From THE REVIEW OF METAPHYSICS Vol. XXVI, No. 1 September 1972

DETERMINISM, FREEDOM, AND SELF-REFERENTIAL ARGUMENTS¹

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The controversy between determinists and proponents of free choice is one of the philosophical disputes that is apparently interminable. As in many other philosophical controversies, each position seems to lack plausibility except to those who share the presuppositions of its proponents. Hence it is understandable why mutual charges of question-begging are often exchanged in this controversy.

For this reason, proponents of free choice have attempted to find grounds for a refutation of determinism in the determinist position itself. Such attempts have sometimes taken the form of argumentation—by now well known—that determinism is somehow self-refuting or self-defeating.²

¹ The authors are indebted to many who read an earlier draft of this paper and without whose generous discussions, suggestions, criticisms, and other help this article would lack much of what is good in it.

² See Wilbur Marshall Urban, The Foundations of Ethics (New York, 1930), pp. 418–19; H. W. B. Joseph, Some Problems in Ethics (Oxford, 1931), pp. 14–15; James McTaggart, Philosophical Studies (London, 1934), p. 193; A. E. Taylor, "Freedom and Personality," Philosophy, XIV (1939), pp. 259–80; A. E. Taylor, "Freedom and Personality Again," Philosophy, XVII (1942), pp. 26–37; Paul Weiss, Nature and Man (Carbondale, 1947), pp. 23–26; C. S. Lewis, Miracles (New York, 1947), pp. 23–31; E. L. Mascall, Christian Theology and Natural Science (London, 1956), pp. 212–19; A. C. MacIntyre, "Determinism," Mind, LXVI (1957), pp. 28–41; Lionel Kenner, "Causality, Determinism and Freedom of the Will," Philosophy, XXIX (1964), pp. 233–48; Warner Wick, "Truth's Debt to Freedom," Mind, LXXIII (1964), pp. 527–37; J. D. Mabbott, Introduction to Ethics (London, 1966), pp. 115–16; Sir Malcolm Knox, Action (London, 1968), pp. 68–80; Norman Malcolm, "The Conceivability of Mechanism," The Philosophical Review, LXXVII (1968), pp. 45–72; James N. Jordan, "Determinism's Dilemma," The Review of Metaphysics, XXIII (1969), pp. 48–66; J. R. Lucas, The Freedom of the Will (Oxford, 1970), pp. 114–72; Noam Chomsky, "The Case Against B. F. Skinner," New York Review of Books, December 30, 1971, pp. 20–26.

Those who propose this argument maintain something like the following: if determinism is true, then its assertion, like every other human act, is a determined effect; thus determinism comes to be held on account of the same sort of factors that account for the holding by others of the opposite position. The conclusion drawn is that determinism undercuts the legitimacy of the determinist's claim that his position ought to be preferred to its opposite. By means of an argument of this sort, determinism is rejected, not because it contradicts a thesis which its opponents hold, but because it defeats itself.

However, there is no consensus among philosophers that self-referential argumentation against determinism is any less question-begging than other attempts to refute determinism.³

In this article we hope to show why previous self-referential arguments against determinism have failed. We will then go on to articulate a different self-referential argument we believe to be cogent. If our evaluation of this argument is correct, determinism is untenable. Yet its falsification cannot yield the precise results proponents of free choice might hope for.

Ι

In this section we examine a recent and well developed example of the argument that determinism is self-defeating. We also review some of the objections philosophers are currently raising against arguments of this sort. We consider these objections decisive.

In "Determinism's Dilemma," James Jordan has articulated an argument typical of recent attempts to show that determinism is self-defeating.

³ See John Laird, On Human Freedom (London, 1947), p. 127; G. E. M. Anscombe, "A Reply to Mr. C. S. Lewis' Argument that 'Naturalism' Is Self-Refuting," Socratic Digest, IV (1948), pp. 7-16; Adolf Grünbaum, "Causality and the Science of Human Behavior," in Herbert Feigl and May Brodbeck, eds., Readings in the Philosophy of Science (New York, 1953), pp. 775-76; A. J. Ayer, The Concept of a Person (London, 1963), pp. 266-67; Lucas, op. cit., p. 116; David Wiggins, "Freedom, Knowledge, Belief and Causality," in G. Vesey, ed., Knowledge and Necessity (London, 1970), pp. 132-54; Adolf Grünbaum, "Free Will and the Laws of Human Behavior," American Philosophical Quarterly, VIII (1971), pp. 309-10.

⁴ Jordan, op. cit.

Jordan argues that if one accepts the determinist thesis as true, then one must admit that all theses, including the determinist thesis, are effects of antecedent causes. It follows that whether the thesis is true or false, one's holding the thesis is wholly explicable in terms of antecedent causes. Thus the determinist and his opponent are equally determined to hold the positions they do hold. And so one's assent to whichever position he holds has no necessary relationship to the fact that one position is true and its contradictory false.

Jordan does not deny that rational judgments have necessary causal conditions. But he argues that if someone wishes to maintain that rational judgments have sufficient conditions he

... would need to produce evidence which is seen to conform to criteria of reasonable trustworthiness and which is recognized to confer, by virtue of some principle of deductive or probable inference, certainty or sufficient probability upon it. But if the proposition [of the determinist] is true, this could never happen, for it implies that whether anyone believes it and what he considers trustworthy evidence and acceptable principles of inference are determined altogether by conditions that have no assured congruence with the proposition's own merits or with criteria of sound argumentation whose validity consists of more than that we accept them.⁵

Jordan's point is that on determinist grounds the correspondence between the truth of a proposition and the causal factors that determine assent is accidental. Thus if determinism is true it is never possible to ascertain whether any statement—including the statement of determinism—is true.

A determinist undoubtedly would object that Jordan begs the question by excluding "criteria of reasonable trustworthiness" from the set of factors legitimately determining assent. This exclusion is obviously an assumption inherent in Jordan's non-deterministic point of view. A determinist could certainly find within his framework some way of explaining the causal efficacy of the factors that Jordan assumes determinism must exclude.

Adolf Grünbaum, for example, claims that the type of argument proposed by Jordan gratuitously assumes that if our beliefs are caused, they are forced upon us. Such an assumption confuses causation with compulsion and prevents proponents of the argu-

⁵ *Ibid.*, pp. 53–54.

ment from seeing that the decisive cause of the determinist's belief may very well be his awareness of the available evidence. Grünbaum goes on to argue that the causal generation of a belief in no way prevents it from being true:

In fact, if a given belief were not produced in us by definite causes, we should have no reason to accept that belief as a correct description of the world, rather than some other belief arbitrarily selected. Far from making knowledge either adventitious or impossible, the deterministic theory about the origin of our beliefs alone provides the basis for thinking that our judgments of the world are or may be true. Knowing and judging are indeed causal processes in which the facts we judge are determining elements along with the cerebral mechanism employed in their interpretation. It follows that although the determinist's assent to his own doctrine is caused or determined, the truth of determinism is not jeopardized by this fact; if anything, it is made credible.

More generally, both true beliefs and false beliefs have psychological causes. The differences between a true or warranted belief and a false or unwarranted one must therefore be sought not in whether the belief in question is caused; instead, the difference must be sought in the particular character of the psychological causal factors which issued in the entertaining of the belief; a warrantedly held belief, which has the presumption of being true, is one to which a person gave assent in response to awareness of supporting evidence. [emphasis his] ⁶

Grünbaum's point is that determinism by no means implies that the causes that determine one to hold a proposition true need exclude criteria of reasonable trustworthiness.

Jordan, in his article, attempts to respond to a similar objection raised by A. J. Ayer.

Ayer contends that determinism is not self-defeating. He holds that it is false to assume that acting from reasons is incompatible with acting from causes. Believing a proposition because of certain brain processes and believing it because of certain rational grounds are not incompatible; the word "because" is used in different senses that are not mutually destructive. Thus Ayer can hold both that he would think differently if his brain were constituted differently and that he actually thinks as he does for the reasons he gives.

