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GRADUATE SCHOOL

FOUR MODELS OF CAUSALITY

A STUDY OF

FREEDOM, AGENCY AND CAUSATION IN KANT

by

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In this paper I investigate certain aspects of the relation of freedom and causality in the context of Kant's ethics. According to Kant the free will is a cause of some sort; his arguments for such a cause, along with his arguments for universal determinism, are briefly outlined. Kant's solution of the resulting antinomy through the bifurcation of phenomena and noumena, along with the theory of moral incentives, is summarized; the distinction of two senses of "will" in Kant, Wille and Willkür, as proposed by John R. Silber and Lewis White Beck, is found to be useful. Some problems are raised concerning Kant's solution via phenomena and noumena. It is then pointed out that, leaving those problems aside, this removal of the free cause to noumena may free it from the requirements of natural determinism, but it provides no positive notion of how a cause can act freely. Some such notion, within limits, is necessary in view of accusations by determinists that freedom in the sense required by Kant is an inherently empty and nonsensical concept. Kant must then prove that freedom is

in at least some sense intelligible, and this freedom must have two characteristics: (i) two or more alternatives must be open to the choosing agent; (ii) the selection among these alternatives must depend on that agent.

I propose to provide a possible reply for Kant through an examination of causal models. The problem is discussed in terms of efficient, rather than final, causality. The following four chapters outline and evaluate four models of efficient causality with respect to the Kantian problem I have raised.

(1) Determinism. Some historical examples, including references to Democritus, Plato and Aristotle, followed by a consideration of basic features of determinism, lead to the conclusion that determinism fails to fulfill either criterion for a model of free causation.

(2) Indeterminism. Several examples of this "chance" or "randomness" model are given, including short discussions of Epicurean indeterminism and of indeterminacy in modern physics. It is shown that while indeterminism fulfills the first criterion, it fails the second, and thus is inadequate as a causal model for freedom. Nor can it serve as a "loophole" through which other causes might act, as some have held. Finally, attention is drawn to a common argument among determinists, the "determinist dilemma," and it is shown that this argument relies on assuming that these first two models are the only ones available. If

others exist, then, the dilemma will be proven invalid.

(3) Internal Determinism. Examples suggesting the model of a self-determined "unfolding" from a seminal state, possibly directed by a final cause, are proposed. A discussion of the basic features of this model makes clear that it, too, is unsuitable for freedom, failing the first criterion, although it fulfills the second (at least in some sense).

(4) Agent Causality. A fourth model, that of the self-directing person, is suggested by several ancient examples, then clarified by a survey of some modern treatments, particularly those of C. A. Campbell and Richard Taylor. Some basic features of agent causality are outlined and shown to be compatible with the Kantian theory of free will. Agent causality fulfills both criteria for freedom; it is argued that it also possesses the intelligibility which can legitimately be required of such a model. Thus it may serve as a model for the Kantian noumenal free will. While Kant's view of freedom remains questionable on other grounds, it can be defended against the determinist's charge of unintelligibility, and this defense may be found useful in non-Kantian theories of freedom as well.

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NOTE ON ABBREVIATIONS

In this paper the following abbreviations are used in referring to works by Kant. The standard pagination of the Königlische Preussische Akademie der Wissenschaften edition of Kant's works has been used in citation where possible, except for the Critique of Pure Reason, whose standard pagination of the first and second editions, represented respectively by "A" and "B," is given marginally in the Preussische Akademie edition. (Where the Preussische Akademie pagination is used, it is noted by (Pr. Ak.) in the entry below.) All German citations of Kant's works are made from this edition:

Kants Werke. Akademie-Textausgabe. 9 vol. (Unveränderter photomechanischer Abdruck des Textes der von der Preussischen Akademie der Wissenschaften 1902 begonnen Ausgabe von Kants gesammelten Schriften) Berlin: Walter de Gruyter & Co., 1968.

Books

CJ: Critique of Judgment. Trans. with an introduction by J. H. Bernard, Hafner Library of Classics, no. 14. New York: Hafner Publishing Company, 1972.

CPR: Critique of Pure Reason. Trans. by Norman Kemp Smith. Unabridged ed. New York: St. Martin's Press, 1965; Toronto: Macmillan, 1965.

CPPrR: Critique of Practical Reason. Trans. by Lewis White Beck. Library of Liberal Arts. Indianapolis: Bobbs-Merrill Co., Inc., 1956. (Pr. Ak.)

FMM: Foundations of the Metaphysics of Morals. Trans. by Lewis White Beck. Library of Liberal Arts. Indianapolis: Bobbs-Merrill Co., Inc., 1959. (Pr. Ak.)

