In fact, we would conjecture that much of what goes under the name of "revolution" in science results from the historian simply imitating the disruption felt by the scientist (pace Collingwood). (3) This reasoning diverts attention from the more interesting (from the

point of view of a systematic historiography) contingency, namely, that the scientist could have imported extra-scientific concerns only within certain limits, to the less interesting contingency, namely, that scientists will import extra-scientific concerns according to their specific social backgrounds, which is to say, the conventions they are closest to. To summarize then, the fallacy of misplaced contingency is the cardinal error of the underdetermination theses, which are made possible once language (and its surrogates) is regarded as an intrinsically passive reflection of the world.

4. Dewey's Attempt at Transcending Representationalism.

Let us now recapitulate our departure from representationalist, or descriptivist, approaches to language. Philosophers who enter into the arguments of representationalism—which is to say, make representationalism a relevant polemical concern—presuppose a radical division between an autonomous practical world and its contemplative linguistic reflection. And while this "reflection" has been traditionally portrayed as clear and univocal, equivocal expression of what is seen as an essentially indeterminate world (i.e. a world that is essentially without any essential features—a radical historicism) also falls under this criticism. We might identify at this point the subtlest form of the latter position in John Dewey's instrumentalism which Rorty (for one) sees as the antidote to whatever residual representationalism may remain in Wittgenstein's "philosophy leaving the world as it is" or in Heidegger's "philosophy as the re-discovery of Being." The post-Wittgensteinian task of language therapy and the post-Heideggerian task of philological deconstruction seem to suggest that there is a correct way of "seeing things" that arises once error is systematically uprooted. However, Dewey appears to differ insofar as he is interested not in the failures of discursive reasoning but in its successes: Rather than purge the bad, Dewey wants to preserve the good. Superficially this intent approximates our own rather teleological conception of language because, it may be argued, we reduce error to an inchoate expression of what the correct thinkers eventually arrive at. Unlike the normal descriptivist strategy of regarding the correspondence between a piece of language and a piece of the world as either true or false without considering ^{what} the inquirer was trying to do in putting forth such a correspondence, our own apparently pragmatist strategy would focus more on the community of inquirers aiming at the same truth, which is in fact what would allow the historian in retrospect to separate those who succeeded from those who do not.

Already we can spot a source of discomfort in endorsing the pragmatist strategy: Truth seems to exhibit the double sense of passivity criticized of underdetermination theses—first, truth is "already there" and just requires discovery; second, truth allows itself to be discovered. However, the historiographical upshot of the pragmatist strategy reverses that of the underdetermination theses: Whereas the

historicism--say, Kuhn--assimilates the historian's narrative perspective to that of the scientist, the pragmatist--say, Dewey--assimilates the scientist's narrative perspective to that of the historian. Indeed, such a reversal accounts for the very prescriptivist tendencies Rorty extols in Dewey, which most often occur as recommendations to the philosopher to "catch up" with certain facts about contemporary society and the kinds of methods that have led to greater social welfare. These facts are the products of the collective endeavor of all inquirers (regardless of the success achieved by any given individual) that must be accounted for by any worthwhile philosophy. Notice that the facts--which may justly be regarded in terms of the truth taken as a *fait accompli*--are relatively inert vis-a-vis the possible philosophies that may legitimately "follow from," or "catch up with," it. The situation is not much different from the relation between observation and theory we earlier attributed to classical positivism (and not surprisingly, someone like Quine, who straddles both pragmatism and positivism, converts "necessary truths" to something like "relatively inert facts"--facts least likely to change in the face of new facts).

In short, Dewey's instrumentalism is largely limited to philosophy getting in harmony with social facts, which may admittedly mean descriptions of correct things to do rather than of correct things to say--but descriptions nonetheless. The essential passivity of pragmatism--contrary to its name--is conclusively shown in its refusal to consider philosophy as aiming to overturn the social facts, to persuade society to think of itself in terms other than those in which the currently accepted social facts are cast. Contrast this to Marxist and even Popperian activism (i.e. the aim to falsify) on such matters. Dewey's adaptive evolutionism only accentuates the passivity of philosophy to "adjust" or "respond" to the world. And although Dewey, unlike the positivists, does not emphasize a ^{neutral} observation language, he does presume that the truths discovered by science (however corrigible they may be) do not favor any particular social interest such that their promulgation (say, by philosophers) serves society as a whole. This view arises in the context of Dewey's linking democracy to science, which like the link between underdetermined theories ("all created equal") and observations, rests on the latter being relatively more fixed than the former, which, in the case of democracy, allows for an open discussion of the social policy that ought to be pursued in light of scientific findings. Here pragmatism's curious relation to ethical hedonism enters. We are tempted to observe that pragmatist ethics moves from one state of satisfaction (under dogma that is not in harmony with knowledge of the origins of the needs in question) to another (under science where such harmony obtains)--the difference being purely on "aesthetic" grounds from the viewpoint of a hard-nosed hedonist. And although Dewey himself argues that social

opposition is often bound up with ignorance, his observations, say, in Reconstruction in Philosophy, are made in a purely historical spirit--he offers no reasons for why social oppression should be bound up with widespread ignorance. Yet, if physiological experiments find that the majority of people get the most pleasure (or least pain) by doing x, then the pragmatist moral philosopher is hard-pressed to deny that x should be promoted, for to question either the validity or the relevance of the finding is to question pragmatism itself (e.g. the possibility of perpetually deferred gratification). This neatly encapsulates the sense in which the call for philosophy to adapt to the world is just another version of the call for philosophy to reflect the world.

Thus, the subtlety of Dewey's pragmatist strategy lies in seeing the task of philosophy as reflecting currently accepted truths on an ethical rather than on a more traditionally metaphysical level. That these truths are reflected in the form of prescriptions to act should not obscure the fact that the relation between "theory" and "practice" is nonetheless a passive reflective one, whereby the latter is elicited from the former. Such a strategy is unlike our own--in terms of statements maximizing their own reference in the world by virtue of their relevance--because it does not treat (prescriptive) language and the (socially defined) world as equally "active forces": The supposed activity of ethical practice amounts to a mere response, as if its possibilities were not merely presupposed but also predetermined by the given and relatively inert truths. We see then that the passivity of theory allows only a pseudo-activity of practice in the form of what can be, in some a priori sense, practiced. This false sense of activity in the pragmatist notion of practice is perhaps most acutely realized at the very point when the pragmatist proclaims his independence from representationalism, namely, in the ability of man to alter the world as he satisfies the ethical prescriptions the world has recommended. However, the epitome of this reciprocal feedback between prescriptions and descriptions is a perfectly synchronized Brave New World in which knowledge of the a priori limits of man and the world guarantee that activity will always stay within those limits. A self-correcting learning machine that asymptotically approaches perfection (such as the one suggested by Mary Hesse in "In Defense of Objectivity" to describe scientific activity under Quine's hybrid pragmatism) also conveys the same point. But in order to capture better the equal passivity of language and the world, the best image is perhaps that of the pendulum whose arc diminishes as it oscillates in a nonideal medium. As the amplitude is dampened, the length of the arc shortens--and this can be taken to represent the way in which the "ontological distance" between language and the world is shortened: If language and the world were perfectly synchronized, there would be virtually no need to utter prescriptions as such, for under any given

circumstances, it would be apparent what needs to be done because that would be all that could be done, and so the only words that need be uttered would be those that are themselves actions--"illocutionary acts" such as promising--and thereby take no additional effort to bring them about.

Such metaphors are cashed out by Dewey and other pragmatists in the form of social planning, the most notorious feature of which is its rapid obsolescence. The metaphors suggest that pragmatism's alleged redeeming quality--if language mirrors the world, then it does so in a dynamic, pendular fashion--is its downfall, for the dynamic picture of prescription reflecting description commits the pragmatist to reflection reflecting itself, and hence the asymptotic elimination of the distance between language and the world. In other words, what has succeeded in the past will survive--only more potently. This almost Lamarckian retrospectivism explains why pragmatism is continually--but not continuously--popular: At any given point, the future is a projection of what historians have taken to be the legacy of the past to the present. But the details of these projections are subject to revisions that cannot be accounted for ^{by} ~~more~~ ^{simply} accurate self-reflection. Hence, perhaps ironically, species of pragmatism, like works of science fiction, begin ahead of their time and end behind it. More ironically, pragmatism may be distinguished from all other philosophies by its defiance of any laws of evolutionary selection: Despite its inherently poor survival potential (due to an inability to adapt to radically new intellectual climates), it is a perennial bloomer.

5. The Metaphorical Roots of Representationalism in Aristotle

Although it may be argued, contra Rorty, that pragmatism is the most representationalist in its approach to the relation between language and the world (because of the dual sense of "reflection" noted above), the paradigm of the active element as something elicited from, and thereby dependent on, the passive element is the classical relation between form and matter, as instituted by Aristotle. The legitimacy of the active-form/passive-matter distinction has been presupposed in a host of philosophical enterprises: God imposes form-as-law upon inert matter in order to create the natural order (Aquinas); scientific reasoners can master the workings of matter by discovering the formal principles that govern it (Leibnitz); man imposes cognitive forms upon given matter that is itself formless but formable (Kant); the self-realization of form in the world abstracts its course from the matter of historical activity through a principle of selection (Hegel); the undifferentiated matter of experience is meaningless without imposing the formal structure of a scientific theory (Carnap). And these are not to mention the prominence of form and matter in initially separating rational men from merely sentient animals and, subsequently, the science of the

animate (biology) from the science of the inanimate (physics).

In order to challenge the legitimacy of this binary, it is first advisable that we rationally reconstruct a unified Aristotelian account of how the binary comes to be. Keenly aware of how the pre-Socratic interpretation of fundamental cosmological questions has directed subsequent thought, Aristotle aims in criticizing the first philosophers to show how they misunderstood their own problems, the legitimacy of which Aristotle does not doubt but only explicates. Consider the quest for the material cause of the world: What is the world made of? Although superficially the question is "timeless" because the verb is not tensed--an impression reinforced by associating matter with subsistence over time, it can be unpacked for its presuppositions to suggest that the semantic category to which nouns answering the question belong--"matter"--is itself tensed: If the world is made, what is it made of? Notice that in analyzing the question as an hypothesis, we find that efficient causality, the world-maker or matter-former, is presupposed in making sense of material causality. Indeed, an autonomous principle of formless matter demands a means by which the form gets either attached to or elicited from the matter. Also notice that this is a problem specific to Aristotle and not, say, to his atomist antagonists, who define form as the combination of material units. However, given the Aristotelian conception of matter as indeterminate with respect to form, it does not necessarily follow that matter is inert in any simple sense. As we will see shortly, the inability to discern a form in matter as such can be understood equivocally: It may simply suggest no form, but it may also more subtly mean that no external form has been imposed on the matter--thereby suggesting that the form is self-imposed by the matter, as in the case of the "unmoved mover." These two possible interpretations are extrema--the least animate versus the most animate: Matter that cannot bear a form versus matter that need not bear a form. In both cases, "opacity" and "inscrutability" are appropriate descriptions for the epistemic relation the inquirer has toward matter. And in both cases, randomness is attributed to material motion--on the one hand, to indicate the lack of order that accompanies lack of form (inertness may result, as in entropy, from these random movements cancelling each other out); on the other hand, to show the degree to which the inquirer's method is insufficient to fathom the complexity of the forms(as laws of motion, which may be the expression of divine will in a more animistic physics) matter takes. But more on this later .

Following the terminology of Otto Jespersen, we would characterize the temporal direction in which Aristotle's concept of inert matter orients metaphysical inquiry as "ante-preterit," which is to say, to a state (efficiency) prior to that which has already been given (matter). The complementary doctrine of form accounts for how the

inert potential of matter is actualized, or "made complete," or "satisfied." The problem here becomes what qualities the world must have in order to be complete. As with the pragmatist version of ethical hedonism, we see here an implicit distinction between the passivity of matter waiting to be formed and its passivity in the sense of having attained its natural state of rest, or completeness, after it has been satisfactorily actualized. Again following Jespersen's terminology, we would characterize the temporal orientation of Aristotelian form as "post-preterit" insofar as it refers to a state (telos or actuality) posterior to that which has already been given (matter). Now in reconstructing the difference between matter and form as a difference in the tense of "matter," which is to say, whether it is the receiver of efficiency or the realizer of telos, it might be argued—as we would be inclined to do—that "passive matter" and "active form" are simply alternate ways of talking about the same thing, which we have chosen to call "matter," but could just as well have been called "form." However, Aristotle, who is also responsible for distinguishing the grammatical categories of "noun" and "verb" on the basis of the tenselessness of subsistence (substance) and the tensedness of process (accidence), presumes that matter and form are ontologically discrete. What we have interpreted as the tensedness of the two nouns signifies for him a natural cosmological order with respect to time: Matter must precede form, justification for which ultimately falls back on the biological observation that the germinal being of an organism is the material precondition to its actuality as a fully matured being. Aristotle clarifies this point by introducing two species of actualization—kinesis and entelechy.

The two species may be discriminated in the grammar of building, as Aristotle himself does in the Physics. Let us call the stuff from which things can be built "the buildable"—it is the pure potentiality, or matter, of actual buildings. How is the buildable actualized? In the "kinetic" sense, as soon as someone starts to build something, the buildable is actualized in that he is acting as if something can be built from it: He is making good on the promise implicit in calling the matter "buildable." We might also say the person is proving that the matter is buildable, and this is perhaps reminiscent of certain versions of the "meaning is use" thesis. However, the crucial feature for Aristotle is that the potentiality remains intact as the actualization occurs: The buildable must be constantly available, or subsistent, in order for the process of building to continue. In contrast, the "entelethic" sense of actualization entails the negation of the potentiality: In the case of a completed building, to say that the buildable subsists is to contradict the sense in which the building is complete, or the form has been elicited from the matter—if more can be built, then the building has not yet been built. There are parallels here to the rationale behind arguing that a statement is meaningful only insofar as its truth-

conditions can be delimited, which has suggested to Popperians that meaningfulness is cashed out in terms of potential falsifiers or the relevant boundary conditions: That a given sample of stuff is buildable is shown in the ability to identify a state-of-affairs in which that stuff would not be buildable.