Ayer points out that a calculating machine can operate both causally and according to logical laws. From this he draws the

Grünbaum, "Free Will and the Laws of Human Behavior," pp. 309-10; see also Wiggins, op. cit., p. 143.

conclusion that the question of the adequacy of reasons for a belief is independent of the question whether there are necessary and sufficient conditions for that belief.

Jordan replies to Ayer's major contentions.

First, to the contention that an argument like Jordan's assumes the incompatibility of acting from reasons and from causes, Jordan replies that no such assumption is made. Only the following conditional statement is asserted: if our rational assessments are causally determined, then we cannot know or rationally believe that any judgment is correct. But Jordan's reply does not escape the point of Ayer's argument—that rational belief and causal determination are not incompatible. The assumption that they are is clearly implied by Jordan's conditional statement.

In discussing Ayer's example of a calculating machine, Jordan states that if determinism is true, then there is only a fortuitous connection between the conditions governing one's belief and the standards governing what ought to be believed. Calculating machines are built in conformity to such standards. If men are determined as calculating machines are, there is no way to determine whether human beliefs conform to such standards. On the determinist hypothesis, Jordan says, if men "make mistakes, they cannot recognize them; if they believe themselves mistaken in any instance, their belief is fortuitously correct if correct at all."

As Grünbaum's analysis makes clear, such a response is question-begging. It assumes that a causally determined awareness of the evidence cannot be among the factors that determine and alter belief. In reply Jordan might ask how on determinist grounds one could know his belief to be true. A determinist could reply that this question is nothing more than a demand for a deterministic explanation of how our cognitional equipment happens to have a capacity for achieving truth. This demand could be satisfied in various ways—for example, by a scientific account of the survival-value of this capacity.

Ayer also holds that the logical independence of the adequacy of the reasons for a position from the causal conditions that deter-

⁷ Ayer, op. cit., pp. 266-67; see also Laird, op. cit., p. 127. ⁸ Jordan, op. cit., pp. 60-61.

⁹ Ibid., p. 62; cf. Wick, op. cit., pp. 534 and 537; and Kenner, op. cit., pp. 246-48.

mine belief in it shows the compatibility of reasons and causes. Jordan argues in response that Ayer shifts his ground in the course of his argument. If Jordan is correct, Ayer fails to consider the relation between reasons and causes from the perspective of the argument that determinism is self-defeating. This argument, after all, is concerned with how we can come to know about the adequacy of our reasons.¹⁰

While it may be true that Ayer has not met the argument that determinism is self-defeating on its own ground, we also think it clear that Jordan begs the question by assuming, as he does, that "good reasons" cannot be causally determined.

Such a confrontation of question-begging arguments shows once more that the issue between determinists and their opponents is difficult if not impossible to resolve. Whether difficult or impossible is the question we propose to investigate.

TT

In this section we proceed as follows. First, we consider the possibility that no attempt to resolve the freedom/determinism controversy is necessary because both positions are meaningless. Second, we clarify some meanings of "determinism." Third, we consider the view that even if determinism is meaningful, the freedom/determinism controversy is ill-conceived and can be dissolved by showing the compatibility of the two views. Fourth, we state the conditions which must be fulfilled if a self-referential argument against determinism is to succeed.

If it could be shown that determinism is meaningless, then the freedom/determinism controversy could be disposed of without appealing to anything extrinsic to the determinist position itself. This approach offers an attractive way of avoiding the whole freedom/determinism problem without begging the question. But before disposing of the dispute in this way, one should determine precisely in what senses determinism might be said to be meaningless.

One sense of "meaningless" is "formally inconsistent." But simply to dismiss a position as formally inconsistent without speci-

¹⁰ Jordan, op. cit., pp. 62-63.

fying the precise respect in which it is incoherent would be fallaciously vague. If someone specifies, however, the particular respect in which some particular version of determinism is formally incoherent, then that determinist must make the concessions necessary to gain coherence. But the ultimate consequences for determinism remain open.

Another way to argue that determinism is meaningless is to claim that the application of determinism to human action is a category mistake. For example, A. I. Melden argues that the causal model cannot properly be applied to human action because language about human actions is a logically different type than the language of natural science. Any attempt to apply the language of causality to actions can only lead to logical incoherence.¹¹

Melden's tactic fails, however, for two reasons. First, even if causal models are derived from natural science, it does not follow that such models cannot both exclude self-determination and explain human actions without reducing them to mere physical events. Second, a determinist might admit that there is a category mistake in attempts to assimilate the language of action to the language of nature, but might go on to argue that future scientific discoveries will make it possible to dispense with the language of action. It would then be possible to give a theoretically adequate account of human behavior in causal terms.

Another way to say that determinism is meaningless is to claim that the terms in which it is stated lack reference. Someone might argue that if the terms are to have reference it must be possible to articulate criteria for deciding whether a given action is determined or not determined.¹⁴

However, the expressions used in articulating determinism are not peculiar to this context. They are imported to it from wider

¹¹ A. I. Melden, *Free Action* (London, 1961), pp. 171-97, especially pp. 181-83.

¹² See Stuart Hampshire, *Freedom of the Individual* (London, 1965), p. 111.

¹³ See Richard Rorty, "Mind-Body Identity, Privacy, and Categories," The Review of Metaphysics, XIX (1965), pp. 24-54.

¹⁴ See Max Black, "Making Something Happen," in Sidney Hook, ed., Determinism and Freedom (New York, 1958), pp. 42-45; MacIntyre, op. cit., pp. 39-40.

contexts of uses in which these expressions have been used in talking about the world. Of course, the employment of these expressions is only straightforward and without difficulty in certain paradigm cases, and the criteria for their use cannot be articulated in a clear-cut way for the whole family of possible uses. But the same difficulty arises in all uses of language. We always find paradigmatic uses related by way of family resemblances to less obvious instances of use.

Still another sense of "meaningless" generates the following objection. However meaningful determinism is as a restricted thesis about a limited range of natural processes, it becomes meaningless when generalized to extend to the entire range of natural processes including human action.

It should be noted that any particular conceptual apparatus a determinist uses has a legitimate employment in some limited area. The extension of this apparatus to cover human action is not defective because of lack of data; the data of human action are there to be explained. The only reason to object to the generalization would be some *a priori* restriction upon generalization itself.¹⁵ Such a restriction must be either a stipulation or a truth-claim.

If it is a stipulation, then the person making it is merely saying that he does not care to use language to make generalized deterministic claims about human action.

But if it is a truth-claim it must be expressed in a formula, for example: "All attempts to generalize without restriction necessarily lead to meaningless utterances."

This utterance is odd. Yet it is not syntactically incoherent; we are not confronted with an example of purely formal nonsense here. Nor does this utterance fall short of meaning on semantic grounds, for there are attempts at unrestricted generalizations, of which this utterance itself is one. Precisely what makes this utterance odd is this self-referential feature of it.

This formula tries to exclude, on peril of nonsense, all attempts at unrestricted generalization. But the utterance of the formula, if it is to do its job, must make a claim that is unre-

The See Bertrand Russell and Alfred North Whitehead, *Principia Mathematica*, 2nd ed., Vol. I (Cambridge, 1927), pp. 37–38.

strictedly general; it invites falsification by any single counterinstance. And yet the attempted generalization involved in this utterance is in fact given to us, and it is necessarily given to us whenever the position itself is asserted. Thus whoever utters this proposition, by that very act inevitably provides us at once both with a proposition that is syntactically coherent and semantically meaningful, and with a datum sufficient to falsify the proposition—the very act of uttering it. The peculiar logic by which this proposition and others like it might be said to "self-destruct" will be spelled out below in the last part of this section.¹⁶

We now turn to the clarification of some meanings of "determinism." To begin this clarification we will briefly describe the experience of choice and then indicate what determinists say about this experience.