Justice: Metaphysical Elements of Justice (Part I of the Metaphysics of Morals). Trans. with an introduction by John Ladd. Library of Liberal Arts. Indianapolis: Bobbs-Merrill Co., Inc., 1965. (Pr. Ak.)

Lectures: Lectures on Ethics. Trans. by Louis Infield, foreword by Lewis White Beck. Harper Torchbooks, The Cloister Library, Library of Religion and Culture. New York: Harper & Row, Publishers, 1963.

MFNS: Metaphysical Foundations of Natural Science. Trans. with an introduction and essay by James Ellington. Library of Liberal Arts. Indianapolis: Bobbs-Merrill Co., Inc., 1970. (Pr. Ak.)

Prolegomena: Prolegomena to Any Future Metaphysics. Lewis White Beck's revision, with introduction, of the Carus translation. Library of Liberal Arts. Indianapolis: Bobbs-Merrill Co., Inc., 1950. (Pr. Ak.)

Religion: Religion Within the Limits of Reason Alone. Trans. by Theodore M. Greene and Hoyt H. Hudson, with a new essay by John R. Silber. Harper Torchbooks, The Cloister Library. New York: Harper & Row, Publishers, 1960.

Virtue: Metaphysical Principles of Virtue (Part II of the Metaphysics of Morals). Trans. by James Ellington, with an introduction by Warner Wick. Library of Liberal Arts. Indianapolis: Bobbs-Merrill Co., Inc., 1964. (Pr. Ak.)

Articles

"Old Question": "An Old Question Raised Again: Is the Human Race Constantly Progressing?" Trans. by Robert E. Anchor. (On History, pp. 137-54) (Pr. Ak.)

"Perpetual Peace": "Perpetual Peace." Trans. by Lewis White Beck. (On History, pp. 85-136) (Pr. Ak.)

"Universal History": "Idea for a Universal History from a Cosmopolitan Point of View." Trans. by Lewis White Beck. (On History, pp. 11-26) (Pr. Ak.)

The above articles are included in Kant, Immanuel, On History. Ed. with an introduction by Lewis White Beck. Trans. by Lewis White Beck, Robert E. Anchor, and Emil L. Fackenheim. Library of Liberal Arts. Indianapolis: Bobbs-Merrill Co., Inc., 1963. (Pr. Ak.)

Therefore he willed that the hearts of Men should seek beyond the world and should find no rest therein; but they should have a virtue to shape their life, amid the powers and chances of the world, beyond the Music of the Ainur, which is as fate to all things else; and of their operation everything should be, in form and deed, completed, and the world fulfilled unto the last and smallest.

--J. R. R. Tolkien, The Silmarillion

INTRODUCTION

In any history of the problem of freedom in philosophy the name of Immanuel Kant stands out. Kant recognized as few others have done both the appeal of a doctrine of universal determinism and the need for retaining freedom in human action. His attempt to solve the problem this raises has been examined many times. In this paper, however, I propose to look closely at one aspect of his solution: the presentation of a causal model for the activity of the free will. Does Kant require such a model? If so, which ones are available? Can any of them account adequately for freedom as Kant wishes to maintain it?

As background I will first set out the problem of freedom as Kant saw it, and his solution, the bifurcation of reality into phenomena and noumena as presented in the first Critique. The removal of the free will to the noumenal realm allows it to be preserved from the reign of universal determinism which Kant finds necessary among phenomena. It does not, however, clarify the way in which the free will acts. Determinists have often claimed that the very notion of freedom (except, perhaps, as understood in special senses) is unintelligible, and thus freedom impossible. While Kant admits that noumena cannot be known in the same way as phenomena, he remains obliged to prove the

possibility of noumenal freedom, and thus to answer the charge of unintelligibility. I attempt here to show that this charge can be answered through an analysis of the possible models of causality.

In the third chapter, therefore, I will discuss some general points concerning the "causal models" which will be dealt with. The next four chapters will present the four models which have been identified: determinism, indeterminism, internal determinism, and agent causality. Examples will be drawn from the history of philosophy to illustrate these patterns of causality, their basic features will be briefly outlined, and their suitability for the explication of freedom will be considered, with particular reference to Kant's own position. A concluding section will bring together the results of the analysis for Kant's system and note the fruitfulness of the scheme of causal models for the discussion of freedom and determinism in general.

Freedom and causality are both topics notorious as sites of philosophical debate, and Kant-scholarship is itself nearly an independent field. Thus it is evident that this paper will not cover all parts of these three areas. Freedom and causation will be discussed here only as far as is necessary to provide sufficient grounding for the project of this paper; thus many important and interesting questions must be left aside or indicated summarily.