To our mind, the most misleading aspect of this account is the assumption that the buildable is separate from, yet manifested in, the act of building. It is this kind of separation that is responsible for talk about truths existing a priori in a purely potential state before someone discovers them and that permits a cosmology of passive determinism—"things happen as they are supposed to happen." Epistemologically, pure potentiality--in the form of "the given"--forces the inquirer to concede a point beyond which it makes no sense to inquire since "that is just the way things (ultimately) are." Now as we have seen in the case of pragmatism, this "concession to inertia" ("entropy" may be a more appropriate metaphor insofar as inquiry loses its direction) occurs just at the point when the inquiry's *raison d'être* is approached (insofar as the given is the fundamental ontological principle). The concession is made even when the given is construed as self-giving, an unmoved mover that is the source of all activity. The picture of an unmoved mover seems to defy ordinary contact concepts of motion whereby something can move something else only if it is itself moving. In contrast, the unmoved mover must act at a distance, say, by emanating waves in the image of its form that have some determinate impact on the things consequently moved. We thus witness, as it were, the "contagion of passivity": An unactivated active principle defines the activated objects into a position of receivership. And even if we do not want to say that the objects themselves are, to a certain degree, unmoved movers. To argue that construing the given as self-giving (or, after Hegel, "self-positing") removes the passive connotations is to neglect that in using "self" only the logical, and not the substantive, problem of givenness is solved. In other words, although a self-giving given provides the form of the answer to what gave the given, namely, itself, it goes no way toward addressing how such an answer would be cashed out in terms of how the given acts, or the effects it has on other things.

6. The Kantian Reconstitution of Aristotle's Physicalistic Metaphors as Logical Principles.

Indeed, since Kant, the possibility of providing a substantive answer has been ruled out as transcending the phenomenal world and therefore inaccessible to normal modes of inquiry. A routine response in this vein has been to say that we construe the given as self-giving simply because it coheres with our intuitions that anything that is able to act must have subjecthood, which is to say, act toward some end or determinately effect something. However, these "regulative principles of reason" are

sharply distinguished from the "constitutive principles of understanding" that actually come to terms with the phenomenal world. After the work of Hans Vaihinger, the regulative principles have been taken as recommendations for the inquirer to act as if certain ontological principles were true even though there is no way of demonstrating (and perhaps there are even ways of falsifying) that they constitute phenomena. It would appear that assuming the given to be self-giving easily falls under this heading: Scientists do not worry about how the fundamental physical principles were generated, but only how they interact so as to constitute possible physical relations (energy, matter, motion, etc.). And such ontogenetic worries are forestalled by saying that the physical principles are self-given. Supposedly the benefit of this strategy lies in providing a psychologically satisfying account of what otherwise seem to be totally arbitrary assertions that nevertheless ground everything that matters in the universe. Moreover, such an account, however unwarranted from a strictly phenomenal perspective, has no real impact on the conduct of scientific inquiry. Of course, Kant's critique of metaphysics takes off from what he sees as an attempt on the part of natural theologians especially to grant regulative principles constitutive status. Perhaps the most famous example of what Kant would see as a conflation of principles occurs throughout the Leibnitz-Clarke correspondence, where the nature of physical laws is very much dependent on the concept of God the natural philosopher has. The disadvantage of such a conflation is largely an historical one: In the case of God as the primary synonym for the self-giving given, significant advances in physics have been made--so the Kantian would observe--under circumstances in which the phenomenal nature of God (i.e. his attributes and powers) has not been a concern (yet his general status as the first cause has gone largely unquestioned). But to return to the original context in which the self-activating quality of the given was raised, we now see that the Kantian "solution" merely reinforces the real passivity of the given and explains away why we might want to consider it active.

The solution, furthermore, is not salutary on other grounds, which cast aspersions on the reasonableness of a fictionalist, "as-if" philosophy. Presumably, to treat x as if it were y is to make x functionally indiscernible from y; indeed, if we did not know otherwise (via the counterfactual "were", which may be easily substituted for a more neutral "is"), we would be unable to distinguish x from y. But, also presumably, we do know that x is not truly y. Notice the plausibility of the fictionalist account of truth--namely, that it has nothing to add to our ordinary adducements of what is true but "merely" to how we act toward the truth--rests on knowledge being incredibly inert. The fictionalist envisages states of knowledge that may permanently remain as pure potentiality--knowledge never treated as if it were knowledge, but could be. In short, knowledge does not entail any particular form of action, and,

not surprisingly, the fictionalist position advances toward the conventionalist conclusion that the inquirer is free to import non-epistemic criteria in order to continue his inquiry. Fictionalists rarely entertain the possibility that a piece of knowledge delimits not simply the types of actions that are in accordance with it but, more subtly, the types of actions that would demonstrate an intentional disregard for that knowledge. The reason perhaps lies in the havoc that the idea of knowledge systematically distorting its own presence would wreak on any neat regulative-constitutive distinction. Furthermore, the much-admired (by Kantians) constitutive inertness of the regulative principles makes us wonder what it can mean to treat the given as if it were self-positing, if it does not mean to treat the given as if it were truly self-positing. In other words, it is difficult to see how such a regulative principle could not have a determinate effect on the way phenomena are actually constituted, unless truth is itself excluded from the constitutive realm. In that case, what role does knowledge or the truth play in fictionalism at all? Diagnostically, the failure of as-if philosophies can be traced to their not taking seriously the role of interaction between the two types of principles that are counterfactually compared: If the regulative principles are defined as if they were true in the sense the constitutive principles are (i.e. "well-founded," after Leibnitz; or "highly verified," after Carnap), then--unless we are notified in advance by some criteria (and not merely defined in terms of one "copying" the other)--there should be no way of distinguishing the regulative from the constitutive, and hence, not surprisingly, the difficulty in drawing the line between metaphysics and physics. But should we wish to draw such a line at some point, then the type ascribed to a given principle would be negotiable at that point. We are tempted to say that the Kantian picture of discrete regulative and constitutive realms is itself symptomatic of the contagion of passivity mentioned above--only here transferred from the discourse of physical relations (How does the unmoved mover move?) to the discourse of logical relations (How does a regulative principle entail, or condition?), a move unproblematically and even routinely made by Aristotle when discussing the nature of substance.

7. Moving Away From the Metaphors of Representationalism.

Before retrieving the thread of our reconstruction of Aristotle's dual conception of actualization, let us explicitly account for how some ultimately active principle, like the unmoved mover, may be identified with something that is passively given. Superficially, it seems as though the active-form/passive-matter binary is highly unstable, with terms like "God" floating between the two poles as they are first attributed an apparently arbitrary will over what they can move and yet cannot themselves be anything but unmoved. Upon considering Dewey's instrumentalism, we saw that the facts greatly underdetermine modes of action--and hence the possibility for real

democratic negotiation in a scientific society--yet the facts themselves are relatively "hard" (being the basis on which subsequent candidate-facts are either "warrantedly assertible" or not) and must be faced in an unequivocal manner. Of course, these attributes of the facts are not as such contradictory, for Dewey need only add that negotiation is viable only within parameters delimited by the nature of the facts. Indeed, his theory of scientific rationality is founded on such a proviso. But it is reduction more than contradiction that we suspect: In particular, we suspect that the negotiability of what actions may regularly follow from the facts is merely a concession--much as the regulative principles are for Vaihinger--to the essentially a priori restricting function the facts play. The form of this concession is "Even granting that x is the case, nevertheless y obtains," where " x " is the looseness of fit between the facts and possible modes of action and " y " is the delimitation of possible modes of action by the facts.

Again, it might not be obvious what we find objectionable in such a concession--surely, not everything is negotiable! But notice the dynamics of this account. Imagine the totality of facts to bound the possible modes of action as a circle does to the space inside it. The concession defines this space from the outside in--we start with the circumference of facts and negotiate our way into the interior. Now consider an alternative picture: The limits of negotiation are defined from the inside out--we start from an indeterminate point and negotiate a radius from which can be inferred the limit that we have circumscribed on our own activity. In that case, the values for " x " and " y " in the concession would be exchanged, and the emphasis would be placed on the artificiality (by virtue of being the hypothetical part of the concession) of stopping the negotiation rather than on the artificiality of starting it. (We are reminded here of Newton's transformation of the Aristotelian understanding of inertia, in which unimpeded rectilinear motion replaces a natural resting place as the paradigm.) It is only an uncritical form of rationality that finds the statement "Reasonable action can only occur within limits" more cogent than "Reasonable limits can only occur within action." In fact, we would maintain that the latter is more cogent, if only because it avoids questions concerning the ontological status of limits when they are not recognized.

As noted earlier in the discussion of scientific revolutions, when someone like Kuhn says that a paradigmatic theory constrains what is to count as scientifically plausible, it is generally assumed that these "rules" obtain irrespective of what any normal scientist says or does. (Notice that we are not lodging the more ordinary complaint that a transcendent paradigm fails to take into account what the scientist thinks he is saying or doing: We are making the logical--and not psychological--point that Kuhn's position offers no good reasons for concluding that scientific activity

affects the presuppositional limits of a paradigm; Intuitively--and his historical case-studies of how anomalies develop more easily by precisifying measuring instruments--there is give-and-take between the scientist and science, as it were; but by analyzing the history of science in terms of paradigms, Kuhn necessitates that this dialectic will appear more deviant and inexplicable--hence "anomaly"--than it would using another mode of analysis.) As it were, the scientific imagination is encompassed by the presuppositions of the paradigm, and this is why only a scientifically irrelevant element can overturn them. But "where" are these rules? Kuhn suggests that the rules are located in the pedagogy of science, but even there they must be rather inscrutable--otherwise, it should be fairly easy to circumscribe the scientific imagination and virtually predict what kinds of research will or will not be conducted. Pedagogy, however, does seem to be an obvious place to look for the grammar of these rules, since it is the institution that explicitly treats science as a grammar. Furthermore, pedagogy's formative role in the life of a scientist makes it a convenient source for presuppositions if it is held that they must somehow temporally precede what will be taken as plausible. But as we argued then, presuppositions need not have a priori status, and, we would now argue, they should not have such status. It is only by assuming that presuppositions predetermine plausibility under normal circumstances that revolutions can only occur, as it were, "by accident" through the importation of a scientifically irrelevant element.

The most misleading feature of Wittgensteinian talk of "language-games" that predominates contemporary ^(including Kuhn's) discussion of presupposed rules of conduct and expression is that "breaking the rules" is easy to diagnose and cure. Admittedly, the Wittgensteinians claim that "players" of a language-game need not be able to say the rules, but that does not mean that their knowledge is any less precise and the rules any less binding for it. It simply implies that their knowledge is not primarily linguistic but ostensive and practical, even though language is the "thing" primarily used in the game. The point then is that the Wittgensteinians do not diminish the a priori element of presuppositions by arguing that they are exemplified rather than actually stated. The glaring deficiency here is that "game" makes sense as a category of activity only if it is defined in opposition to the way life is normally conducted. In "real life," misunderstandings are very difficult to identify, rules seem to change in the course of activities without prior notice, etc.

8. Towards a New Metaphor for Presuppositions.

Our reinterpretation of the concession above attempts to redress this neglected but crucial difference between language-as-played and language-as-practiced. We contend that presuppositions run a parallel course to what is said, much like the

narrative structure of the unconscious (e.g. an Oedipal episode) for a patient's account of his own neurosis in psychoanalysis, and is thereby negotiated in discourse. As opposed to being a predetermining structure, a "grammar of presuppositions"--if we still wish to talk of such things--would address the question: Scientific activity proceeds as if what were true? And rather than being in the form of a logical machine that generates the set of plausible utterances as theorems, a typical answer to this question would take the form of the plot structure abstracted from an improvised exchange that then gets used as the script for the next performance, which is nevertheless also taken to be improvised and from which the plot structure is once again abstracted, etc. Notice that the grammar-as-plot is being renegotiated at each juncture, since we have stipulated that just because the plot instructs the actors to act in a certain way, it does not follow that that will in fact be the way the actors act. Instead, the consequent exchange will be treated as if it were an improvisation that presupposes a new plot structure. We have ^{here} tried to capture some intuitions about how language works "in reality" that traditional grammatical approaches neglect.

First, the parties to an exchange do not aim at maximal coherence in their responses (e.g. "the most probable response" on the model of a Markov finite-state grammar that underlies behaviorist approaches to communication, or "the most appropriate response" on the model of a post-Austinian speech-act protocol theory, such as that of Juergen Habermas, which defines truth in terms of what maximizes social interaction) but at minimal incoherence, such that each party wishes to convey his point--however radically different it may be from that of the other party--by relying as heavily as possible on what the other party has previously said. Thus, we require a paradigm of exchange whose "logic" is very much dependent on the actual sequence of utterances; hence, improvisation. ^{Second} approaches based on the self-conscious admission of consensus by all parties at the end of an exchange, which, for example, means agreeing that none of the rules of the language-game have been violated in reaching the conclusion, are unpracticed and impracticable in actual discourse. If rules are presupposed in any way, then they are presupposed in such a way so as to be taken on "blind trust" so as never to be confirmed by discursive practice. In other words, the identity of plot structure before and after an exchange is taken as axiomatic, and so the plot extracted after the exchange is defined as identical to the plot in which the exchange is supposedly grounded. It is this very practice that allows us to intuit that language is "natural" and not a game, and it also allows for the gradual shifting in plot structure with each performance. Indeed, we might say that the only

absolute grammatical rule is that whatever the grammar is, it grounds the activity of all parties to the exchange, which amounts to saying that whatever is the nature of the world the parties inhabit it is nevertheless the same world. It is only, as it were, the "false security" of presuming a self-identical plot across exchanges that does not motivate the parties to keep track of the identity of the plot's structure.

Finally, we also intuit that knowledge of presuppositions somehow alters their status as presuppositions. This is sometimes expressed as becoming more self-conscious so that the presuppositions surface in a more extreme form, an image that the literature of existentialism is largely responsible for. For example, upon admitting that his relation to his father has been Oedipal, a psychiatric patient may recast the relation in more explicitly Oedipal terms--adding heretofore unnoticed details, projecting possible future relations with his father, etc. Should the patient totally Oedipalize his relation, the discerning analyst might suspect that the real presuppositions are more than meet the eye (perhaps some extra event that can be conveniently omitted and still retain a coherent Oedipal story) and conclude that the patient's professed self-consciousness signifies a considerable amount of repression. In contrast, grammatical approaches to presuppositions, which have tended to be either logical (as the semantic entailments of a statement) or causal (as what motivates an utterance to be made) keep the relation between what is grounded and what is doing the grounding (i.e. the presupposition) symmetrical: Deriving the grounded from the grounding is no different than the reverse. To take the first grammatical approach, a statement's entailments obtain irrespective of the circumstances--if any--in which it is uttered. Now while we do want to maintain that presuppositions are not determined as the utterer thinks they are determined, nevertheless we do not want to deny that he does determine them--at least in part. In short, presuppositions are determined indeterminately and hence the asymmetrical relation we advance between the extracted plot structure and the subsequent exchange. An actor may argue that he is acting according to the plot he has previously extracted, but given the resultant improvisation there is no reason to think that it had been acted in accordance with that plot. By postulating symmetry between performance and plot, grammatical approaches eliminate this crucial perspectival feature of presuppositions which accounts for their shifting status upon "discovery."