Most people would agree that they often find themselves in situations in which they seem to be faced with alternative possible courses of action. In such situations people usually look for some factor that would settle which of the alternatives they will actually carry out. Of course, the perception of any possibility as a real alternative includes the awareness of a purpose for which that course of action might be done. But no such purpose is understood as sufficient to settle what will be done; if it were sufficient, one would have no genuine alternative. And if one were aware of any factor whatever sufficient to bring about his carrying through one course of action, then he could no longer think any other course of action really possible. But sometimes, at least, one is not aware of any such factor, and then one feels-rightly or wrongly-it is up to him which possibility will be realized; one thinks that his choice alone will be the determining factor in the unsettled situation.17

Most people may not be clear or even consistent in their understanding of their experience of their actions. But we think a fair formulation of at least one aspect of that experience might be this: "What I will do in this situation is really up to me. Whichever

¹⁶ See below, pp. 18–20.

¹⁷ See Richard Taylor, Action and Purpose (Englewood Cliffs, New Jersey, 1966), pp. 167-84.

alternative I shall choose, I am now able to choose it or some alternative." 18

No one disputes the fact that one who believes he is thus able to choose, nonetheless, may sometimes be mistaken in this belief. As psychological studies have shown, sometimes people believe they are acting freely but are not.

We are now ready to state a preliminary definition of "determinism." Determinism is any theory, psychological or otherwise, which claims that the belief that we freely choose among alternatives must always be mistaken. A determinist's account may refer to many factors, such as behavioral reinforcement, innate psychological conditions, genetic determinants, cultural influences, institutional acculturation, economic conditions, the physiological processes of the nervous system, and many others. Whatever factors are incorporated in a specific version of determinism, all versions of determinism agree in excluding as mistaken the belief that we can freely choose among alternatives.¹⁹

In our examination of determinism, we shall not at all be concerned with arguments proposed to support it. Therefore the explanatory factors to which a particular form of the hypothesis appeals are not relevant to our consideration. We deal solely with the common position.

Even outside the context of the freedom/determinism controversy the word "determinism" has a number of significant uses. These uses must be carefully distinguished from the use of "determinism" with which we are concerned.

¹⁸ In describing the experience of choice, we are not begging the question by ignoring meanings of "can" compatible with determinism. We are aware that a description of the experience of choice and analysis of words used in the description cannot settle the freedom/determinism controversy. We maintain only that the stated description (a) is what people sometimes say they do in choosing, and (b) cannot be accepted at face value by a determinist since it involves a sense of "can" inconsistent with determinism. In other words, if anyone challenges this formulation of the experience of acting by choice, the reply is that at least some people would accept this formulation as an expression of their experience, and this fact is enough to establish the *phenomenon* as posing a problem. As a matter of fact, however, we would be surprised if many ordinary people, people who sometimes wish they "had it to do over again," would regard our formulation as counter-intuitive. See *ibid.*, pp. 181–84.

For example, one of the principal uses of "determinism" is to signify the thesis that all events and processes have necessary and sufficient temporally antecedent conditions. Such a statement might be an ontological thesis about the natural world; or, it might be posited as a necessary presupposition for any knowledge—or at least for scientific knowledge—of the natural world; or, it might be proposed as an element in any linguistic framework which can be used for interpreting the world. And there are other similar uses of "determinism." We are not concerned with these uses of the word "determinism" except to the extent that they are related to some hypothesis which would preclude freedom of choice.

It should be noted that indeterminism with respect to nature may be—but need not be—a principle of an account of human action which we would classify as deterministic. Such a position might count as determinism in the sense in which we are concerned with it, because a non-determinist view of nature can—but need not—exclude free choice. A real possibility is not necessarily a possibility for choice. Even if there is contingency in nature, the initiation of human actions might nevertheless be explained in the same way as are any other events and processes in nature.

We therefore formulate what we mean by "determinism" as follows: no special interpretive model beyond the interpretive models used to account for natural events and processes is needed to account for the initiation of human actions; an additional interpretive model used to account for the initiation of actions is a needless proliferation of explanatory machinery. Reformulated in terms of our previous description of the ordinary man's understanding of his actions, determinism implies that there is no warrant for a naively realistic interpretation of the experience of choice among alternatives. Determinism, in the sense in which we are concerned with it here, must exclude any interpretation of that experience which involves a claim that there are really open possibilities among which it is up to the agent alone to choose.²⁰

Richard Brandt and Jaegwon Kim put the point nicely in "Wants as Explanations of Actions," The Journal of Philosophy, LX (1963), p. 435. After indicating the difficulties that surround the question of whether or not there are causal explanations of actions—difficulties due to the many meanings of "causal explanation"—they say: "What we think clear and important in this dispute is the question of whether or not sensible

In the sense in which we are concerned with it, determinism is the common form of all those hypotheses that would try to account for human actions deterministically. Whatever else one might mean by "determinism," such a determinism set over against freedom of choice must be a hypothesis capable af accounting somehow for the data of experience constituting the common subject matter of the freedom/determinism controversy.

The way in which a particular version of determinism tries to explain the initiation of human action is irrelevant to the argument we are going to articulate. Only the position common to all versions of determinism is relevant. Regardless of the philosophical or other grounds on which someone might hold some version of determinism, the determinism with which we are concerned is the position common to a set of explanations of human action that must be characterized logically as explanatory hypotheses.²¹

explanations of human actions exhibit the appropriate inferential and nomological pattern of explanations found in physical and biological sciences—in other words, whether explanations of action form a unique type of explanation with special logical and methodological requirements distinct from those of explanations in natural science." See also Bernard Berofsky, "Determinism and the Concept of a Person," The Journal of Philosophy, LXI (1964), p. 475; and Determinism (Princeton, 1971), especially pp. 268-69.

21 Berofsky, Determinism, pp. 35-41, argues that determinism cannot

be construed in terms of explanation. The meaning of "explanation" can be divorced from that of "lawful account," and the definition of determinism requires only the latter. Berofsky sums up (p. 41): "If, in proving that some event is determined, one also explains the event, all well and good. If, on the other hand, no explanation is thereby offered, we cannot criticize the concept of determinism. All that one need specify to satisfy determinism is the rule which reduces the future possibilities to one. The concept of explanation seems to play no role here; rather, we must turn to concepts like cause and law. Although the latter concepts are often explanatory, their being so is of no interest to determinism." In part, Berofsky may be using the word "determinism" in some of the senses already excluded from consideration here. In some of these senses, "determinism'' refers to a thesis or a presupposition or a rule that need involve no attempt at explanation. Berofsky also may be using the word "determinism" to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determinism to refer to the position shared by hypotheses that are determined by hy ministic in the sense with which we are concerned. Only a particular hypothesis, not the common position, in any sense involves explanation. But "explanation" has many senses. It is not our position that a determinist hypothesis need attempt explanation in the sense that it would undertake to account for particular human actions. Our position is that in offering a rational ground for excluding freedom as the principle of human action, any determinist hypothesis proposes some alternative prin-

It should be noted that many philosophers and others who attempt to explain human behavior do not assert a determinist hypothesis although they may use one as a heuristic device, making no truth-claims at all for their interpretive model. Such a use of a determinist hypothesis asserts nothing; it merely proposes that we consider data as if a determinist hypothesis were true. Consequently, we are not concerned with those who proceed in this manner; used in this way, a determinist hypothesis is irrelevant to the philosophical issues we are investigating.²²

It is quite another matter, however, to hold determinism as a hypothesis in the sense that it is accepted as an adequate theoretical account of the data of experience. When someone holds a determinist hypothesis in this sense, he indeed is not asserting anything as he would if he asserted a factual statement. Still, he is claiming that determinism is a good explanation of the data. This claim amounts to saying that if we wish to make sense of the world, we ought to consider the data from a determinist perspective, and not merely take them at face value as does the naive realist.²⁸

The foregoing clarifications show that determinism is not meaningless; it is coherently defined. It is frequently argued, however, that although determinism is a meaningful position, the freedom/determinism controversy is nothing more than a muddle.

ciple of human actions, and that principle explains human actions just to the extent that it excludes the naively realistic explanation of the experience of choice.