9. A Revised View of Presuppositions as Knowledge.

Having stated these intuitions, two observations follow. First, it appears as though we have retreated to a representationalist model in trying to paint a picture

that "captures" our intuitions about language. All we can say here is that the relation between the picture and our linguistic activity should be regarded in the same light as the relation between a plot structure and the subsequent performance "based" on it, as described within the picture. In other words, in trying to maximize the appropriateness of the plot we have extracted from linguistic activity, we are not necessarily in fact doing that. Indeed, the rather idealized plot structure of the grammatical approaches may be seen as the basis of a subsequent performance from which our own plot was extracted.

Second, and of more general import, is the degree to which we have implicitly made knowledge and ideology indistinguishable. What is the difference usually drawn between the two terms? Let's answer this as analytic epistemologists and appeal to Edmund Getthier's 1963 paper "Is Justified True Belief Knowledge?" Getthier argues that traditional criteria of a person holding a belief, his being justified in holding it, and its being true are insufficient for ascribing knowledge to that person. His examples suggest that all three may be present and the person still be ignorant by virtue of predicating his belief on false premises. Orthodox Marxists confer ideological status on "bourgeois science" for somewhat similar reasons: Although modern science may arrive at truths about the natural world that are believed for good empirical reasons, it nevertheless is merely an expression of bourgeois class interest insofar as these truths are believed to be grounded in a particular method aiming at prediction and control, which presupposes that nature can be understood only through domination. The Marxist strategy here ^(unlike Getthier's) is not to counterpose an alternative premise--for the Marxist would be the first to admit the historical truth of the bourgeois premise--but to demonstrate that bourgeois methodology is logically unnecessary to the truth of its science. Thus, there is no rational compulsion to believe either that capitalism is the only economic order that can sustain science or that a socialist order--and its "proletarian science"--would necessarily cripple the growth of knowledge. And if "premise" is taken to be the hypothesis of a conditional, then the Orthodox Marxist is correct; for it is indeed possible that a falsehood entail a truth, thus showing that a scientific truth is logically detachable from the class-interests grounding the method that led to its discovery. However, if "premise" is taken to mean "presupposition" in Peter Strawson's transcendental sense as the necessary condition for the consequent being either true or false, then a false antecedent would yield an irrelevant consequent. In other words, if bourgeois methods are denied, then at least the language in which scientific truths and falsehoods are expressed becomes meaningless. How does the Marxist, for example, propose to launch proletarian

science without that bourgeois cornerstone of experimental technique, operationalism (i.e. the translation of concepts into macro-physical manipulations)? And if experimental techniques are rejected because they attempt to dominate nature, then on what other grounds can modern science be reconstructed? Could not proletarian science easily "regress" to the teleology and animism of Aristotelianism, which identified experimentation with the commission of violence against nature? These are serious questions for the Orthodox Marxist, since the presuppositional interpretation of "premise" blurs the distinction between logical and historical necessity insofar as the essence of a scientific truth may be entirely contained within its particular linguistic expression (i.e. it can be deemed "true" only in light of other particular expressions). In that case, knowledge and ideology would become indistinguishable, thereby revealing the spuriousness of the attempt to "end ideology." Likewise, the fourth Getthier condition would be undetachable from the traditional three criteria of knowledge: In other words, if the three criteria are satisfied, then it must be presupposed that the fourth is as well--there is no independent proof that a true justified belief is grounded on true premises, for it is simply implicit in what is meant by a "true justified belief." However, it does not necessarily follow that the presupposition itself is true; it must just be taken as if it were true--hence, the relation between a plot structure and the subsequent improvisation.

Now to resituate this discussion of presupposition in our original account of Aristotle's dual actualization procedure: As suggested earlier, the kinesis/entelechy distinction rests on potentiality--whether it be taken as latent form, given matter, hidden truths, or implicit presuppositions--having an a priori status, which is reinforced by the use of building as the paradigmatic case of actualization. We can easily imagine bricks and cement as the buildable because they are the necessary ingredients of a building that exist as ingredients before the building is completely built (entelechy) yet during the time it is being built (kinesis). However, upon intruding our improvisatory model of presuppositions, what gets called "the buildable" is in fact the ingredients that are identified as "having been necessary" after the building has already been built. The "having been necessary" aspect of our reinterpretation moves in two directions: The "necessary" part confers on these ingredients the status of potentiality for any subsequent act of building; yet the "having been" part points to these ingredients achieving their status after they are no longer ingredients but are instead an integral part of the completed building (hence, the ingredients--like the plot structure--are extracted from the built). From this perspective, Aristotle's paradigm is misleading insofar as it portrays the relation between the buildable and

the built as a progressively infinite cycle of beginnings and ends, suggesting that at some absolute beginning there was only the buildable. In contrast, we would say that the infinitude of the series of buildables and built applies regressively as well as progressively, so that it is impossible to have anything but an in medias res view of the relation between the two moments of building. In that case, a priori it is just as reasonable to say that the cycle consists of a sequence of built and buildables as to say the contrary--in just the same way as it is equally reasonable to say an even number precedes every odd number as it is to say an odd number precedes every even number. In addition, we have tried to show how there are good intuitive reasons for preferring what prima facie seems to be the counterintuitive position. The improvisatory model attempts to capture both the in medias res and ex post facto character of "discovering" presuppositions.

10. Implications for the Sociology of Knowledge.

One issue that may be particularly illuminated by the improvisatory model is the plausibility of what David Bloor in Knowledge and Social Imagery has called "the strong program for the sociology of knowledge." The strong program, which finds its most complete exposition in Emile Durkheim's The Elementary Forms of the Religious Life, argues that any so-called "product of thought" that either is conferred the status of "knowledge" by a consensus of relevant individuals or is manifested as something knowable only in the context of other individuals is in fact a social product. More succinctly, social activity is the necessary condition for cognitive forms. Examples of the first condition for the sociogenesis of knowledge are to be found in the justification of what will be accepted as a scientific discovery. Kuhnian research into the pedagogy of science makes this thesis more intuitively plausible than the second condition, which is addressed to Durkheim's own concerns for the sociogenesis of space, time, causality, and number. These concepts have traditionally been located in the minds of individuals. The classic Cartesian stance is to associate their a priori status in understanding the world with their innateness, which gradually are articulated by the child having more experiences and becoming more adept in linguistic expression. In contrast, the empiricists deny the innateness thesis and suggest that the child learns to abstract space, say, as a property common to all objects by being exposed to many different kinds of objects. In order to strike a balance between these two positions, Leibnitz--and Jean Piaget after him (especially in The Origins of Intelligence in the Child)--offers an epigenetic account of the fundamental concepts that amounts to the child's environment eliciting conceptual forms that exist in his mind as potentialities until new cognitive challenges demand their actualization. On this

view, the ultimate sophistication of the child's thought will depend on the complexity of the tasks he has to face; thus, a programmed course of education that deliberately increases the complexity of cognitive tasks should speed up the development of thought. Notice that in all these cases, the social context of education is little more than a medium for the psychogenesis of thought. Even the empiricists follow Locke's lead in conceding that the spatiality of objects could not be abstracted unless the child had at least some innate ability to do so. The break with the Cartesians arises over whether this ability amounts to a clear and distinct idea of space, as if the child already knows what property of objects will have to conform to the concept of space before they are even presented. For Locke and his successors, what might be called the "intentionality" or "activity" of cognitive forms is considered an implausible hypothesis because children are not able to articulate their concepts. The Cartesian response, of course, is that the children actually have the knowledge--say, of Euclidean geometry--in their minds but do not have the language in which to express it: In other words, they have intuitive rather than the discursive knowledge that empiricists demand as proof. The reader will undoubtedly notice that this entire psychogenic account of knowledge heavily depends on the Aristotelian active-form/passive-matter distinction.

The principle argument for space, time, causality, and number being social products is their objectivity. At first glance, this might seem paradoxical since sociogenesis is associated, especially after Karl Mannheim, with cultural relativism, the very antithesis of objectivity insofar as ^{cultural relativism} A stipulates that such fundamental concepts are molded in accordance with the social practices of individuals. However, this "paradox" arises only if objectivity is not rigorously separated from such associated notions as universality and absoluteness; yet once stripped of these notions, it need not be reduced to intersubjectivity either. If the concepts are "absolute," then their identities never change; if they are "universal," then their identities are the same for a given universe. On the basis of these definitions, it is possible to have a nonabsolute universal concept of, say, space, as well as a nonuniversal absolute concept of space. The first possibility is exemplified in world-view theories founded on all individuals in a given historical period partaking of a "collective consciousness," yet there may be a radical shift in concepts across world-views. A variation on this theme is suggested by Durkheim's anthropology of space, in which the particular social practices of a tribe determine the concept all the individuals of that tribe will (and must, in order to be identified as tribal members) have; yet, the concept of space is nonabsolute insofar as radical differences

may arise between tribes. On the other hand, a nonuniversal absolute concept of space finds its paradigm in social orders that are maintained by members having differential knowledge of the world, a division of cognitive labor, that may even involve the conceptions of some members contradicting those of others. For example, the false consciousness responsible for sustaining capitalism in Marxist theory lies in management's ability to exploit labor without labor thinking that it is being exploited: The nonuniversality is shown by the asymmetry of perspectives; the absoluteness by the net effect of social equilibrium this asymmetry has. In his early work, The Division of Labor in Society, Durkheim draws roughly the same distinction drawn here between nonabsolute universals and nonuniversal absolutes in terms of "mechanical" and "organic" solidarity, respectively. But although the paradigm of organic solidarity is indeed social, a nonuniversal absolute conception of space is also implicit in general relativity theory, in which the characterization of space-time as having an overall constant positive curvature involves space appearing uncurved (i.e. Euclidean) to observers in the vicinity of their frame of reference--much as the spheroid earth appears flat to an observer looking toward the horizon.

In contrast to universality and absoluteness, objectivity addresses what can be seen as the "quality," rather than the "quantity," of extending the fundamental concepts over the world. In other words, instead of asking the limits of a concept's relevance, we are now inquiring into the very signs that indicate its relevance. For example, why is it so difficult to imagine a "private language" for time and space, in which only I am able to ascertain the number of units "passed" or "traversed"? One reason is that I cannot identify myself in space and time except in reference to other things that ordinarily exist in space and time as it is "publicly" understood, which is to say, in accordance with their uniform metrics. Thus, in coherently describing the "subjective time" experienced in dreams, we are forced to account for it in terms of, say, how "quickly" events seem to occur vis-a-vis the "objective time" experienced while awake. And even the bizarre sequences that seem to defy the causal order of objective time can only make sense as particular occasions of that order being violated. It might be objected, however, that this reasoning merely appeals to convention insofar as the logic of our objective time-sense is much more fully worked out than that of our subjective time-sense, and so, not surprisingly, the unknown must be explained in terms of the known. But there is a second reason behind the implausibility of a private language for space and time.

If we are in the least true to Wittgenstein's use of the "private language"

metaphor in Philosophical Investigations, then it will be admitted that what we would be attempting to provide is something more than the merely whimsical labeling of events and places as they are experienced. Originally, interest in the possibility of a private language centered on whether all languages must be essentially similar in some respect in order to be languages. Wittgenstein hypothesized the case of a language whose grammar could in principle never be reconstructed on the basis of our knowledge of public languages. Roughly speaking, the private languages have been judged impossible on pedagogical grounds: How would the person fluent in the private language be able to associate signs with referents, unless it were on the model of how he was taught his first language? To say such learning paradigms (ostension, repetition, etc.) are unnecessary jeopardizes the sense in which a private language is a "language" at all. Be that as it may, the reader will notice that by grounding the possibility of a language on how its grammar is actually learned, Wittgensteinians (often intentionally) blur objectivity with intersubjectivity. The difference between the two ^{can be shown} ~~A:~~ as follows: The paradigm of intersubjectivity is the identity of an experimental outcome --say, a meter-reading--being agreed upon by a group of overseeing scientists. The supposed "objectivity" of this finding lies in the fact that its identity was ascertained by a consensus of competent judges who nevertheless may have different interests in the outcome being one way or another (say this is a crucial experiment for deciding the fate of several competing hypotheses).

A "purer" concept of objectivity, however, does not require the actual presence of scientists, for it stipulates that a consensus must be presupposed in order for the experiment to make any sense at all. Indeed, in most experiments hordes of scientists do not huddle around, say, the end of a maze (contrary to what Russell suggests in chapter sixteen of An Outline of Philosophy) to see whether the rat crosses the finish line in record time. Instead, there are one or a few scientists who, in assessing the significance of their findings, presuppose that they can be situated among the findings of other scientists as either corroboration or falsification. A special demonstration of the objectivity of their results is not even contemplated for that would imply the possibility that scientific research amounts to a series of subjective appraisals which may coincide--but only by virtue of a consensus of opinion (perhaps symptomatic of a collective illusion or ideology) and not a convergence on reality. If such rampant subjectivity were a real possibility, then science itself would be impossible, or more precisely, science would be indiscernible from other modes of persuasion--and that would not be sufficient to justify the

uniqueness of the scientific method vis-a-vis other rhetorical methods. (Notice that we have not considered statistical tests for validity and reliability, for they too presuppose objectivity in that the possibility of error is confined to another objective outcome resulting from^a similar experiment. Hence, failure to corroborate a previous finding is normally attributed to that finding not being a representative sample of how the world "really" is under the experimental conditions, which means that the unreplicated outcome is a highly improbable, but nevertheless objective, occurrence.) In short, for the scientist to try to prove the objectivity of his research is to contradict the transcendental conditions that make his activity possible, where by "possible" we mean the scientist's ability to distinguish truth from error. Thus, insofar as one attempts a demonstration of objectivity, he is no longer a scientist. However, he may be a "meta-scientist" or "metaphysician" in the mold of Edmund Husserl's phenomenologist who undertakes to delimit the objectivity claims of experimental psychology by suspending the scientist's unreflective "natural attitude" to those claims. We see then that objectivity is an example of a concept that is able to regulate research only insofar as its presuppositional status is not examined critically. This is in striking contrast with intersubjectivity, whose regulative power derives from showing that a majority of relevant parties self-consciously agree on the identity of an event.