²² Someone using the determinist hypothesis as a mere heuristic device can consistently assert the reality of freedom and reject every attempt to establish a determinist hypothesis. For example, such a person might use a determinist hypothesis to guide an investigation into causal conditions of human actions for the precise purpose of altering those conditions to the extent that they limit the scope of self-determination.

²³ See Kenner, op. cit., p. 234: "Now, it is customary these days to treat 'Every event has a cause' as a heuristic maxim. It is certainly true

²³ See Kenner, op. cit., p. 234: "Now, it is customary these days to treat 'Every event has a cause' as a heuristic maxim. It is certainly true that the proposition can neither be proved nor disproved, but it would be a joke in very bad taste for an elderly scientist to tell his apprentices that they must always go on looking for a cause unless the elderly scientist believed that there, in fact, always was a cause. 'Always look for a cause' is only honest advice if it is believed that there always is a cause. When the determinist formulates his position in terms of causality the proposition 'Every event must have a cause' must be taken as a statement of fact. It is quite another matter that this key proposition in the formulation of the determinist position can neither be proved nor disproved." Also see Berofsky, Determinism, pp. 282-90.

One way of claiming that the freedom/determinism controversy is a muddle is to claim that the whole debate results from a confusion between two irreducibly different kinds of propositions—empirical propositions and propositions that are formal elements in a conceptual framework. Obviously, both a determinist hypothesis and its contradictory are statements about facts, and yet neither is a generalization merely contingently true. But does this in fact establish the meaninglessness of both positions?

To assert that it does is simply to adopt a traditional empiricist stance with regard to the issue we have undertaken to investigate in this paper. To invoke the analytic/synthetic distinction when an instance of that very distinction is being questioned serves only to block inquiry. Our inquiry is partly an attempt to resolve the question whether the issue between deterministic and non-deterministic positions is decidable; to eliminate the controversy by a mere stipulation that would make the issue in principle undecidable is simply to beg the question.²⁴

"Soft determinism" is another version of the claim that the freedom/determinism controversy is meaningless. Positions of this sort assert that the experiences which most people claim to have and say lead them to think they are free cannot be eliminated. However, a soft determinist tries to account for these experiences by using the same interpretive model he uses generally to account for natural events and processes. Thus the data are explained in a way that would exclude the possibility of free choice among alternatives. Soft determinism affirms the experience of self-determination: people decide, choose and act, and are in no way constrained to do so.²⁵ But, according to soft determinism, the only

²⁴ R. L. Franklin, in *Freewill and Determinism* (New York, 1968), pp. 20-36, shows from a point of view different from ours that this issue cannot be easily classified as either wholly empirical or wholly conceptual

cannot be easily classified as either wholly empirical or wholly conceptual.

²⁵ See Moritz Schlick, "When Is a Man Responsible?" in P. Edwards and A. Pap, eds., A Modern Introduction to Philosophy (New York, 1957), pp. 51-58; A. J. Ayer, "Freedom and Necessity," in Philosophical Essays (New York, 1965), pp. 271-84. Schlick and Ayer are representative soft determinists; the view found its classic formulation in David Hume, An Inquiry Concerning Human Understanding, Section 8. See Edward D'Angelo, The Problem of Freedom and Determinism (Columbia, Missouri, 1968), pp. 17-47.

thing people can choose to do is what in fact they do choose to do. That position is determinism as we have defined it.²⁶

Another way to claim that the freedom/determinism controversy is a muddle is to contend that reasons and causes need not be incompatible.²⁷

One version of this contention is the view that reasons are a type of cause.²⁸ This version is a variation of soft determinism, which was considered above.

Another version of the contention that reasons and causes are compatible is the position that they can be referred to only within languages that have utterly distinct and irreducible uses, and that reasons-language and causes-language are distinct ways of talking about the same thing.²⁹ An example of this position is the distinction between the theoretical and practical viewpoints.

According to such views, for practical purposes interpretive models that treat actions as different from events cannot be dispensed with. Nonetheless, self-determination cannot be found among the *facts* in the world. It would follow that from a theoretically adequate point of view, all "actions" must be explained by the interpretive model employed to explain other natural events and processes.³⁰

Anyone who tries to dissolve the controversy in this way faces the following dilemma.

On the one hand, if the theoretical and practical viewpoints are semantically isolated from each other, they have no common sub-

²⁶ See Richard Taylor, "Determinism," The Encyclopedia of Philosophy, Vol. II (New York, 1967), p. 367: "To say that a given action was free means at least, according to these writers [who say that Hume's analysis of free choice was superficial], that the agent could have done otherwise given the very conditions that obtained, not just that he could have done otherwise if something within him had been different."

²⁷ See Fredrich Waisman, "Language Strata," in A. Flew, ed., Logic and Language, 2nd ser. (New York, 1953), pp. 28–31; Donald Davidson, "Actions, Reasons, and Causes," Journal of Philosophy, LX (1963), pp. 685–700; Ayer, The Concept of a Person, pp. 266–67; M. C. Bradley, "A Note on Mr. MacIntyre's Determinism," in Bernard Berofsky, ed., Free Will and Determinism (New York, 1966), pp. 256–64; D. G. Brown, Action (London, 1968), p. 144.

²⁸ Davidson's position is a good example of this view.

²⁹ This seems to be Waismann's position.

³⁰ Immanuel Kant, Critique of Pure Reason, A 189-211 = B 232-56; A 538-58 = B 556-86; see also Jordan, op. cit., pp. 53, 64, and 66.

ject matter. Two semantically isolated systems have no resources for identifying as the *same* any of the referents of their wholly disparate sets of expressions. It follows that if the semantic isolation is complete, then the proposal of the two viewpoints is simply irrelevant to the controversy we are analyzing here, because there is then no way to say that freedom and determinism pertain to distinct ways of viewing the *same* reality.³¹

If, on the other hand, the semantic isolation is not complete, and common reference is possible, then the distinction of viewpoints cannot succeed in eliminating the controversy.

Someone could try to avoid this dilemma by claiming that the semantic isolation of the two viewpoints is overcome by means of a metalanguage within which the common reference is established. But the dilemma simply recurs at this new level. Such a metalanguage can do one of two things. It may simply describe the formal properties both sub-languages share, not adopting the concepts of both of the sub-languages that make reference to human action possible, and thus side-step the problem of establishing a common subject matter. Or the metalanguage may be rich enough in semantic resources to establish commonality of reference between the sub-languages. But in this case the freedom/determinism controversy remains.

Having shown that determinism is the form of a set of hypotheses that need not be incoherent, and having shown that the freedom/determinism controversy is a legitimate one, we next clarify the logic of the self-referential argumentation that we believe can succeed in refuting determinism. First, we distinguish self-referential inconsistency both from formal inconsistency and from semantic problems that lead to meaninglessness. Second, we list the properties of valid self-referential argumentation.

Formal inconsistency, semantic problems that lead to meaninglessness, and self-referential inconsistencies are sometimes lumped together as inconsistencies, but they ought to be distinguished from each other.

Formal inconsistency is self-contradiction. The elements of an expression that is formally inconsistent, taken separately, could

⁸¹ See Lucas, op. cit., p. 18.

be used in formulating a true or false statement. But the combination of these elements cannot be used in formulating any statement whatsoever, because these elements simply exclude one another.

Semantic problems that lead to meaninglessness arise because of the impossibility of determining the referents of expressions which are of the type used to refer. Semantic paradoxes exemplify this sort of meaninglessness. The argument advanced above against the claim that freedom and determinism could be rendered compatible by being semantically isolated shows the semantically paradoxical character of that claim.

Self-referential inconsistencies are entirely different from formal inconsistencies and semantic problems that lead to meaninglessness.

An example of self-referential inconsistency is the statement, "I can't utter a sentence in English." Faced with a sentence such as this, most people have the feeling that it is somehow self-contradictory or paradoxical. There is indeed something wrong with this sentence, but it is not formally inconsistent nor does it involve any semantic problem that would lead to meaninglessness. It is both coherent and has definite reference, but it is false. It is false because included in the scope of its reference is a fact which falsifies it, namely the fact that its own utterance is the utterance of a sentence in English.⁵²

Of course, this example of self-referential inconsistency is not philosophically interesting except as an example. But there are other examples of self-referential inconsistency that are in themselves philosophically interesting. We will argue that any determinist hypothesis (in the sense defined above) is a philosophically interesting instance of a self-referentially inconsistent position.

Since the logic of this sort of argumentation has been explained elsewhere, here we need only list some important charac-

³² The distinction between the self-referential inconsistency described here and the self-reference involved in semantic paradoxes is completely overlooked by Lucas; this vitiates his criticism (*ibid.*, pp. 19, 116–24, 144, and 166) of self-referential arguments—other than his own—against determinism.

teristics of this kind of argumentation to obviate possible confusion.38

- 1) An argument exposing self-referential inconsistency is not a reductio ad absurdum argument as this expression is normally understood; a reductio ad absurdum exposes formal inconsistency.
- 2) Arguments intended to exhibit the self-referential inconsistency of a position are not *ad hominem*. In fact, a position can be shown to be self-referentially inconsistent even if no one actually asserts it.
- 3) Generalizations may be self-referentially inconsistent. Self-referentially inconsistent statements do not depend upon egocentric particulars. For example, the generalization, "All attempts to generalize without restriction necessarily lead to meaningless utterances," which we criticized above, is a self-referentially inconsistent generalization. The argument against that position was the sort of argument we are going to articulate against determinism.
- 4) Statements that are self-referentially inconsistent are false, but not contingently so; they are inevitably falsified by a fact that is inevitably given in their very utterance.
- 5) The contradictories of self-referentially inconsistent statements are necessarily true, but nevertheless refer to facts.

We might say that self-referentially inconsistent statements "self-destruct." They are not logical non-entities as syntactically incoherent expressions are. Nor are they necessarily empty as are semantically paradoxical expressions. Self-referentially inconsistent statements have coherence and content enough to demand and to deserve to be tested by the facts. But they inevitably and immediately fail that sort of test, because they inevitably give us all the evidence we need to falsify them. They carry that which falsifies them with themselves.

Joseph M. Boyle, Jr., "Self-Referential Inconsistency, Inevitable Falsity, and Metaphysical Argumentation," Metaphilosophy, III (1972), pp. 26-44. This analysis depends in part upon Jaakko Hintikka's discussions of "performative inconsistency" in Knowledge and Belief (Ithaca, 1962), pp. 64-78; and "Cogito Ergo Sum: Inference or Performance," The Philosophical Review, LXIX (1962), pp. 3-32. See also Malcolm, op. cit., pp. 67-69.

34 See above, pp. 10-11.

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In this section we show that determinism as defined above is self-referentially inconsistent. The argument has the following steps. First, determinism involves an appeal to a rule of simplicity. Second, a rule of simplicity is normative. Third, the normativity of a rule of simplicity is distinct from the necessity of a factual conditional statement. Fourth, our explanation of the distinction between the force of a norm and that of a factual conditional is not question-begging. Fifth, the normativity involved in this rule of simplicity presupposes a kind of unconditional normativity. Sixth, this kind of normativity falsifies determinism.

First, then, determinism involves an appeal to a rule of simplicity.

As we have seen, determinism in the sense in which we are concerned with it is the common form of a set of hypotheses. Inasmuch as any version of determinism is a hypothesis, it surely is neither a self-evident truth nor a statement of simple fact. Furthermore, as a hypothesis it cannot be reached as the conclusion of a deductive process from premises of these sorts. Any determinist hypothesis attempts to provide a unified, coherent account of human behavior including the data that may lead people to believe they can freely choose among alternatives.

Someone who does believe in free choice might say that he needs no explanation of his experience of choice. Confronted with such an apparently obtuse refusal to take seriously a serious attempt at explanation, any determinist no doubt would reply that if one wishes to achieve an understanding of the facts of experience, then coherent explanations cannot be rejected without a reasonable ground.

In responding thus, the determinist would say nothing remarkable. Implicit in the proposal of any explanatory hypothesis is the demand that we avoid needlessly multiplying factors. And, clearly, the obtuse anti-determinist who persists with no reasonable ground in believing that he is not mistaken in his naively realistic interpretation of his experience of choice, rather than accepts the simplicity of a determinist account of it, precisely does multiply factors without necessity.

It should be noted that a rule of simplicity is not an extrinsic assumption which determinists need employ only on the occasion of disputes. Rather, a rule of simplicity is an essential ingredient in the assertion of any determinist hypothesis, as it is in the assertion of all explanatory hypotheses. In this use of a rule of simplicity we claim to find the element in any version of determinism whereby it is falsified.

This brings us to our second point. A rule of simplicity—for example, Ockham's Razor—is normative. In its traditional formulation, Ockham's Razor can be expressed as follows: one should avoid the needless multiplication of entities. What counts as needless—that is, one's standard of simplicity—does not matter here. What does matter is that there be a rational ground for deciding among hypotheses. This decidability presupposes boundary conditions among which is one or another standard of simplicity. Without some standard of simplicity, one cannot succeed in falsifying a hypothesis, because one cannot reasonably rule out ad hoc complications introduced to accommodate facts that would otherwise falsify the hypothesis.

A rule of simplicity expresses a relationship between a purpose sought in attempting to explain and a means necessary for achieving that purpose. A rule of simplicity is thus a norm expressible in the form of a conditional: if one wishes to achieve any purpose by an attempt at explanation, then one may not arbitrarily introduce complications.

Inasmuch as it is a rule, a rule of simplicity is not a statement of fact, although it is related to the facts which make up the process of scientific inquiry itself. A rule of simplicity involves a claim about a relationship between two aspects of that process—namely, a purpose of the process and one of the conditions necessary to achieve it.

Inasmuch as it is a rule, a rule of simplicity is obviously not a logical truth. Like any other conditional norm, it is based upon some real information about how to go about doing something we might wish to do. But we need not attend to that information unless we really do wish to achieve the proposed purpose. Obviously too, conditional norms are not completely arbitrary stipulations, although the goals proposed by some—perhaps even by all—conditional norms can be accepted or ignored arbitrarily.

This brings us to our third point: the normativity of a rule of simplicity is distinct from the necessity of a factual conditional.

Conditional norms are not merely conditional factual sentences. For example, the factual statement, "If the goal of scientific inquiry is achieved, Ockham's Razor has been followed," is not identical with the conditional norm, "If one wishes to achieve the goal of scientific inquiry, one ought to follow Ockham's Razor." The latter is a rule for action, not a statement of fact.

A rule of simplicity, inasmuch as it is a rule, makes a demand which a factual statement could not make. It presents us with a norm. When someone—like the irrational anti-determinist discussed above—ignores this norm, it becomes clear that this rule depends on another more general rule governing the relation between the ends we seek and the means to those ends. In calling the arbitrary anti-determinist "irrational," we assume this implicit rule: we should do what is efficient for achieving our ends.

We do not mean to suggest that anyone ought to pursue immoral ends. What we do mean to suggest is that, prescinding from the morality of one's ends, one ought at least to be efficient in the pursuit of his ends. This rule, understood in this way, is so obvious a requirement for the rational pursuit of any end that everyone normally observes it without reflection.