We can read this difference between objectivity and intersubjectivity back into the private language problem and then back into the social production of space, time, causality, and number. Keeping in mind the requirement that a language be a well-ordered system, it must then be presupposed that the person fluent in the private language is subject to the rules governing the system which, admittedly, he has imposed. Such constraints apply even if the cardinal rule of the private language is that all acts of signification will have purely illocutionary force, which is to say, a sign would refer only by virtue of the person engaging in the act of referring. Although this minimal rule may amount to little more than the whimsical legislation of meaning, its effectiveness nevertheless presupposes that there be a way of deciding whether the person fluent in the private language has made the utterance--as opposed to either someone who accidentally utters a grammatical string of signs or perhaps some evil demon who illegitimately possesses the person's body and is thus uttering strings that would be grammatical if the person himself had uttered them. Thus, even if we grant that a private language can be known by only one person, his knowledge is still necessarily bifurcated into what formal semanticists after Alfred Tarski have termed "the object language" and "the metalanguage." Whereas the object language regards the

utter from the first person perspective (i.e. in the act of speaking), the metalanguage regards him from the third person perspective (i.e. as an act of speaking). We might conceive of this bifurcation in terms of the utterer acting as if another utterer were present with the potential to correct him--much as the Freudian characterization of adult behavior in terms of the ego acting as if the parent, in the form of the superego, still exercised moral authority. And just as Freud located the foundations of the social instinct in this structural feature of the psyche, we are likewise able to identify the essentially public nature of language in what presupposes its use. Here too, as in the Freudian case, it is possible to convert the presuppositional structure into an historically predetermining one: For example, the psychiatrist may postulate some primal moment in which the parental image is actually incorporated--"introjected"--into the psyche; or, as sociologists of knowledge, we may emulate Jean-Jacques Rousseau's attempt to provide an originary myth for the rise of language among primitive men. However, the validity of either the superego or the publicity thesis is not affected by the empirical truth of such psycho- or sociogenic accounts, since it would not make any sense to talk about the psyche or language without presupposing these perhaps empirically dubious structures.

Recalling our earlier account of Vaihinger, it would seem that we are now in a position to endorse the fictionalist claim that the search for truth can often be facilitated only by employing patent falsehoods. Yet if the falsehood is taken to be not merely an heuristic device for continuing research but part of what makes the so-called "truth" possible in a transcendental--or presuppositional--sense, then we begin to see that, once again like psychoanalysis, the sociology of knowledge cannot be reduced to either a set of scientifically dispensable just-so-stories about origins or a set of falsifiable hypotheses. Indeed, we would argue that because the strong program for the sociology of knowledge amounts in practice to the emplotment of the presuppositional structure of publicly available concepts, the implausibility of a proposed plot stems not so much from a lack of historical warrant as from an inadequate understanding of the concepts ^{emplotted}. For example, a Durkheimian account of the social foundations of space might be sketched as follows: Natives organize to clear away vegetation in order to build a circle of huts where they will be able to live together. (The motivation behind this communitarian spirit--whether it be fear, hunger, etc.--is irrelevant.) The organization however is not formal in the sense of proceeding according to a predetermined blueprint; instead, a third party (such as the sociologist narrating this story) would say that there is an intuitive sense of

what is and is not a feasible move--especially the latter, and any native is eligible to correct another should an intuitively unfeasible move be made. Afterward, the natives reflect on what made their social organization possible. The configuration of the huts suggests a geometry that underlies the concept of space presupposed by their activity, but which would not have been discovered unless it were presented as a social product. The pivotal binary of inclusion/exclusion that guided the demarcation of "culture" from "nature"--those who belong within the sacred space from the profane ones who do not--presupposes that a violation of the social order implies an undefined chaos (such that foreigners may be accorded the same status as wild animals)--as opposed to, say, another well-defined social order--or, in logical terms, that a contradiction (indeed, that the conjunction of sacred and profane spaces is contradictory rather than contrary) entails any proposition. Once again, this presupposition is only derived after the society has been built, yet it is resituated as the guiding force throughout its construction.

21. Objections to These Implications.

Here the standard objection to any strong sociogenic account of concepts arises: At most our Durkheimian myth shows that the natives could only be aware of already having a concept of space by observing the products of social organization, which perhaps--and perhaps this is a generous concession--could arise only in the context of social interaction. The psychogenicist would then echo rationalist and empiricist claims that the concept of space must be in the minds of the natives, at least in some inchoate form (that is perhaps given full expression by society), in order even to make sense of the concept of space. Bypassing the physiological evidence for there being brain centers for spatial organization, just consider the grammar of our ordinary use of "space" that intuitively guides such scientific research: How can space be socially "invented," as it were, if space must be a medium in which all possible objects subsist? Unless we follow Bishop Berkeley in locating the unthought in the mind of God, the strong sociogenicist must determine the status of space before the natives constructed their society and, furthermore, how did they manage to recognize that there was a distinctly spatial organization?

Yet for all these problems, the sociogenicist does not face the perennial difficulty of the psychogenicist, which can be summarized, after Rorty, as the status of the mind as "the mirror of nature." Notice that we have so far not rigorously distinguished space per se--where the objects are "really" placed--from the concept of space--where we think the objects are really placed. The psychogenicist is compelled to draw this distinction, but the sociogenicist is not. Now consider the issues that follow from

such a distinction: If space is fundamentally a mental concept with no extramental correlate, does this mean that we literally mold the world in accordance with the structure of our minds? If our concept of space simply allows us to perceive space as it really is (i.e. more a receptive than a constructive capacity), then are the cultural differences in expressing space of negligible ontological import (i.e. they would not reflect real variation in the nature of space)? Regardless how these questions are answered, the psychogenicist must ultimately explain why there must be both a space-concept and real-space, which returns him to ~~the task of~~ justifying talk about the "imposition" or "elicitation" of form from matter (depending on whether the space-concept is constructive or receptive vis-a-vis real-space). We would argue that the distinction is founded more on an uncritical acceptance of our ordinary talk about space than on some primal intuition of space that might be conveyed by such talk. Specifically, we would reiterate Franz Brentano's critique of the psychologistic notion of consciousness as something distinct from the object of which one is conscious: Just because we ordinarily say that "we are conscious of space," it does not follow that the consciousness and the space are separate, with one somehow trying to "capture" the other. Indeed, the naturalness with which we act "in" space militates against the possibility of any real difference, and this is why so-called "illusions" are only discovered as such after the fact.

On a psychogenic account, attributing spatiality to what is not spatially present is a real possibility as long as the mind and the world are considered autonomous and yet not in some pre-established harmony (which would once again point to the redundancy of having two realms rather than one). Illusions result when something interferes with our spatial perception such that it no longer reflects the spatial presence of the world. In fact, it would only be through illusions that the difference between a space-concept and real-space could be demonstrated. Thus, given the psychogenic position, the objectivity of space is made possible by the ability to tell some real thing that has spatial extension from some illusion that does not. But does it make sense to say that illusions have no spatial extension? Considering the foundational status of space, this becomes a difficult line to explicate, let alone defend: Precisely what non-spatial realm do these illusions inhabit? It would seem that only the most immaterialist conception of mind (e.g. Descartes') could be comfortable with this question. Short of endorsing immaterialism, is it not more plausible to say that an illusion is simply the misnaming of some spatially extended thing? In that case, the

objectivity of space is presupposed so that the identity of an object can be negotiated. For example, rather than to doubt whether I have seen the thing I have called a ghost, it is more reasonable to doubt whether that thing is most appropriately called a ghost—as opposed to, say, the shadow of fluttering curtains. (Notice this is not the negotiation of the bargaining table, in which contesting sides enter with self-consciously defined positions against which the outcome can be measured as a "gain" or "loss." Instead, this is the improvisatory negotiation of social practice. In other words, all parties act as if they are subject to the same spatial organization of objects until someone appears to act in such a way as to violate the intuitive limits of that presuppositional "as-if." It is then that the illusion gets negotiated. What exactly has been the script in accordance with which all parties presupposed the others were acting that now allows them to point out this deviation? In short, they negotiate the characterization of their previous practice so as to inform subsequent practice—much different from the negotiation of the bargaining table that is perhaps exemplified in social contract theory.)

Thus, as in the earlier case of the scientist's treatment of an experimental outcome, the objectivity of a spatially extended thing need not be proven insofar as the practice of discriminating illusions (e.g., by pointing out the illusoriness of an illusion) already demands such objectivity. Hallucinations, which are distinguished from ordinary illusions by having no apparent physical correlates whatsoever, do however seem to resist any easy sociogenic interpretation and consequently require the space-concept/real-space binary. But in fact by the end of this paper we will have shown the contrary to be the case.

12. Confuting the Objections: Language as Word-Magic

Our defense resembles the ones offered for saying that a private language is impossible and that self-conscious intersubjective agreement is unnecessary for objectivity in scientific research. It rests on getting straight what precisely is the negation of objectivity: The accounts we have been opposing automatically take "negation" to mean "contrary," and consequently some species of subjectivity has been postulated. Instead, we seek objectivity's contradictory, or, more specifically, what it means to say that some expression is false in relation to the concept of objectivity; hence, objectivity has been treated here as a presupposition rather than as one pole of a binary. It follows that the essential objectivity of hallucinations must be considered not by looking at the reference of the expressions that propose to identify an hallucination but by looking at the linguistic performance that makes it possible for an hallucination to be identified at all (irrespective of whether it

proves to be a correct or incorrect identification). In other words--and this has been the principle implicit throughout this analysis--we must not pay so much attention to what language says about how it functions in the world at the expense of possibly regarding linguistic expression as deceptive. For example, G.E. Moore and J.L. Austin have observed that the evolution of ordinary language has bequeathed to contemporary speakers all the distinctions that have proved fruitful to draw. As a result, any foundational philosophy or metaphysics should ground its insights on these distinctions, which are discovered through meticulous semantic analysis. Such advice makes sense only if we take ordinary language's self-description at face value, since indeed it defines itself as the repository of the "perennial wisdom" of common-sense that has allowed us and our progenitors to function "naturally" in everyday life--so much so that we "normally" cannot envisage a critical attitude toward ordinary language that would not make all communication impossible. But just as the discerning psychiatrist would be suspicious of the patient who proposes an etiology of his own illness, the discerning philosopher should also be suspicious of linguistic attempts to explicate the function of linguistic expressions: Such attempts are themselves symptoms rather than solutions.

The fact that such an explication is needed--because it is not self-evident what a given piece of language is talking about--suggests that any proposed explication should be questioned. To demonstrate more pointedly our opposition to the modern Fregean impulse in linguistic analysis: If there must be a "route" to reference at all (as Frege stipulates), then the sense of any definite description that is proposed as such a route is contestable. And still another way: If a piece of language--a term, a sentence fragment, an "incomplete expression," to echo Russell--is inherently ambiguous in meaning when taken by itself, what should lead us to think (aside from the pronouncements of a semantic grammar) that several such pieces strung together will disambiguate the term's meaning? This query is not designed to make philosophy's assignment impossible to fulfill but to prevent it from being reduced to a catalogue of necessary truths--analytic statements that exhaustively and uniquely define a term, such that to deny a statement of this type is to commit a contradiction and render the term meaningless (i.e. unusable). Instead, it should be recognized as legitimate philosophical practice to radically renegotiate the meanings of terms according to how misleading the connotations of current definitions seem. Either "Evening Star" or "Morning Star", for instance, is a misleading way of identifying Venus (given our current astronomical knowledge),

for each name systematically diverts the language-user's attention from possibly discovering relevant information about the planet—"systematically", because if, say, Venus is associated with a particular time of the day, then Venusian studies may be conducted exclusively during that period. Our suggestion can be understood as the "dark side" of the operationalist principle: Whereas the early positivists defined a set of concrete operations as the sufficient condition of a scientific term's meaning so that to know what, say, "gravity" means is to know what must be done to demonstrate its denotation, we would add what not to do, where not to look.

In short, language needs to be thought of as having "a will of its own" that is more than the passive medium for expressing thought or even the relatively more active medium for constraining thought (i.e. the realist and nominalist positions, as presented in the opening of this paper). In fact, language must be regarded as the sublation of these two alternatives: It is the medium that constrains thought by having its users think they are expressing thoughts other than those really being expressed. The reader may notice that this account resembles the so-called "word-magic" theory of language's origin associated with early anthropologists like Edward Tylor and the child/psychologist Piaget. Supposedly, primitive man and children respond animistically to the world, which is to say, ^{they} treat all objects as if they acted from ^{intentions} independent of man's. Thus, certain words would be thought to have special inherent "powers" to conjure up objects, which meant that they had to be used with discretion--the most notable examples of this practice being curses and profanities. As Piaget puts it in A Child's Conception of the World, the child relinquishes his animism when he realizes that the "power" of language is only manifested when it is used, thereby showing that language is an inherently inert tool that is "animated" only by the will of men in an appropriate social setting. However, the adamant child need not accept this ontogenetic "refutation" of word-magic. Just because a human utterer may be a necessary physical condition for language to "work," it does not follow that the human utterer is the cause of language doing the work it does in the world. Yet such an inference is valid if it is presupposed that language is the medium by which thoughts ("the will") are expressed. But once this passive view is rejected, there is no reason to think that the consequent follows from the antecedent. Indeed, the fact that the unique identity of the human utterer is irrelevant to the efficacy of an utterance and that the identity of the "appropriate social setting" in which the utterance is made can only be known ex post facto leads us to think that animism is a plausible theory of language. Why do soldiers stand erect when the sergeant says

"Attention!"? It is not due to the charismatic authority of the particular sergeant over his troops nor is it due to the military context in which the command is given. The latter is not the case if only because we would not have known that this was a genuine military context had not the command been uttered as part of a chain of other utterances that, when taken together, define a military context.

We would go so far as to maintain that the peculiar development of linguistic expression--specifically drama, fiction, and even writing itself--presupposes the word-magic thesis. If the utterer and the discursive context were the sole source of the powers of language, then what purpose would be served by inscribing utterances? It seems that an oral tradition would be sufficient to make language work, and indeed anthropologists are quick to point out that this is the case in so-called "primitive" societies. They would go on to argue that due to the complexity of life in more "advanced" societies, a written tradition has arisen to codify the rules governing this complexity which could not possibly be carried around in an individual's head. The teleology of this account is somewhat unsatisfactory, for it is not clear that "the complexity of social relations" as such requires a written tradition. There are indeed very populous nonliterate societies, but the anthropologist would then counter that "complexity" means something more than just the sheer number of people one comes into contact with regularly. But what makes this "something more" possible? From Adam Smith, through Durkheim, and well into the twentieth century, anthropologists have pointed to a division of labor as the source of complementary roles in complex societies (and even here complexification is seen as a response to demographic demands) But if these evolving societies ^{initially} only had an oral tradition, what ^{would} have allowed the members to recognize and execute this complexification ("bureaucratization" may also be appropriate in this context)? In other words, we are wondering whether writing might not itself be the necessary condition for the complexification of society, rather than vice versa. Our speculation however cannot be resolved simply by turning to history--whether "in fact" writing predated or postdated complexification--for we are challenging the intelligibility of a written tradition possibly arising from the complexity of social relations: How could such a thing happen? The point of this speculation is to show a very general case of linguistic animism at work, namely, the generation of complex social relations.