If anyone clearly understands what it is to have ends and to act in pursuit of them, then he understands that one should do what is rationally necessary to achieve his ends. That which is a means and that which is an end also may be involved in many other mutual relationships. In such other relationships the means need not be rationally necessary—i.e., efficient for bringing about the end. The words "means" and "end" often are used ambiguously to refer, on the one hand, to that which is the means or the end, or, on the other hand, to the means or the end as such. But the means, precisely insofar as it is a means, is rationally required for achieving the end as end.

Thus, it is possible to refer to something as a means even though it is not the rationally necessary way of achieving an end. Nevertheless, inasmuch as anything is not rationally necessary to achieve an end, precisely to that extent it is not strictly speaking a means.

In the context of the consideration of a rule of simplicity, to deny what we have just said would entail the view that someone could want the end of theoretical explanation and still reasonably refuse a rationally necessary means—that is, conforming to some rule of simplicity.

At this point the defender of determinism will remind us that he can propose a deterministic account of rules and of their normativity. This brings us to our fourth point. We must not beg the question by introducing interpretations of rules and their normativity that either imply or presuppose freedom.

A determinist can admit a difference between conditional statements and conditional norms which he can explain on his own ground. Conditional norms might be explained, for instance, as expressions of emotion or as causally determined exhortations. The general rule of efficiency we have described might be explained, for instance, as a key component in the survival mechanism of the organism.

For the sake of argument we will grant any such deterministic account of normativity in terms of antecedent determining conditions. But in conceding this point, we mean to hold determinists to all the implications of determinism, including those implications which determinists ignore when involved in arguments with someone who disagrees with them. In particular, we wish to call into question the consistency between any determinist's account of normativity and his assertion of his position, involving—as it necessarily does—a rule of simplicity as an essential ingredient.

Any determinist hypothesis must be able to account for the existence in the world of conflicting attempts to account for the data of human experience—there are positions that contradict determinism. A determinist might try to account for this fact by saying that both positions are determined effects of different sets of antecedent conditions.

Nevertheless, every determinist makes the claim that his account of the data is superior to his opponent's, and therefore ought to be accepted in preference to the alternative position. The question is, what meaning can a determinist attach to the word "ought" in this context? Certainly no determinist can mean what anyone who would disagree with him would mean by saying that we ought not accept determinism. Someone rejecting determinism can distinguish between the force of a norm and the force of determining conditions. But, any determinist must say that among the

sets of determining conditions there is one set of determining conditions that determines him to say "ought" and determines whatever effects follow from his utterance of "ought." And he must give the same account of his opponent's utterance of "ought." This result will not seem odd to a determinist; it follows logically from any form of the determinist hypothesis.

On his own account of "ought," then, a determinist is perfectly able to say we ought to accept his position and ought not hold the contradictory position. But on those same grounds he must also grant that someone who has articulated a contradictory position is equally able to say that we ought to accept his position and ought not accept a determinist hypothesis.

No determinist can avail himself of a distinction between positions in fact maintained and positions justifiably maintained in any sense of that distinction which a determinist account would preclude. Where normativity is explained in terms of antecedent determining conditions, the exclusion of any position can be achieved only by excluding the very articulation of that position. But inasmuch as determinism is a more economical account of a set of facts that initially present themselves as including the naively realistic interpretation of the experience of choice—which any determinist hypothesis explains as an illusion—the contradictory position is necessarily articulated whenever any determinist position is articulated.

It follows that a determinist hypothesis cannot exclude its contradictory in the only sense of "exclude" that is available to a determinist. Any determinist hypothesis implies the impossibility of excluding its counterpositions, but necessarily presents its own counterposition in its very articulation. But a determinist, in arguing with his opponent, precisely does want to exclude the contradictory position. Otherwise there would be no point in the determinist's entering the argument, because the utterance of a sentence without the intention of excluding the contradictory is not a statement.

The conclusion just reached—namely, that any determinist in arguing with his opponent is both attempting to exclude his opponent's position and, in principle, incapable of excluding it in the required sense—points to the basis of the self-referential incon-

sistency of determinism. But further clarifications are needed to show precisely how determinism is self-referentially inconsistent. These clarifications follow.

Someone might say that the argument we are articulating depends upon a certain interpretation of normativity but that no particular interpretation of normativity can be taken as its uniquely correct interpretation. This objection fails to take account of the following distinction.

The argument we are articulating does not depend upon restricting permissible interpretations of normativity, except that any interpretation of normativity incompatible with determinism is excluded. It is immaterial which of the possible interpretations of normativity a determinist adopts, so long as he adopts one compatible with determinism.

The argument we are articulating turns upon the fact that any determinist in attempting to establish his position makes use of a norm. If a determinist adequately accounts for normativity within his own framework, then that normativity will not exclude—in the required sense of "exclude"—his opponent's position. But if a determinist does effectively exclude his opponent's position, he implicitly invokes a normativity inexplicable within the framework of any determinist hypothesis.

The point just made can be clarified by consideration of one way a determinist might try to escape.

A determinist might claim that although he cannot exclude the existence of a position counter to his own, still his own position has some sort of superiority that can be explicated within a deterministic framework. He might propose, for example, that his position is supported by reasons and evidence, and that his opponent's is not. An opponent, of course, would reply that he too has reasons and evidence for his position. Any determinist, therefore, will be compelled to claim that the reasons and evidence for his position are superior to the reasons and evidence purportedly supporting the contradictory position.

But a determinist must explain what meaning he gives to "superior" in this context.

One account of superiority unavailable to a determinist is the claim that determinism is superior to its opposite simply because determinism is true. This is clearly question-begging. Since any

version of determinism is a hypothesis, it cannot be asserted without appealing to a norm—namely, a rule of simplicity. As soon as such an appeal to a norm is made, we return to the beginning of the argument just completed.

There are various available accounts of superiority a determinist might offer. For example, he might claim that his position facilitates better adaptation to the environment than does that of his opponent. Implicit in this claim would be the additional claim that certain things (that are antecedently determined) count as better adaptations to the environment than do others.

An alternative account of "better adaptation," however, will remain possible, and, as we have seen, no determinist can exclude the fact that arguments are offered to articulate this possibility. A determinist's only resort is to defend himself once again by a similar strategy. But whatever defense he offers, he inevitably will be faced with a counterclaim at this new level, and he will face the same difficulty at any further level to which he might regress in his attempt to evade the facts which, as we propose to show, inevitably falsify his position.

It is important to note that while the concept of adaptation to the environment was used as an example in the preceding paragraph, any other concept a determinist could adopt to articulate the notion of "superiority" in a way consistent with his position would inevitably lead him into a similar dialectic. This is not surprising; conditions can be accounted for factually only by antecedent conditions, and these again by antecedent conditions, and so on ad infinitum.

This brings us to our fifth point: the normativity involved in a rule of simplicity presupposes a kind of unconditional normativity.

Having shown that the use of the notion of normativity to distinguish between factual statements and conditional norms does not beg the question, we may now turn to a fuller consideration of the implications of the fact that anyone who takes a deterministic position appeals to a rule of simplicity which is a conditional norm. As we have said, this conditional norm presupposes a more general rule regarding means and ends—namely, the rule of efficiency. The rule of efficiency is not conditional in the same way that a rule of simplicity is.

It will be objected that this is not so. On the one hand, it will be argued, conditional norms express a necessity that is merely conditional, while an unconditional norm would express an unconditional obligation. On the other hand, it will be argued, the uses of conditional norms are perfectly understandable and straightforward; they involve no metaphysical assumptions, whereas the very existence of any unconditional norm is problematic, and any attempt to establish such a norm seems to lead to hopeless metaphysical muddles. An example of such muddles is the difficulty Kant had in defending his categorical imperative.