13. Writing as the Fundamental Presupposition of Complex Society.

Among the differences between inscription and speech are the former's permanence (the letters always stay fixed on the page) and repeatability (the letters can ^{always} be

uttered in the same form over again), which, for instance, allow for the systematic addition or subtraction from a body of knowledge as well as the systematic dissemination of that knowledge--necessary conditions for science and probably for both higher economic forms like capitalism which are largely based on recording transactions and legal systems grounded on case precedents. (The reader will notice that nominalists like Locke have tried to assimilate these two distinguishing features of writing into a speech-centered model of language by portraying the speaker's memory as a tabula rasa.) However, this is not to say that a self-conscious science of writing (that would, among other things, distinguish writing from speech) must have preceded complexification. Once again, as in the sociogenesis of space, there need only be a practice of writing, not necessarily a technology of writing. In other words, the members of the evolving society must be acting as if they were writing (in the eyes of a third party) irrespective of how they themselves would characterize their activity. Their situation would thus be similar to that of Moliere's bourgeois gentleman who did not realize that he had always been speaking prose. But how would the third party recognize that writing was being practiced? It is not as simple as seeing whether functional equivalents of pen and paper are present. Reconsider the example of the sociogenesis of space: The natives were thought to have some sense of geometry because they were able to arrange their huts in a circle--as if they had used the appropriate geometer's tools (protractors, rulers, and compasses). But of course (so our example goes) they possessed no such tools--only the know-how necessary for constructing them, so that if the third party were able to communicate with the natives he would be able to introduce them to the technology with little difficulty. In fact, they would probably come up with it themselves upon formulating their concept of space. We see then that the difference between practice and technology is the difference between competent performance and performed competence, or unself-conscious and self-conscious activity. But more precisely, a competent performance consists of the necessary conditions for a performed competence. This is made clearer when we move to writing.

It is not inconsistent to envisage a society under an oral tradition that contains the necessary (but not sufficient) conditions for writing. Such a society would exhibit certain features in its linguistic behavior that are unnecessary to uphold its oral tradition. For example, suppose one linguistic practice is to parse meaningful utterances into meaningless units for combinatorial purposes (i.e. different combinations would yield utterances of different meanings). A view of language that centers speech next to what the speaker has in mind does not require this rather

mechanical approach for generating meaning that seems to dispense with the uniqueness of the speaker. Now suppose also emphasis is placed on getting the exact wording of an utterance correct. It is well-known that oral traditions easily convert history into legend over the years as speakers attempt to transmit the "spirit" of what is said rather than the "letter." So what is gained by fetishizing the words themselves, given that oral traditions have no way over many transmissions to check for accuracy? From both cases, it would be fair to conclude that even though members of the society in question used neither pen nor paper they nevertheless acted as if they had writing--or as if their language were writing-centered. As an aside, note that in resisting to define the practice of writing in terms of an empirical activity (e.g. the application of a pen-surrogate to a paper-surrogate) that can be univocally labeled "writing," we embrace a more dynamic--perhaps even dialectical--position whereby the practice is located in the technology of some other activity, speech, that can then be used as the basis for making writing a self-conscious activity, or a unique technology of its own.

But to resume the argument about the animism inherent in writing, it may only be after the fruits of writing have been produced--the laws, records, science--that a unique technology of writing is discovered (or invented--more on this later). And as a technology, writing resembles more an automaton than a hand-tool: Once the utterer sets the language in motion, it operates largely from its own accord. Imagine that two people decide to act out the script of a play, unbeknownst to a third person in the next room. Let us say the play contains a scene with a row between two characters. Once the words of the scene are "set in motion" (allowing for the appropriate intonation, etc.), the person in the next room will naturally think that there is a "real" row going on--until he peers through the door and sees the other two holding scripts. This example makes two points. First, there is quite a literal sense in which language conjures up reality out of ^{the} otherwise undifferentiated stuff of the world, and this includes the invention of context. Writing epitomizes this "word-magic" or "recipe" approach in its ability to consistently elicit actions as if the reality "cooked up" were of the more "natural" variety promoted by commonsense (We assume the difference between a "cooked up" and a "natural" world only for the sake of contrast). Thus, whenever the scene of the row is enacted--and the scripts are hidden--bystanders will act as they would in regard to any "real" row. In fact, unless the scripts are deliberately hidden, the actors themselves may think that the row is real.

The reader may object at this point that while he can understand some sense in which written language can be regarded as a recipe that cooks up the world, this sense can certainly be no more than metaphorical. Presumably the objector would say that the world is literally cooked up from molecules formed from the combinations permitted by the periodictable of physical elements. And admittedly science and commonsense do agree that the structure of matter--and not the structure of language--"composes" the world. Yet it is indeed curious that the periodic table--a persistent desideratum of scientific atomism (finally formalized by Mendelejev in the late nineteenth century)--is modeled on Leibnitz's combinatorial science, the forerunner of symbolic logic whose syntax would reveal the essential semantic structure of all possible utterances. The insubstantiality of the elemental atoms taken in isolation of their molecular combinations matches the semantic indeterminacy of what Russell in The Principles of Mathematics calls "logical constants" (connectives, punctuation marks) and "sentential variables" (propositional and predicate signs) when treated outside the syntactically correct strings formed when they combine. On a more ordinary level, we need only consider the indeterminacy of meaning of individual letters vis-a-vis the words they form, as well as that of individual words vis-a-vis sentences, and finally individual sentences vis-a-vis discursive contexts. And if the reader thinks that the algebra of atomic weights demonstrated in chemical formulae is a more precise science than the algebra of constants and variables, then he is instructed to examine the process of Goedel numbering, whereby (very roughly) it can be shown that the laws of arithmetic are preserved when each sign of the logical calculus is assigned a unique number and then combined to form syntactically correct strings. (A more illuminating account is provided in chapter seven of Goedel's Proof by Ernest Nagel and James Newman.) Thus, we need to consider why should the generation of substance from structure be so plausible an account of ultimate physical reality. Why not do instead as the presocratics did, namely, treat the elements themselves as substances (e.g. rather than a complex of hydrogen and oxygen, water was taken to be an element in its own right)? The plausibility of the former over the latter, we have maintained, is grounded on the language of physics presupposing the centrality of writing over speech, and hence reality is constructed just as meaning is from morphology.

To continue, the second point raised by the dramatized row, especially in light of the third party's presumption of the row's naturalness, concerns the means by which language manages to divide fact from fiction. The key lies in the linguistic creation of the social context by reducing or expanding the scope of the utterances

under consideration. On the most intuitive level, "expanding" or "reducing" scope amounts to adding or subtracting the sheer number of utterances. Statistically speaking, in the long run the propositions expressed by utterances tend to fictionalize (we need not decide here whether the propositions actually change truth values or whether only our knowledge of them changes). In other words, given any hypothesis whose probability of being true is less than one, the greater the number of successful testings that hypothesis undergoes, the greater the probability that the next test will falsify it. Thus, reducing the scope of articulation tends to factualize the propositions expressed by utterances, while expansion tends to fictionalize them. Given a sufficiently reduced context, any lie can pass for a truth; but as the lie is integrated with additional utterances, the probability of its detection increases. Analogous situations occur in designating scientific truths during a particular historical period and in presuming the dramatized row to be "real" until proven otherwise. The reader will have gathered by now that our use of fact/fiction and reality/unreality does not simply reiterate the empiricist binary of reality/appearance, which presupposes a strong mind-world split, whereby the largely passive mind apprehends the active world either as it is in itself or in some mediated form. Instead, we have been advancing the phenomenological line that mind and world are "existentially fused," by which is meant our natural attitude of regarding the two realms as co-necessary for reality being presented as it is. Consequently, the distinction between "reality" and "unreality" is between whether this existential fusion is intuited or not. If it is intuited, then questions of veridicality do not even arise--thoughts about evil demons passing off systematic illusions as truths seem perverse and perhaps unaskable. But if the fusion is not intuited, then we begin to think transcendently: What would make it possible for a given relation to subsist between what is said (or thought) and what it is said about (or thought about)? And are we warranted to assert that such grounds are present? As Husserl points out, this suspension of belief places reality in "brackets," and here we can imagine the role played by quotation marks in demarcating the ontological levels of language--what belongs naturally in the text as part of the author's own work vis-a-vis what is artificially appropriated so as to show the author's dependency on other sources. As conveyed earlier in our improvisatory model of presuppositions, "the sense of reality" (to be understood on analogy with "the sense of sight") occurs in medias res, without awareness of the beginning and end of an episode--without a sense of expansion toward a limit. The reason that the natural attitude need not be self-consciously delimited lies in the very co-necessity of mind and world: If reality is to be treated as

reality (i.e. the reality in which one exists), then it must be treated as the only possible reality--and this requirement goes against the intention of all transcendental thinking, which is to relativize possible realities by making each dependent on a specific set of limiting presuppositions, such as Kant circumscribed human understanding on the basis of twelve categories of judgment.

But how does the sheer expansion of utterances suggest expansion toward a limit?

The answer to this question rests on recalling the two features that distinguish writing from speech: permanence and repeatability. The two indeed go together: In order to say that a repetition has occurred, it must be possible to point to the earlier and later utterance as fixed entities; if this is to be done from memory, then we act as if we were reading the utterances off a transcript (even though we may be actually speaking the repetition). This intuition is borne out by the way in which one speaker catches another in a lie by appealing to an earlier statement the latter had made, as if some cosmic stenographer were recording the conversation. On a speech-centered model of language, there would be no good reason to set off a current utterance against a previous one, because presumably the speaker's word would be meaningful only insofar as the speaker speaks it. Thus, there could be no notion of a speaker getting tripped up by his own inconsistencies because the words themselves become inert outside the actual speech context; they are not presumed to subsist independently as a transcript that can be referred to subsequently. A speaker can only be held responsible for what he currently espouses, and so the status of the other speaker's recollection of inconsistency must shift. He may ask of the first speaker whether he upholds the two apparently inconsistent propositions at once. Most likely then, the first speaker will deny this. And even if it is brought to his attention that he earlier held a position contradictory to his present one (keeping in mind that this would presuppose writing-centeredness), he need not be disturbed because--so goes the ethics of speech-centeredness--the truthfulness of his discourse lies in whether he is speaking his mind (irrespective of changes in opinions) rather than in whether his utterances cohere in the long run.

Our point here is that only a writing model of language, the one committed to the word-magic thesis, can draw the fact/fiction distinction--and this is through language's ability to talk about itself, its so-called "reflexivity" or "self-consciousness." In order to talk about something, the something one is talking about must be fixed relative to the talk itself: How can I judge a previous statement to be true or false unless there is a sense in which that statement subsists in some

constant form (i.e. with some constant meaning even after the supposed meaning-giver, I-the-speaker, is no longer uttering it)? Now it may be countered that all these judgments could simply reaffirm previous utterances, and so the net result of the "meta-utterances" would be to entrench the truth of what has already been said. In that case, expanding the number of utterances would by no means imply expanding toward some limit on the truth-value of what is said. But that would be a redundant use of the metalanguage, since unless a later utterance explicitly modifies an earlier one (which may range from denying it to explicating it, which amounts to setting the semantic boundaries of the utterance beyond which it cannot possibly be true), each successive utterance is presumed to entrench the truth of the previous ones. As suggested before, this presumption of truth unless proven otherwise is the key presupposition of the natural attitude. To return to the dramatized row, the third party's apprehension of its "reality" is reinforced with the natural flow of dialogue. Indeed, if one character should explicitly affirm the reality of the row, the third party may well begin to suspect that something is afoot. Thus, if everything said is either true or on the same ontological plane (i.e. subject to the same kind of verifiability conditions), then there is no good reason for language being reflexive; it is only the possibility of falsehood or semantic ambiguity that makes the introduction of a metalanguage worthwhile. This may account for why societies governed by an oral tradition have an ontologically rather undifferentiated form of creative expression called "myth" or "legend" in which natural and supernatural phenomena freely interact (e.g. Homer's epics), while societies under a written tradition are concerned with drawing genre boundaries within such myths between the "fabular" and the "historical." The clash between oral and written traditions in the West appears with the expulsion of poets from Plato's Republic for concentrating more on entertainment (i.e. inculcating a natural attitude in the audience toward the action onstage so, for example, they respond with the same emotional fervor as if the drama were real) than with edification (i.e. recognizing the dramatic contrivances for their falseness so that the audience will not be swayed by similar techniques used in inflammatory speeches).

14. How Language ^{Works} A Its Magic.

In order to tie together the strands of argument in the previous discussion (so as to resume ultimately our explication of the sociogenesis of hallucination), let us focus a little more closely on the "magical" element of the animistic theory of language. Magic works primarily by the sleight-of-hand, which is to say, by employing

a system of signs--mostly gestures--that have a relatively fixed conventional interpretation (i.e. their performance predictably directs the audience's attention to specific aspects of the perceptual field and elicits from them expectations that certain other signs will follow) in order to derive totally unconventional consequences. Thus, magic presupposes the metalinguistic ability to discriminate between what the audience will conclude from the legerdemain and what they would conclude if they observed the additional gestures that are deliberately hidden. We can see the relevance of this model to the Habermasian characterization of ideological discourse as "systematically distorted communication": The power of ideology lies in what (after the Marxist Antonio Gramsci) can be called its "hegemonic" status. A proposition is most persuasive when no alternatives are conceivable, implying that it is impossible to set boundary conditions for its falsification; hence, one cannot think "outside" or "beyond" the proposition. Like the magical trick, ideological discourse consists generally of a series of truisms or prejudices that are mutually reinforced when systematically integrated: All the moves the magician makes are commonplace in their own right, but together they perpetrate a massive illusion. Such perpetration is possible because the meanings of these gestures or propositions are much more indeterminate than we ordinarily imagine, and, as a result, the magician or ideologue is able to slip in some unnoticed gestures or suppressed premises in order to totalize the illusion, so that it becomes impossible to deny its reality. This totalization usually occurs soritically--as in the case of the magician who has a member of the audience confirm that each step of his trick is "legitimate" or in the case of the ideologue who juxtaposes the following widely accepted propositions in order to declare that as a race Whites are intellectually superior to Blacks:

- (1) I.Q. Tests are reasonably good predictors of intellectual achievement (e.g. college success).
- (2) I.Q. Tests fulfill criteria of statistical reliability.
- (3) Whites significantly outperform Blacks on I.Q. Tests.
- (4) Genetic research has shown that at least some traits are racially linked.

Notice that if the reader pays exclusive attention to the above four propositions, he is bound to be persuaded by the racist's argument, for no obvious falsehoods or fallacies are committed: His attention has therefore been moved in the direction the ideologue has wished, such that even though conventional wisdom has denied the relevance of race to intelligence, the argument seems to offer no alternative than that very conclusion. Notice the "magical" effect here; The reader expects that four propositions considered reasonable by a scientifically literate public would

dispel such "unscientific" attitudes as racism, but the contrary seems to be the case.