Taking the second objection first, we wish to make clear that we do not accept Kant's categorical imperative. We have rejected Kant's use of the phenomenon/noumenon distinction to make room for the possibility of self-determination. Kant's position is that theoretically a deterministic account of the phenomena of choice is necessarily true.³⁵ Our position is that any deterministic account of the experience of choice is necessarily false.

The rule of efficiency is a norm which in one important respect is unconditional: the rule regulating how one ought to act in reference to any end whatsoever cannot depend upon conditions necessary for any particular end. Of course, the rule of efficiency is not unconditional in the sense that efficiency is the sole requirement to be met in pursuing one's ends.

Someone might object that conditional norms are simply conditional. In one sense this is obviously true: there is no necessity to be concerned with the means unless one is interested in the end. But in another sense the force of a conditional norm is not merely conditional. In the analysis of the relationship of means and ends under the third point above, it has been shown that there is a sense of "necessity" in which conditional norms do involve necessity. This necessity might be appropriately expressed by saying: "One ought to accept the means necessary to achieve the end one wants."

So long as the irreducibility of the normative element of this rule is recognized, it matters not whether this normativity is expressed in a general formula, such as that just proposed, or

³⁵ See Immanuel Kant, Critique of Pure Reason, A 444-51 = B 472-79; Critique of Practical Reason (Prussian Academy Edition), Vol. V, pp. 19-106.

whether each and every "conditional" norm is recognized to have a normativity reducible neither to the factual necessity of human wants and interests, nor to factual connections between that which is a means and that which is an end, nor to both of these together. In case each conditional norm is considered to have its normativity in itself, the norms hitherto thought of as conditional may be taken to mean that one ought to accept certain means whenever one wants the ends for which those means are necessary. On this interpretation, conditional norms would be regarded as conditional not with regard to their normativity, but rather with regard to some condition bearing upon their content.

This brings us to the sixth point: the kind of normativity we have been discussing inevitably falsifies determinism.

There are many senses of the word "ought" irrelevant to this argument. Consider the following sentences: "It is September, and soon the leaves ought to be changing," and "One ought not say 'ain't'." In such uses the word "ought" is not used in the normative sense at issue here.

Consider the following sentence: "One ought not accept as coherent the expression 'Both P and not P'." "Ought" in this sentence may be said to have normative force, but, if so, its normativity is not the same as that of "ought" in a simplicity rule. For if someone says that one ought not accept as coherent the expression "Both P and not P," then if one understands what is said, one cannot help but comply.

However, the normativity of a rule of simplicity is a sort of necessity. It is not the necessity of facts, nor is it logical necessity. Logical necessity is a requirement for formal coherence. This requirement must be met even as a condition for violating a rule of simplicity.³⁶

³⁶ Most of those who have argued that determinism is self-refuting fail to distinguish logical necessity from the necessity of a norm. A. E. Taylor, "Freedom and Personality," pp. 273-74; Knox, op. cit., p. 69; and Lucas, op cit., p. 116, distinguish choosing from thinking—which correlate with norms and logical laws—but assume that what applies in thinking and judging must also apply in choosing and acting. Lucas' elaborate attempt to refute determinism by way of the self-reference of Gödel's theorem is based on his ignoring of this distinction. Thus his argument—if it is not question-begging—proves that human thinking

The normativity of a rule of simplicity insofar as it implies a general rule of efficiency is a condition for action which in fact may or may not be fulfilled. There must be some factor operative when the normativity of the rule of efficiency is fulfilled that makes it be fulfilled, and operative when it is not fulfilled that makes it not be fulfilled. This factor cannot be reduced to causal determination, or this normativity would be eliminated. But, as we have seen, normativity is indispensible to any position trying to account for the facts and exclude possible counter-positions.

The factor accounting for the fulfillment or non-fulfillment of the irreducible normativity is what the determinist wishes to eliminate. This factor we call "free choice."

Moreover, this position is the contradictory of determinism. Determinism as defined in Section II is a class of hypotheses sharing the common position that no one can freely choose among alternative courses of action. The conclusion of the argument presented here, insofar as it shows the falsity of determinism, is that someone can choose among alternatives. The two positions, as contradictories, differ only by a sign of negation. Thus the word "can" is used with precisely the same meaning or meanings in both positions. Consequently, no determinist can escape the force of this argument by exploiting the variety of uses of "can."

The inconsistency in which a determinist finds himself is unavoidable; therefore, determinism is not only false but inevitably false. It follows that the contradictory of determinism—the assertion of the possibility of free choice—is necessarily true. But the necessity of this assertion does not mean that it lacks reference to the real world. On the contrary, inasmuch as determinism itself refers to the real world, the position contradictory to determinism has reference to the real world in precisely the same way.

It is important to note that we do not claim that we or any determinist or anyone else either has done or will do a free act. What we do assert is that in appealing to normativity any determinist inevitably implies that someone *can* do a free act.

Since this point is very important, we will exemplify it by an everyday instance. If someone asks the question, "Are you awake,

cannot be explained in physical terms—it does not prove that man can freely *choose* among alternatives.

dear?" and the reply is "No," this fact does not show that the individual replying is really awake. One can utter the statement "No," in his sleep and may have done so on this occasion. Consequently such a reply does not demonstrate any self-referential inconsistency. But if the question is formulated more carefully: "Can you respond to the question, 'Are you awake'?" and the reply is "No," then the reply is inevitably falsified. While it remains possible that the response was uttered during sleep, it is nevertheless a response. As such it indicates that the individual uttering it could reply. What precisely is meant by "could reply" is irrelevant provided that the expression is used in the same sense in both the question and the interpretation of the significance of the response.

The distinction just clarified seems to have been overlooked by many who have attempted to show that determinism is self-referentially inconsistent. We believe that the failure to make this distinction is one reason why many previous attempts to show determinism self-referentially inconsistent have begged the question. Anyone arguing that determinism is self-referentially inconsistent but overlooking the distinction between acting freely and being able to act freely is bound to argue fallaciously. He is bound to argue fallaciously since he tries to arrive at a conclusion he cannot legitimately draw from the material at his disposal—determinism itself. Since he cannot legitimately draw his conclusion from determinism he must import something. Whatever he imports, he imports illegitimately—since a determinist can consistently deny it—and thus the opponent of determination begs the question.

Paul Weiss, for example, says:

If a determinist is willing to affirm that his theory is true, he must affirm that it is something which can be freely considered

³⁷ Wiggins, op. cit., p. 134, in considering the reply often given to the Marxist claim that the beliefs of capitalists are due wholly to social conditioning, makes this point clear: "The reply [that Marxist beliefs also are conditioned] is no better than ad hominem because it leaves perfectly open the possibility that beliefs, capitalist, marxist, and all others, are uniformly tainted by the causality which determines them. It cannot tell against this that if it were so then nobody would have the knowledge of this fact but at best an accidental true belief. Perhaps that is how things are."

and responsibly adopted, and thus that those who know it are so far not determined by an alien power. [our emphasis] 38

As we have seen above, a determinist need not admit what Weiss demands he must. Thus Weiss' attempt to show that determinism is self-referentially inconsistent begs the question. The argument articulated here avoids this fallacy because it avoids claiming that anyone does free acts and instead claims only that someone can choose freely.

The scope of the conclusion—that someone can freely choose among alternative courses of action—must not be misunderstood. The argument establishes the truth of this conclusion only in the sense and precisely to the extent that it is denied by someone who defends determinism in the sense in which we have defined determinism in Section II above. Nevertheless, it follows from this modest result that it is no longer naively realistic to claim that someone can make a free choice.

Yet the rationally grounded claim that we are articulating—limited precisely because it is rationally grounded—does not preclude the possibility that people are determined in some senses of "determined" which a determinist hypothesis does not affirm and which, therefore, the conclusion reached here does not deny.