This surprise itself adds to the persuasiveness of the argument because, unlike the largely unchallenged conventional wisdom (regardless how "liberal" its sentiments may be), the scritical nature of ideology begs the reader to scrutinize the validity of each premise as it is presented. Thus, a deliberate effort is made to look as though nothing is being "passed off" uncritically, even though that may in fact be the best ploy for passing off an invalid conclusion. Such a ploy may be encapsuled as the fallacy of composition, whereby it is invalidly presumed that whatever is a property of the parts is necessarily a property of the whole: Four propositions valid in their own right need not yield a valid conclusion, since the meaningfulness of one or more of the propositions may be altered if another is taken to be valid at the same time. In addition, we would argue--in accordance with the word-magic thesis--that it is not simply that the semantic relations among the four premises are so underdetermined that the ideologue can slip in whatever suppressed premise he wishes in order to draw some desired conclusion, but that the four premises themselves--in the very act of persuading the reader of the conclusion's validity--suppress the additional premises necessary to the make conclusion seem inexorably true (but which, if discovered, would cast doubt on the entire argument). Semantic underdetermination thus amounts to the ability of the four juxtaposed propositions to hide the sense in which the conclusion is already fully determined, or demonstrated, yet to prevent the reader from believing other than that the conclusion has been demonstrated. This is the bind faced by the member of the audience who intuits that the trick must rely on more than is actually presented by the magician but that the magician--by having him scrutinize each step--has somehow managed to satisfy all the relevant criteria such that it becomes impossible to detect the source of the ruse. Likewise, an ideology gains hegemonic status only on the reader's terms; hence, the appeals to commonly accepted beliefs. Of course, intuitions of the kind manifested by the member of the audience are not limited to cases in which scientific propositions are used to draw socio-political conclusions, as suggested by the racist interpretation of I.Q. Tests, but extend to both the revolutionary scientist and the incorrigible relativist, who share a common suspicion that underlying, say, the law of gravity is some rather dubious presuppositional ruse. The difference then between the vanguard thinker and the malcontent is that the former succeeds in diagnosing the ruse, while the latter merely dwells on his suspicion of foul play.

In a previous chapter we had defined ideology as knowledge regarded from the standpoint of its own delimitation, the model being the witness who commits himself

to a misleading position by systematically omitting parts of his testimony. The racist's argument exemplifies this activity well by focusing the reader's attention on whether I.Q. Tests are valid scientific measures and, in so doing, presupposing the issue allegedly under contention--whether race is in fact a relevant factor in accounting for intelligence. Strictly speaking, the racist has shown--in the manner of all ideologues--that if we presuppose the conclusion under dispute, then there are quite reasonable ways of justifying it. More specifically, the racist has inferred that Blackness is the source of the lower I.Q. scores achieved by Blacks overall. This is a rather subtle fallacy that capitalizes on the Aristotelian dictum that the cause must be adequate, or in proportion, to the effect. If there is a clear difference between the scores of Whites and Blacks, then it must be due to what clearly differentiates Whites from Blacks, namely, race. In making this move, the ideologue is preventing the reader from considering other nonracial factors that may be associated (for nongenetic reasons) with racial difference, such as socio-economic background. However, the racist's fallacy becomes obvious once stated, for it heavily relies on the reader's acceptance of the relevance of the racist terms--so much so that the conclusion is analytically written into the argument. Of course, when following someone else's argument, this is difficult not to do, since if the terms are denied, how is the reader to explain and justify what the arguer should be saying? If we are not to talk about the racial component of intelligence, then what should we be talking about? The problem in answering this question lies in demonstrating the relevance of what the reader would like the arguer to say to what the arguer originally intended to say. The racist may well counter that to concentrate on socio-economic differences rather than on racial ones is to raise a new argument rather than to improve the old one. The reader must then show how, in some sense, the racial issue is the socio-economic issue "in disguise," and this may be done via such statistical techniques as factor analysis and the more traditional canons of inductive proof. The reader will have succeeded if race proves to be an "impure" variable, a complex of several detachable factors. Thus, race will have been reduced from the unifying cause to a gross symptom of intellectual differences.

But the procedure for arguments ^{in general} is not nearly so formulaic: How does the would-be revolutionary scientist begin to argue against the law of gravity when the normal scientist starts by asking him to account for "gravitational effects"? Obviously, the natural phenomena collected under the category of gravitational effects will have to be reapportioned to new or already existing categories if the revolution

is to succeed. But he cannot do this simply by wiping the ontological slate clean and regenerating the world. Anti-Newtonians in the modern period--most notably Schelling and Whitehead--have attempted to reconstruct the cosmos on a non-mechanistic physics that only ~~take~~^{take} for granted Euclidean geometry and our ordinary (largely Aristotelian) intuitions about nature. Although no one will deny the universal breadth of their efforts, the depth of their insights is often questioned. Staunch mechanists will maintain that whenever metaphysicians try to build the world from scratch without the findings of experimental science they end up with a hopelessly opaque collection of notions concocted into a pseudo-system. The implication of such criticism is that to start from cosmic foundations rather than from meter readings ultimately leads to facile generalizations without any empirical specificity. Of course, the net result of being persuaded by such criticism is to drop metaphysical inquiry for the sake of empirical science. But is this criticism a fair diagnosis of what ails metaphysics? That this is not the case is first suggested by the fact that what motivates Schelling and Whitehead to forsake science for metaphysics is exactly what motivates the mechanists to do the reverse: Excessive generalization and abstraction at the expense of explaining the particular. But for the mechanists such explanation entails the prediction of specific events, while for the metaphysicians it entails an intuitively acceptable explication of how the world is experienced. Again, the two entailments are at odds with each other--so both metaphysician and scientist will agree. We would conjecture that the issue of "breadth without depth" is little more than a rhetorical ploy used by either side against the other that goes no distance toward explaining the scientific unintelligibility of modern metaphysics. It is not that the metaphysician proceeds from the "top down," as it were, when he should be going from the "bottom up," but that he never moves laterally to show how the scientifically literate may "shift across" (etymologically: "translate") from their conceptions to his. This is how Einstein succeeded when Schelling before him and Whitehead afterward failed. The strategy must be to supplant existing presuppositional ruses with new ones without the act of substitution--that strictly illicit magical move--being noticed. Subsequently, in the course of writing textbooks, the trickery of the previous presuppositions may be documented to add to the hegemonic status of the current ruses--the common technique being to demonstrate, say, how the Newtonians could have solved their major internal difficulties if they had been privied to a certain Einsteinian discovery: Einstein is as true as Newton can be shown to be false. This is an important formula of scientific development insofar as it

presupposes eliminative, and not enumerative, induction. In other words, truth is what remains when the demonstrably false alternatives are eliminated--or the "real" magician is the one who can foil the other ruse-makers without himself being detected.

15. Gricean Objections to the Word-Magic Thesis and Their Refutation.

However, since we do not ordinarily regard language as inherently magical or deceptive, such ruses routinely slip by. Almost all philosophers of language, especially speech-act theorists following Paul Grice, would disagree with the spirit of our statement, which suggests that regarding language as the transparent medium for communicating thoughts is at least a sign of intellectual laziness. They would argue that our view is inefficient, unrealistic, and (perhaps most of all) antisocial. It is supposedly inefficient because no conversation would get off the ground if the speakers constantly suspected each other's presuppositions. To this we question the degree to which conversations really do get off the ground in the sense of revealing to either party the intentions of the other. Just because neither party objects to the other, it does not follow that there is mutual understanding; in fact, systematic mutual misunderstanding would have this very same symptom. But of course we do not argue that position either. In stead, we advocate a view of linguistic interaction as unsystematic mutual misunderstanding (or deception), since the possibility of talking about "misunderstandings" presupposes at least some detectability. While Griceans seem to measure discursive efficiency in terms of how much of what the speakers wanted to convey was communicated over the conversation, we would measure it in terms of whether what was eventually said was worth the amount of time it took to communicate it (regardless what the intentions of the speakers were). On another point of efficiency, the Griceans would argue that the best way of actually conveying a message is by trying to convey it, which implies that the best theory of language would be one that presupposes the transparent communication of meaning unless otherwise indicated (or suspected). There is no reason or evidence to suggest that this hypothesis is true, despite its intuitive plausibility. In fact, the subtler the task, the more a self-conscious attempt will tend to prevent (or alter) its realization. More certain on this score is that the Gricean presupposition is sufficient (and perhaps even necessary) for a misunderstanding to persist undetected.

As regards the unrealistic nature of our position, the Griceans would argue that it is not clear that all possible speakers have at their disposal the intellectual resources needed to circumscribe the presuppositions of fellow conversants. Whatever else a theory of language may be, it must (so goes the Gricean claim) recognize certain

brute facts of linguistic behavior, including the fact that all speakers have equal access to the means of communication. Karl-Otto Apel has gone so far as to designate equal access as a transcendental condition of communication even being possible. However, the brute factuality of what must be presupposed in order for communication to occur does not entail that the presupposition must be fully realized, or self-consciously put into effect, by all those who hold it. Indeed, the presupposition of equal access may itself presuppose that not every one at once realize its consequences, as in the case of the seating arrangement in a theater presupposing that any member of an audience may attain a better view by standing up--just as long as not everyone does this at the same time. In light of this, we would suggest that all such transcendental conditions of language--whether Grice's, Apel's, or our own--are subject to what may be called (after Sartre in The Critique of Dialectical Reason) "the principle of counterfinality." The point is that in principle any member of a speech community has equal access to the means of communication, but once some members exercise it other members may be prevented from doing so. The latter-day Frankfurt School critique of ideologically dominated discourse (Habermas, Apel) must thus be seen as aiming not at actually equalizing the discursive capacities of speakers but at showing that there is no a priori reason why any particular group of speakers should monopolize such discursive capacities. A result of the critique then is that neither bureaucratization nor the cultivation of intellectual elites legitimate any permanent divisions as to what speakers can or cannot say. In characterizing Einstein's supersession of Newton as a matter of eliminating possible scientific voices, we held open the possibility of some revolutionnary scientist subsequently revealing Einstein's presuppositional ruses and thereby superseding him. (This recalls our earlier conclusion that universals need not be absolute.) In short, Einstein is able to bring his suspicion into fruition only insofar as other members of the intellectual community are not ^{also} suspicious.

Finally, the charge against our position as antisocial is to be contrasted with the communication theorists' reliance on the principle of charity, which presupposes, among other things, that under normal circumstances speakers say what they mean. To suspect that the speaker is speaking deceptively (so the Gricean critique goes) is to doubt the speaker's integrity, which only serves to make it impossible for that speaker to be persuasive. And if the power to persuade is systematically blocked in this fashion, then the point of communication itself is lost. Of course, this critique is valid only if we presume that the speaker has more or less full control over not

merely what he can think but also how he can express it. More eccentric thoughts—such as extraordinary reasons for performing a certain act or conceptions with potential for revolutionizing an existing science—are more difficult to convey by virtue of their eccentricity, and are therefore more readily targeted as lies, fantasies, and errors. Credibility and plausibility are more qualities of the discourse than of the speaker. The ready-made phrases composing idiomatic speech are themselves persuasive. Imagine a respected astrophysicist trying to convince the police that he had encountered beings from another world: Most probably his speech would be faltering not so much out of fear or self-consciousness (that often accompanies willful deception) but out of a lack of the appropriate language to express what he experienced—more pointedly, a lack of language that talks about alien beings without connoting the fancifulness of their existence (i.e. one that does not attempt to minimize their referability in the act of referring to them).

Furthermore, we can turn the charge of antisociality against the Griceans: Since the principle of charity in effect recommends that A interprets B to mean what A would mean if A had made the same utterance in a similar context, it would not be unfair to characterize the "social" nature of communication as a natural extension of how an individual comes to understand himself. In other words, the Griceans posit no essentially social element in accounting for linguistic activity: "The other" is patterned as closely on "the self" as possible. Not surprisingly then, misunderstanding is considered highly aberrant: A understands what A means because A composed the utterance, and A understands what B means because A could have composed B's utterance. Notice how our position reverses this picture: A understands B only if A can persuade B to adopt A's position on B's terms, such that B never realizes to what degree his mind has been changed. In other words, A's ability to communicate rests on the ability of his language to mask his differences from B, which is to say, to erase A's individuality. We thus see how persuasion reaches totalitarian dimensions as ideology: A shows that not only does A believe a certain position but that B also believes it—and, in fact, A's presentation of that position merely articulates what B has always thought. In short, A's self is cast as an expression of the other, B.

16. Implications for Linguistics and the Philosophy of Language.

As a means of recapitulating yet again, consider the argumentative strategy of an objector who claims that our position "reifies" language. He would probably argue that the relation between names and things is entirely conventional, and indeed this is what makes talk about "misnaming" things—or naming things "inappropriately", as

we would put it--possible: Since the essence of the thing is not carried in the name assigned to it (and here we do not distinguish between "names" and "descriptions" there need not be any slippage in reference--or ambiguity as to what is being talked about--when a name is changed or challenged. Thus, the objector would conclude that our own position presupposes that nothing much about reality hangs on our use of language. And of course not only would our own position presuppose the ontological insignificance of naming but (more importantly for the objector) so would any modern (i.e. post-Fregean) theory of meaning, which takes for granted that the same thing can be identified in many different ways without affecting the identity of that thing. The classic case is "the morning star" and "the evening star" both designating the planet Venus. But notice that such an example makes sense only now that we do not identify Venus in terms of one time of the day or another. In fact, when those two names were in use, they were thought to identify ^{two} discrete celestial bodies. The example therefore vindicates our position over the objector's. However, given the paradigmatic status of Frege's Venus example in the analytic philosophy of language, it would seem that this point has gone unnoticed. And no doubt this is the result of adhering to the model of language we have been criticizing throughout this chapter: The two names are taken to be little more than passive labels having no impact on the thing itself because the thing's ultimate identity, or essence, is determined independently of language. On the most ordinary level, we supposedly experience this when we "know" what something is but we cannot think of its name. On the more refined level of considering what the morning star "really is," we appeal either to some perfect knower (and if our understanding of the world is presumed to increase over time, then the present--as the latest point in time--can be, for the sake of discussion, posited as the seat of perfect knowledge) or to some world-in-itself minus our confused thoughts and words (this alternative usually plays on the discrepancy between the finitude of our modes of apprehending and expressing the world and the infinitude of relations and perspectives that is available to any object). Both alternatives capture the ontological insignificance of language, in the first case, by making descriptions corrigible in light of the nature of reality and, in the second, by making them superfluous to whatever happens to be the nature of reality.

At this point, it is important to contrast our position. We do not deny the corrigibility of descriptions, but we do deny their superfluity to the nature of reality. Furthermore the objector's claim that the essence of a thing does not hang on assigning the "right" name does not entail that its essence does not hang on the very practice of naming. The following propositions, we maintain, are quite compatible

- (1) Language is used as if naming things correctly were of primary importance.
- (2) A thing has been named "correctly" if its essence has been determined.
- (3) There is no sense in which a thing can be said to have been assigned the correct name.
- (4) The essence of a thing is determined by whatever name it has been assigned.

We can uphold all four theses at once because we also hold that language is descriptive only by virtue of being prescriptive. Since the first and third theses must be true together, the question of the correct name thus becomes a matter of how we should talk about the thing--truth reduced to relevance. As suggested earlier, language tells us where to look for the thing (and what to do with it), but this is not to suggest that language holds the self-conscious control over the nature of reality that idealists have traditionally attributed to mind. Our previous arguments in favor of language's inherent deceptiveness reveal how the fourth thesis may be true and yet we think that the essence of a thing subsists throughout our discussion of it: We have here the situation of being persuaded to a radically different viewpoint, yet thinking that it is a natural extension of what was originally believed. And notice that we are not even entitled to characterize the undetected shift in the essence as a "deception" unless we presume that the original determination, or naming, of the thing should encapsule the essence, for there is no sense in which the thing is "really" one type of thing or another. Instead, there are simply linguistic prescriptions that participate in making that thing what it is.

To say that language is inherently deceptive is, on the most elementary level, to say that an utterance is not made for its own sake, or that it does not mean what it says. Underlying the descriptivist view of language, of course, is the affirmation of what we deny: If an utterance means what it says, then it is not leading the audience astray. The paradigm, as we have suggested, is the ostensive labeling of things, such that whenever "table" is uttered, the audience's mind need not wander away from the vicinity in which such an utterance would be normally made--i.e. the vicinity of a table. As learning theorists have traditionally put it, the contiguity of "table" and a table in the primordial episodes of language acquisition is subsequently reproduced in the form of "table" eliciting with the least effort a mental image of a table. In other words, the spatial contiguity of ostension is translated into the temporal contiguity of comprehension. However plausible this account may appear for the association of words with things, it neglects the fact that language is essentially discursive, which is to say, that something is said in order to say

something else. Perhaps the most pernicious legacy of this brand of associationism is the analysis of discourse into a series of discrete linguistic routines: A tells B to do x, and B demonstrates his understanding of A by doing x--end routine. Notice here that inaction is portrayed as a point of equilibrium in which something (done) in the world satisfies, or completes, something (said) in language. But is the identification of such routines any more than an analytical device? Even though we can roughly say when a question has been answered or a request fulfilled, it would be misleading to say that the question has exacted only an answer or that a request has exacted only a particular action, since the way in which the question has been answered or a request fulfilled delimits the possible successive moves available to the parties. Of course, silence sometimes follows, but usually some other question or request does--and the fact that it does is not taken to be the start of a new routine but part of the natural flow of the discourse in which the parties are engaged.

The atomic nature of the "speech-act"--as these routines are technically called--runs afoul of the integral nature of language as both systematic and discursive. The founder of the modern science of linguistics, Ferdinand de Saussure, formalized the intuitions of grammarians who saw systematicity ("langue") and discursiveness ("parole") as aspects of language calling for two different types of inquiry. It is virtually a truism of contemporary linguistic philosophy that while systematicity (as represented in a grammar) is necessary for language, discursiveness (as represented in recorded speech) is merely sufficient for it. Given this logical hierarchy, languages can change only by altering the rules of the system through the employment of a metalanguage whose rules remain unaltered; altering the rules in the course of actually using them, such as subtly shifting the meanings of terms in the middle of an argument, is ranked among the most grievous grammatical errors. Not surprisingly then, the game is a popular metaphor for language. But when we distance ourselves from the presupposition that the discursiveness of language must be subordinated to its systematicity, we find that the game-metaphor suffers from a similar kind of artificiality as the contract-metaphor in accounting for the rise and maintenance of civil society. Just how many rules of any language are changed by the self-conscious agreement of the language-users? We maintain, none--and we would go so far as to argue that this denial should offer a clue as to how systematicity and discursiveness are integrally connected to make language possible. Atomistic approaches--from Russell's logical atomism to Searle's speech-act theory--have (unwittingly) captured much of what we have designated the "writing-centeredness" of language: Combinations

of grammatical strings predictably cook up the discursive contexts in which the "real world" transpires. However, missed by these approaches is that the combinations mask their atomic structure so that they are not treated as systematically fitted routines but as a naturally seamless discourse. This discursiveness is a product of language's systematic nature insofar as the atomic parts are sufficiently similar such that through either a sorites of semantic associations or strict implications one part can be made to "blend" into the other, as it were. This observation can perhaps be less cryptically stated as the ability to make any utterance x relevant to any other utterance y within a finite number of utterances without making the meta-linguistic comment that the direction of the discourse has changed.

But as we said earlier, the ability to make metalinguistic comments (especially to indicate deception) is a major consequence of the writing-centeredness of language. Yet, coupled with the thesis of discursiveness (that something is said in order to say something else), we are presented with a picture of language as systematically masking its identity through discourse. This is to say that language "tells" the speaker and the audience that it is something other than it is, as in the narrowing of the semantic horizon by so-called "analytic" statements. The epitome of such deception is to be found in linguistics itself, which postulates speech as the fundamental form of linguistic practice. But what does "speech" amount to? It is the object of phonological inquiry, the most systematically developed branch of linguistics. The act of speaking is analyzed into a series of sounds and silences that can be read off a voice spectrogram much like a series of letters and blanks on a page. The sounds are arranged into a phonetic "alphabet," from which all possible utterances can be composed. However, again like letters, the speech sounds are inherently meaningless pieces of mechanical behavior. Consequently, syntactic and semantic forms must be "superimposed" on the sounds, but these forms are themselves subject to a combinatorial structure--whether they be grammatical categories or lexical units--that is also inherently meaningless. Thus, meaningful speech only arises from the actual combination of phonetic, syntactic, and semantic factors. Anthropologists influenced by the linguistis account of speech, as we have seen, argue that such a mode of linguistic practice can only flourish in simply structured societies. Can this "empirical" claim be treated independently from the "analytical" techniques involved in defining and studying speech?

We respond that however fundamental its status is said to be, speech can never be treated as anything other than an incomplete practice--and this is not because speech is essentially "primitive," as anthropologists suggest, but because linguistics presupposes that writing is the mode in which language is fully realized and so speech

is defined negatively to it. The reader will be struck by the degree to which only an individual used to acting as if language were writing-centered could study speech in the manner linguists do, perhaps the most notable feature here being the elimination of intentionality from the analysis of meaning. Of course, linguistics masks this fact by translating its negative definition of speech into the incompleteness or inchoateness associated with origins. But evidence that the mask is not entirely seamless arises in the "mystery" of how sounds become associated with meanings once intentionality is excluded from scientific inquiry, as well as in the difficulty anthropologists face in not demeaning a speech-centered culture unable to make any sense of the need for writing. The first case is particularly interesting insofar as it gives a new twist to the standard Wittgensteinian criticism of "asking the wrong question." Recalling an earlier remark, a writing-centered speech community would say that A understands what B means if A is able to make an utterance that coheres sufficiently with B's previous utterance so as to continue the dialogue. In contrast, a speech-centered speech community would say that A's plausible response to B primarily demonstrates A's access to B's mind. The largely unpsychological nature of linguistics can easily satisfy the former criterion but not the latter. Indeed, linguistics does not have the conceptual apparatus even to begin to address the question of mental access. Given this impasse, we can say either that the science or the criterion is at fault. But then given the degree of mystery surrounding the criterion and the degree to which the science functions adequately without satisfying it, at least it would be "easier" to conclude that the question of mental access is itself at fault. And from the perspective of mixing speech-centered with writing-centered concerns, the criterion would be at fault by virtue of being irrelevant--but not by virtue of being ill-conceived (as if linguistic practice should be regarded as writing-centered), which Wittgenstein suggests in an attempt to debunk not only the insolubility but especially the mysteriousness of the proposed criterion. As a general rule for detecting deception in language, the more mysterious a question or issue appears, the less adequately that analytical entity is being defined in terms of some paradigm or epitome (e.g., writing as the culmination of linguistic development, against which speech must measure up); in short, a mystery is the symptom of a bad analogy.

(As an aside, we would submit that one consequence of the above rule is an explanation for why the diachronic laws common in the social sciences can never predict the next stage of development as a qualitatively different one. If, say, all modes of language are measured up against writing, then beyond writing can only be a more perfect or pervasive version of that telos. Thus, the perfect version of

social scientific laws not surprisingly appears as the clockwork sterile future of science fiction, behavior modification, and--most appropriately for ^{a writing-context} language--1984. The pervasive version comes in the extension of, say, Marxist dialectical laws or Comtean positivist laws to all fields of inquiry--simply put, the lesser sciences catch up with mathematical physics by imitating its method. Our point is that the predictive failure of such laws is inherent to the form such laws take and not necessarily, as it is usually maintained, to either ^{the} inherent unpredictability of human activity or an inadequate command of the data needed to make successful predictions about man.)

One final way of regarding the inherent discussiveness of language is in terms of a linguistic unit (word, sentence) being underdetermined as to its precise meaning. The remedy here is to say more in order to contextualize the unit. However, this should not be understood (contrary to what Quine and contemporary philosophers of science might suggest) in terms of the speaker having the power to decide which one of several possible ways the semantically underdetermined expression might be completed. Framing the problem in this fashion suffers from the same difficulties as does trying to conceive of discourse as a series of systematically fitted routines. An analogue may be found in trying to construct linear motion from a succession of static point-like events: Since a line is a set of points ordered with respect to "density" (i.e. for any two successive points there is a point between them), the number of points comprising a line is indenumerably infinite, which means that is impossible to set up a one-to-one correspondence between the set of integers and the set of points. As Zeno's Paradoxes show, motion seems to depend on this impossibility obtaining in the physical world (in fact, this is where Hegel initially derives his intuitive and philosophical support for the "reality of contradictions" in The Science of Logic) insofar as motion cannot occur instantaneously, at a point (i.e. in a state of rest or "suspended animation"; this, of course, presumes that action at a distance--that the mover need not itself be moving--is false), but only during a length of time. If a line of points is ordered with respect to density, then we cannot speak of a succession of instants--say, the "first" and "second" frame of a film depicting the flight of an arrow (to borrow Henri Bergson's modern version of a Zenonian paradox)--as anything other than an abstraction from the continuous flow of time. We would go one step further: A point cannot simply be abstracted as the scalar quantity of time and space identified within a coordinate geometry (e.g., the arrow's flight of thirty feet in five seconds); instead, this quantity must be treated vectorially so as to incorporate the crucial feature of the moving object (the arrow) having been able to traverse a given spatiotemporal region only by

virtue of its being directed toward some different spatiotemporal region--i.e. greater distance as time goes on. (In the teleological kinematics of Aristotle, it could be said that the moving object occupies a place temporarily as a means of achieving its end, rest.) Likewise, a linguistic unit is underdetermined in the sense that, taken alone, it is insufficient to account for its own meaning. However, once the semantics of that unit is treated "vectorially"--in terms of the direction the discourse takes once it is uttered, then a determination can be made. In somewhat less metaphorical language, we may describe this vectorial analysis of meaning as a search for presuppositions: The speaker does not "decide" to say something in the sense that such a decision could be separated from the unavoidable presuppositions involved in saying something (anything) in a particular way--just as a given point-like event cannot be succeeded by any other event in the sense that the identification of a time and place could be separated from the unavoidable directedness of whatever continuous motion made that event possible (i.e. abstractable).

17. Reprise: Towards a New Sociology of Knowledge

Having gone this far, we now return at last to the sociogenesis of hallucination. We have argued, contra Grice and the communication theorists, that society must be presupposed as a recognizable entity only if language is treated as having its own inherent powers, which in turn requires the necessary conditions for writing as a linguistic practice. Just because a person is needed for language to work and for ideas of space and time to be projected on (or extracted from) the world, it does not follow that what individuates a particular person as such (i.e. a unique set of intentions that distinguishes him from other persons) is necessary for either linguistic practice or spatiotemporal perception. Particular persons are largely interchangeable if they "read off the same scripts," as it were, and this is a testimony to language's inherent powers. We are reminded of the anti-skeptic's complaint about the unreality of the Cartesian demon who is allegedly a perfect deceiver--one who created the world exactly as it appears but with malevolent intentions that, because of the completeness of his deception, never gets revealed: If the demon does not offer any signs of his deceptiveness, in what sense then can it be said to present a real problem? The demon is, in effect, acting as if he were an honest deity. On a less grandiose scale, we know that lies, fantasies, errors, misunderstandings, and secrets only make sense as conceptual entities if they are in principle detectable, which is simply a modern way of saying that finitude is an attribute of the false (e.g. a lie cannot go undetected forever and still be a lie). Thus, if two people say the same things but intend two different things by their utterance, then such a situation presupposes that their difference is detectable,

which is to say, utterable. Notice that we have ^{identified} the sense in which a difference in intentions can make a real difference in terms of a shift from the individual mind to a socially accessible discourse.

Hallucinations similarly offer a systematically misleading self-description that has widespread consequences: Even though an hallucination is defined as a purely psychogenic state with no physical correlates, we are still entitled to ask whether the individual--in his capacity as the hallucinator--could identify an hallucination. The answer is plainly no: As we saw earlier in the case of private languages, a bifurcation of consciousness is presupposed--a metalanguage/object language or superego/ego distinction. And either distinction can be taken as inchoate expression of society insofar as the possibility of hallucinations rests ultimately on isolating an "other" that judges what the "self" experiences--even if it just means the same person designating his hallucinatory episodes when he is no longer hallucinating. The "widespread consequences" we mentioned, of course, pertain to how the domain of psychiatric practice should be interpreted: An hallucination is not simply the disease of an individual mind, but a disease that can be identified only if social interaction is presupposed. The reader will probably notice that "disease" can be classed with lies, misunderstandings, etc., and that alone is sufficient to claim that hallucinations are sociogenic.

Perhaps the best way of summarizing this rather "systematically discursive" paper is by contrasting our metaphysical strategy ^{with} that of traditional metaphysicians. At several points, we have exposed the limitations of a strategy that goes back at least to Plato and may be called either "realism" or "idealism." Its propositional tactics are as follows:

- (1) There is a perfect way of regarding things (i.e. how they ought to be regarded) and various ordinary ways that fall short of perfection in different respects.
- (2) However, all these ways of regarding things are commensurable, which is to say, it is possible to measure the degree to which an ordinary way approximates the perfect way.
- (3) The primary reason why these ways are commensurable is that the perfect way remains unaffected by whatever the ordinary ways of regarding things may be, and so, in effect, we have an "absolute scale" of intellectual clarity.
- (4) It is by virtue of such an absolute scale that we can speak of, say, the mind "reflecting" the world (realism) or the world "conforming" to the mind (idealism): the world and the mind, respectively, is the unchang-

ing standard, or "unmoved mover," as we earlier called it.