The conclusion reached here might be regarded as a new form of compatibilism. Clearly, someone who accepts the conclusion reached here cannot be called a "compatibilist" in the sense in which Hume, Kant, and modern soft determinists are compatibilists. Such positions were excluded when it was shown that the freedom/determinism controversy is not a meaningless muddle.

Compatibilism in the new sense suggested here involves the following points. First, in the sense in which a determinist denies that we can choose freely, the argument we have articulated shows that someone can choose freely. Second, the languages used to refer to the natural world and to the domain of human actions are not semantically isolated. Third, whatever we may legitimately say about the natural world must allow for the possibility of free choice in the sense in which it has been demonstrated to be possible.³⁰

³⁸ Weiss, op. cit., p. 25.

³⁹ See Henry Margenau, Scientific Indeterminism and Human Freedom (Latrobe, Pennsylvania, 1972), pp. 86-87; Allan M. Munn, Free-Will and Determinism (Toronto, 1960), pp. 212-13.

The natural world must allow for the possibility of the freedom here demonstrated because if the natural world did not allow for that possibility, it would follow that there are contradictions in reality. But there cannot be any contradictions in reality, as Aristotle has shown in his *Metaphysics*.⁴⁰

Some might object that the claim that the world of nature must allow for the possibility of free choice implies that the natural world includes something unintelligible. To support this objection it might be pointed out that the natural aspect of human acts—if they are free—could not be fully accounted for by the same kinds of explanations that account for other natural events and processes.

This objection misses the point of the argument. Free acts that did have a natural aspect would not be inexplicable; such acts, if there are any, have necessary and sufficient conditions. Some of these conditions would be found in the world of nature, but one not found there would be the ability to make free choices, an ability now demonstrated to be real. To deny that the operation of this ability could contribute to rendering intelligible anything in the natural world is simply to reassert a position now shown to be untenable.

Finally, that the possibility of free choice is not completely explicable in the language used for explaining natural events and processes does not imply that freedom of choice itself is unintelligible. To draw such an implication, one would have to assume that everything whatsoever must be explicable in such a language. To advance such an assumption against the argument articulated here is simply to ignore the force of the outcome of that argument: that there is a statement, necessarily true of the world, which is not completely explicable within the language of natural science.

IV

In this section we obviate some possible misunderstandings of the position articulated here. We also suggest briefly how we might deal with one important form of determinism distinct from that refuted in this paper.

⁴⁰ Metaphysica iv, 1005b35-1009a5.

A possible objection to the argument presented here is that although the determinist thesis is self-refuting, it could still be true. Such an objection might take several distinct forms. One is Jordan's view based on a distinction between the theoretical and practical viewpoints. We have already discussed this view above.⁴¹

Another form of this objection would be the claim that self-referential arguments are mere logical exercises without relevance to the real world. If this means that one either engages in mere logical exercises or is restricted to assertions about contingent matters of fact, it also means that the analytic/synthetic distinction has been taken for granted once more. In virtue of that assumption, the claim amounts to no more than an a priori prohibition of the investigation undertaken and carried through here.

However, if this objection is not based on an assumption of the analytic/synthetic distinction, we think it sufficient to reply that the argument presented here does falsify the determinist position by confronting it with a counterinstance factually given—given in the very expression of any determinist hypothesis. Thus the present argument against determinism is no mere logical exercise; it deals with the world in which the determinist in fact asserts his position.

Of course, this objection might arise from a confused awareness of a point already clarified. The point in question is the distinction between concluding that someone can choose freely and concluding that someone is choosing freely. If one takes this distinction into account, he can understand why the conclusion reached here is true even if there happens not to be a single human act that cannot be explained deterministically, just as if determinism were true.

Another objection is that the self-referential argument only shows determinism false to someone who wishes to propose it as true, and that therefore determinism is only contingently false, not necessarily so. There is, of course, an important point here. A determinist thesis can articulate a coherent picture of the world; it can describe a possible state of affairs. But such a description of a possible state of affairs is odd in that, as we have shown, it is inevitably falsified.

⁴¹ See above, pp. 17-18.

This inevitability does not depend upon the fact that anyone actually happens to assert a determinist hypothesis. Even if everyone were to hold determinism questionable, its falsification would arise inevitably in the mere consideration of what would be involved in asserting it.

Another possible misunderstanding may arise in regard to the contention that determinism is inevitably false. This contention might be mistaken to mean that all applications of causal accounts to any aspect of human behavior lead to falsity——in other words, that deterministic explanations of human behavior have no legitimate uses. The progress of the sciences of human behavior proves such a view mistaken.⁴²

The self-referential argument, however, is modest in its conclusion. It shows only that exclusivistic attempts to account for human behavior by reference to antecedent conditions are inevitably falsified. If determinism is sufficiently restricted so that it does not exclude the kind of normativity implicit in its use of a rule of simplicity, one need not quarrel with it. But even if much human behavior is determined in various ways, it remains impossible to show that all human behavior must be determined in every respect.

Some who accept the conclusion reached here might object to the status assigned to that conclusion, namely, that it is a necessary truth. For various reasons some philosophers hold it impossible to demonstrate the possibility of free choice. They hold that because of the very nature of freedom, no one can demonstrate man to be free by an argument that exhibits a rational necessity. Their view is that one who believes in freedom must freely choose to believe in it.⁴³

In one sense this is true. Someone could ignore cogent argumentation which in some cases could lead to the necessary truth of

has often been admitted in the history of thought."

43 For example, William James, "The Dilemma of Determinism," in
The Will to Believe and Other Essays (New York, 1956), p. 146.

⁴² See Knox, op. cit., p. 77: "The strength of determinism lies in the fact that our freedom is not absolute. We are not free from the ravages of disease. We are not free to become invisible. This has long been obvious; but what physiology, psychology, and perhaps sociology have done in this century is to show that our freedom is more circumscribed than has often been admitted in the history of thought."

a conclusion, such as the conclusion of the present argument. In another sense, this view is false. If one understands determinism and an effective self-referential argument against it, he cannot help but assent to the self-referential inconsistency of determinism and the necessary truth of the contradictory position.

Finally, we turn to a brief consideration of a different sort c determinism.

Someone might defend a metaphysical reduction to the status of mere appearance both of the normativity and of the non-normative determinacy found within experience. From within such a metaphysical framework, further objections to the possibility of free choice could be constructed. Such objections might be called "determinism," but they would articulate a position different from determinism as defined in Section II above.

What such objections would assert may be clarified by considering an example of a metaphysics that is a simple theory in which it is claimed that ultimate reality is pure intelligible necessity. This theory might be expressed metaphorically by saying that reality is like an intelligible light that simply shines.

Such a metaphysics cannot deny standing in the realm of appearance to positions holding that reality includes the possibility of free choice, and denying that reality is pure intelligible necessity. Such positions contradict the proper theses of this metaphysics, which theses, let it be noted, are also presented to us only in the realm of appearance.

A suitable strategy for carrying out a full-scale refutation of such a metaphysics is obvious. Like the determinism refuted above, such metaphysics cannot exclude any proposition as unacceptable. A light that merely shines has a contrary—darkness—but no contradictory opposite to it; hence, by such a light one cannot see wrongly, and without it one cannot see at all.

But one's denial of such a metaphysics and one's assertion of freedom could not be a mere matter of not seeing. Such a metaphysics cannot rule out any vision as mistaken seeing, since mis taken seeing must be regarded as impossible. And so such a metaphysics cannot exclude the position that free acts are possible; this position must be admitted to share somehow in truth.

The refutation of more sophisticated metaphysical attempts to undercut the ultimate reality of freedom can use a similar strategy.

There are still other senses of "determinism." But we think there are conclusive arguments against all versions of determinism that exclude the possibility that among the conditions for some human act is a capacity of free choice.

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