- (5) Consequently, the truth is the clearest representation of the perfect way of regarding things; falsehood arises as the representation is obscured, say, by disproportionately representing certain aspects at the expense of others.

The semiotics of this strategy becomes particularly interesting when we consider what causes a given representation to be true. The above tactics define truth as an iconic, or mirroring, relation between the representing and the represented--but what brings this relation about? The problem perhaps become philosophically most significant when Descartes realized that the ontological argument--which is grounded on the thesis that to have an idea is to represent an existing object--cannot by itself account for how men come to know that God exists. Indeed, the argument (if we grant its Platonic presupposition) establishes that God exists but does not show that God himself is the cause of our knowledge of his existence. At this point, Descartes invokes the Aristotelian principle that a cause must be adequate to the effect, which serves to extend commensurability from the representing/represented to the cause/effect relation. This extension is exemplified in the sense in which a footprint--by virtue of being the effect of a foot pressing against the earth--is the foot's index. Notice that we "deduce" (or "abduce, as Charles Sanders Peirce would say) that a foot caused the footprint by determining what object would be able to make the print with the least effort--because it would just have to map its form upon a given medium (in this case, the earth) or dimension (in this case, from three to two dimensions). Such a deduction is made on the grounds that it, in turn, is the simplest way of accounting for all the features of the effect in question; hence, a foot is sufficient reason for a footprint. Thus, "simplicity" becomes merely an ellipsis for the simplest route by which the cause can reproduce itself as an effect, given dimensional and other medial constraints, or the simplest route by which the effect can be "retroproduced" as some idealized cause without those constraints. It is this latter interpretation that allows us to see the problem of causation on par with the problem of universals: Just as the foot may be seen as the perfect state of the footprint once its material conditions have been removed, so too may a number, say, be seen as the perfect state of a collection of objects once its material conditions (i.e. the actual objects) have been removed. This strategy is also responsible for the presumption that either language reproduces thought or thought reproduces language, with whatever difference lying between the reproducing and the reproduced attributed to such "merely" material constraints as

words not being able to capture the subtlety of thought, thought not having a full enough command of language, etc.

In contrast, we have replaced the strategy of representing/represented with one of saying/doing. For the most part, saying/doing can be taken as the Marxist distinction between theory and practice as long as certain key differences from the previous binary are kept in mind:

- (1) Theory/practice cannot be reduced to the iconic relation between language and world stipulated in Wittgenstein's Tractatus whereby a propositional label is structurally isomorphic to a state-of-affairs and thereby attaches to the state as ^{its definite} description.
- (2) Neither can theory/practice be reduced to the indexical relation between footprint and foot whereby a two-dimensional static sign is projected from a three-dimensional constant object.
- (3) Whatever "stasis" the theory-end of the binary exhibits is due to the writing-centeredness of language: A static description is one of which it makes sense to say that it is reusable, by virtue of eliciting certain practices predicatbly; thus, every description is a covert prescription.
- (4) The practice-end of the binary is not a three-dimensional constant object but a four-dimensional continuum of activity elicited by the covert prescriptions.
- (5) However, the two dimensional difference between theory and practice (two to four^{means}), among other things, that projection across the binary is not symmetrical: In simplest terms, there is no reason to think that even the most meticulous linguistic account elicited by an event (e.g. a news report), when treated as a script and re-enacted, will itself elicit an event which, (it were) not for the mediating linguistic account, would be considered similar to the original event.
- (6) Yet the relation between theory and practice is defined in terms of a symmetry between the two, and so this fundamental incommensurability goes systematically unnoticed.
- (7) Thus, in the long run the repeatability of theory and the unrepeatability of practice (i.e. old language for new situations) guarantees the notorious discrepancy between the two ends of the binary that is manifested in our ability to speak of the "appropriateness" (or not) of

a certain description or the "well-groundedness" (or not) of a particular state-of-affairs. (Notice that these ways of characterizing the relation between theory and practice would not be possible if language were speech-centered, since it would then not make any sense to speak of repeatable units that appear to function differently under changing circumstances: Instead, each event would be uniquely named as a representation of the unique meaning that event has for the speaker observing or participating in it--this may go some way toward accounting for why non-literate societies lack a sense of historical change.)

In the text, we have associated theory/practice with the sociogenesis of traditionally mental or physical entities like space, time, cause, and number. Sociogenesis can be seen as occupying the position of what may be called "morphogenesis" in the classical problem of universals. By "morphogenesis" is meant simply the thesis that the entities we actually experience are representations of some (perfect) form that is either internal or external to the mind. As we have seen, because there is some sense in which the relation between a form and its concrete instances is pre-established (i.e. a given instance--so goes our account of traditional metaphysics--approximates the form to a certain degree) irrespective of how the perceiver may regard that relation (i.e. what he thinks the form is, based on his knowledge of the instances; e.g. a scientific law), from a morphogenic perspective sociogenesis could never amount to any more than a theory of knowledge, not a theory of reality as such. On the other hand, sociogenesis, by virtue of denying the commensurability of theory and practice, precludes the possibility of social interaction approximating some predetermined understanding of the nature of reality. Instead, this fundamental incommensurability implies that the ontological status of the entities must be negotiated a posteriori as theoretical account^{of} what has already been done that can be then used to guide subsequent practice. And as we have seen in our improvisatory model, this means that rather than merely mirroring its counterpart, each end of the binary delimits the other's future articulations. Indeed, because there is none of the hierarchy from "reality" to "appearance" of the previous binary, knowledge (theory, language) can be said to participate in the construction of reality (practice, world) in a manner symmetrical to how reality usually is said to participate in the creation of knowledge.

In conclusion, we should offer a demonstration of how our sociogenic strategy covers the same metaphysical terrain as the morphogenic one. Such a demonstration would show that sociogenesis and morphogenesis are competing solutions to the same problem. We earlier identified the problem as one of "universals," an ontological

category that may be translated semiotically into the problem of "reference," or what grants a given sign its significance. The Platonism/intuitionism controversy in metamathematics over the nature of number captures the difference we seek. To echo some earlier distinctions, each side of this controversy makes absolute and universal claims over what it tries to explain. This is especially evident in the morphogenic strategy of Platonism: Frege, for example, conceived of the sense/reference distinction in terms of the function (an algebraic expression)/argument (what satisfies a variable in that expression) distinction in an equation. Extracting the underlying reference of several sentences having different senses is like finding the solution set of simultaneous equations: The proper name presupposed by a set of definite descriptions (e.g., "Venus" vis-a-vis sentences about the morning and evening stars) and the number(s) satisfying the intersection of the equations (or making it possible for those equations to be computed simultaneously) are both discovered in the sense of not being invented--this is yet another way of characterizing knowledge of an object being sufficient for the object's reality but not necessary for it. In contrast, the sociogenic strategy of intuitionism regards discovery as anticipated but unexpected invention. In other words, the practice of, say, counting anticipates arithmetical theory insofar as arithmetic is taken as a formal characterization of counting; however, there is no reason to think that the counters themselves would have expected a particular arithmetical theory to ensue from their practice. And this asymmetry between retrospect (anticipation) and prospect (expectation) continues as arithmetical knowledge itself prescribes certain heuristics that alter the practice of counting, which lead to revised arithmetics, etc. Notice that the hybrid "Marxist intuitionism" espoused here eschews both the mutual exclusiveness of discovery and invention proposed by the Platonists (whereby the counter makes no difference to the nature of number) and the sheer reduction of discovery to invention proposed by the original, more voluntaristic intuitionists, like Brouwer (whereby the counter makes all the difference in determining the nature of number).

We have chosen the Platonism/intuitionism controversy to demonstrate our point also in order to clear up a fundamental misconception that seems to make any sociogenic strategy logically subordinate to a morphogenic strategy. This concerns the allegedly nonabsolute and nonuniversal nature of sociogenic explanations. The sociology of knowledge is notorious for presenting the social determination of ideas in terms of the localized historical concerns of the people who develop the ideas. This is certainly central to Bloor's "strong program" in Knowledge and Social Imagery.

These concerns take the form of beliefs, which when collected form ideologies and which, in turn, are said to be "reflected" in ideas of professedly non-local import, such as science and mathematics. The reader may recognize these tactics as indicative of the morphogenic strategy—only here the "form" is the perfect mirror of an historically specific reality, with the commensurability provided by both ideology and science being fundamentally linguistic entities that can be unproblematically compared for compatibility, joint plausibility, etc., and so hypothetical causal links can be set up (e.g., "Thomas Hobbes' attitude toward the political unrest in seventeenth century England led to his characterization of man and matter in terms of inert masses subject to violent motions.") Not surprisingly, literature in this vein tends to characterize scientists as casting their discoveries in terms of certain all-consuming visions of the world (which may derive from class or personal interest, etc.). However, when the sociologist of knowledge presents his case in this manner, the hard-core Platonist need only contrast the universality and absoluteness of, say, number with the historical specificity of the sociogenic account: Why does not mathematics change in proportion to the changes in society? Since the sociologist has argued on a morphogenic strategy, he must take this question seriously. His answer has classically been to concede that the Platonist seeking the essence of number and the sociologist seeking its origins are performing complementary functions—the former wants to understand the sense in which number is discovered, and the latter the sense in which it is invented.

We need not make this concession to the Platonist if we speak of practices rather than beliefs, as suggested earlier. The problem of number regains its universal and absolute status once we consider the transcendental question of how the world must be treated in order for arithmetic to "arise"? Notice, as was seen in the case of writing, we need not look for empirically verifiable practices and the practical source of theory, but only the types of practices that are presupposed as possible by the way the theory is cast—the theory's "practical entailments," as it were: What must I be able to do in order to say that the set of integers is infinite? Intuitionists concluded that it must always be possible to construct an integer whenever one is added to the highest integer counted. Even ^{classical} ~~mathematicians~~ mathematicians who conceived of an infinity of the integers as a completed set closed under some fundamental operations and laws must presuppose this practical possibility, even though the characterization itself (i.e. the intuitionist's "potential" infinity vis-a-vis the classicist's "actual" infinity) may not be helpful for developing certain kinds of formalization.

However, as mathematical intuitionism has shown in the twentieth century, this sociogenic strategy has the potential for rethinking the foundations of even the most conceptually entrenched of disciplines.

VII. BIBLIOGRAPHY (not submitted with manuscript)

page	line(s)	original / revision
35	17	universe is continuous / universe (of discourse) is continuous
35	36	insert "just" before "because"
36	22	if it were not / were it not
38	20-23	rewrite sentence beginning at the end of line as follows: "At least up to the time Leibnitz, demonstrating the theorem- hood of a sentence was merely an epistemic crutch and not a necessary condition of that sentence being a theorem."
38	34	no / not
41	8	they are complementary / their complementarity
41	37	The is / This
46	10-11	underscore "prescription" ; insert "should" between "naming" and "mirror"
47	28	prevent / stop
48	24	intending / attempting
49	5-6	so as to result in the formulation of Apel's thesis in terms resembling / so that the formulation of Apel's thesis resembles
52	15	eliminate last sentence of the paragraph
52	21	not / no
54	30-31	(i.e. the case...finding him) / , that is, the case...finding him
55	11	chapter / essay
56	chart	speaker-as-speech / speech-as-speaker
58	18	neural / topological
59	12	nonextensional / intensional
59	13	nonextensionally / intensionally
59	29	formalist / formal modist
59	30	materialist / material modist
59	33	nonextensional / intensional
59	34	formalist / formal modist
59	35	materialist / material modist
60	17	formalist / formal modist ; materialist / material modist
60	24-25	...associates misprediction signifying / ...associates the taking of misprediction to signify
60	31	materialist's / material modist's
60	34	formalist / formal modist ; materialist / material modist
60	37	is / are
64	5	ever knowing / the possibility of knowing
64	9	those signs / those experiential signs
64	10	a consensus entails a consensus / a superficial consensus entails a deep consensus
64	11	which does not bear on / thereby not questioning
64	25	eliminate "diagrammatically"
65		eliminate the diagram
67	13	contary / contrary
68	13	eliminate parenthetical remark
69	7	were obviously representative of / obviously represented
70	22-23	eliminate parenthetical remark
77	23	The reader should notice / Notice
88	28	by / through
89	12	when actually / when we actually
105	21	eliminate parenthetical remark
116	3	eliminate "internalist"
118	23-24	eliminate "but was later revived...and David Lewis."
126	21	eliminate "Richard Braithwaite and"
127	22	extension "simplicity" / extension of "simplicity"

page	line(s)	original/revision
133	29	place "and domination of" in parenthesis
136	11	fame / frame
140	37	correct / corrective
145	9	and / or
145	12	them / it
151	15	deductive / quasi-deductive
163	6	Wilhelm Dilthey, Robin Collingwood / Friedrich Schleiermacher, Wilhelm Dilthey

CORRECTIONS FOR "BEYOND CATEGORIES" (make sure you have all the pages)

3	21	underscore "any"
6	19	eliminate "as"
9	1	space / place
9	21	what / whatever
10	6	add as last sentence to the paragraph: "For all the anthropologist knows, 'Gavagai' may refer to a rabbit spacetime slice." Superscript the "6" at the end of this sentence, instead of the one in the text.
14	19	expression; / expression by another sign;
14	26	place "referential opacity" in quotation marks
14	28	place "referential transparency" in quotation marks
15	8	(i.e. clumsily) / (i.e. indirectly, or clumsily)

CORRECTIONS FOR "A PHILOSOPHICAL DEFENSE OF DECONSTRUCTION"

Drop all footnotes
 Eliminate the first four paragraphs
 Eliminate the first sentence of the fifth paragraph, and begin the paragraph as follows: "Deconstruction is so difficult because it makes major breaks..."

3	18	(including the lines eliminated) eliminate "instrumentalist or"
6	30	hermeneutical hedonism / "hermeneutical hedonism" (i.e. the freeplay of textual interpretation)
9	10-11	physical detachment from the vicissitudes / lack of control over the outcome
10	35	underscore "ultimately"
11	40	start new paragraph with "The antirealist..."

CORRECTIONS FOR "ANALYTIC PHILOSOPHY VS. DECONSTRUCTION"

2	18	place "but that they are unimportant" in parenthesis
5	12	what / whatever
6	34-37	rewrite the sentence as follows: "It is not that it is impossible to retrieve what the author had in mind when he composed a text, but rather, that intentionality, even granting its accessibility, counts for nothing when determining the truth or significance (i.e. the correct reading) of that text."

NO CORRECTIONS FOR THE FOLLOWING:

- "Recovering Philosophy from Rorty"
- "God's Role in the History of Philosophy"
- "A French Science (With English Subtitles)"
- "Rationality for Aesthetes"
- "The Dialectical Status of Philosophical Positions"
- "On Evaluating Eliminative Materialism"
- "Rhetoric Without Shame"
- "Kripke on the Distinction Between 'Epistemic' and 'Metaphysical' Modalities."