Similarly, many sorts of objections to Kant's entire attempt, or to various aspects of his system, might be raised immediately by proponents of some philosophical positions, such as the proposal that causality has in fact no relevance to questions of action, free or otherwise, as put forward by modern Wittgensteinian action theorists.¹ These I must leave to be answered in broader discussions of Kant's theory of freedom, except insofar as the success or failure of the arguments of this paper can cast light on the fruitfulness or unfruitfulness of certain approaches. Only those questions bearing directly on my topic can be treated extensively.

Finally, no attempt can be made here to survey exhaustively the historical instances of the four causal models described; such an endeavor would swamp the specific argument of the paper. Examples cited for the different models should be taken simply as illustrative. In particular, the development of a model of agent causality in the seventh chapter does not pretend to be complete or final; many other instances might be found, and many problems can be raised and questions opened which I cannot treat here. Attention will be focused on those aspects of agent causality which are important for the argument. For a fuller and more leisurely treatment, the sources cited in the chapter should be consulted.

I. THE PROBLEM OF FREEDOM IN KANT

The Requirement of Universal Determinism

In the Third Antinomy of the Critique of Pure Reason Kant sets out proofs both of freedom and of universal determinism. The two, in the senses in which Kant attempts to prove them, are contradictory; they cannot both be maintained of the same things. If all things are determined, then none can be free, for Kant supports a meaning of "freedom" incompatible with determinism. Thus the opposing proofs generate an antinomy, a problem which must be resolved by Kant under pain of self-contradiction. In order to understand how Kant reaches this position, we must consider briefly the proofs leading to each of the theses.

The Antithesis of the Third Antinomy maintains that all phenomena must follow universal laws of succession, that one event must follow another in a strictly determined way. This conclusion depends on the general justification of the a priori categories in the Transcendental Analytic:

The possibility of experience is, then, what gives objective reality to all our a priori modes of knowledge. Experience, however, rests on the synthetic unity of appearances, . . . Apart from such synthesis it would not be knowledge, but a rhapsody of perceptions that would not fit into any context according to rules of a completely interconnected (possible) consciousness, and so would not conform to the transcendental and necessary unity of apperception.¹

The unity of experience, in Kant's view, is the necessary condition of any knowledge worthy of the name. That unity is forged by the application of the apparatus of forms of intuition, categories, schemata, and principles, described in the first half of the Critique. But if the result is to be a unity, it must not admit of exceptions. An event which did not follow the rules set forth by the categories would remain outside the unity of consciousness necessary for knowledge. Thus the categories must cover all possible cases, must hold completely without exception, in order to uphold the synthetic unity of experience. In particular, if any appearances are excepted from the law of causality, the unity of experience will be broken. Thus causal law must apply universally.

This law, as applied to experience, is set forth in the Second Analogy of Experience. The principle of causation is used to give an objective and non-arbitrary order to appearances, to sort them into a necessary succession. Thus, while in looking at a house we may visually traverse it from top to bottom or from bottom to top, since those parts of the house are not causally related, in looking at a boat moving down a stream we must see it at a point upstream, then at a point further downstream, and not vice versa, for the stages of the boat's motion causally follow upon one another.² We may inspect the parts of the house in any order we wish, but our inspection of the boat's

movement must begin with its earlier "parts" and continue to its later "parts." If this law of succession is to be non-arbitrary in all cases, however, the causal order must be necessary and completely determinate: one thing must follow another without fail. "This rule, by which we determine something according to succession of time, is, that the condition under which an event invariably and necessarily follows is to be found in what precedes the event."³ Since, given the preceding event, the succeeding event must necessarily be one rather than another, the preceding event "conditions" the succeeding one; it determines it, or provides "sufficient reason" for its being one rather than another. Any less stringent rule would fail as a category, because it would not wholly unify experience, leaving out that event which was not entirely determined to a place in the causal series.⁴

It is this line of reasoning which Kant employs in the proof of the Antithesis.⁵ Transcendental freedom, the beginning of a causal chain not entirely determined by the preceding state, would be an exception to the rule of the Second Analogy. But if this were allowed,

. . . that connection of appearances determining one another with necessity according to universal laws, which we entitle nature, and with it the criterion of empirical truth, whereby experience is distinguished from dreaming, would almost entirely disappear.⁶

The argument from the possibility of experience--

that is, unified experience, structured and synthesized as "knowledge" in Kant's sense--obviously depends on the assumption that there is in fact experience of such a kind, else the experience could be denied along with the conditions of its possibility, defeating the argument. Kant takes it for granted that modern science, specifically Newtonian physics, represents such knowledge. Since physics (and mathematics) is available as a standing example of scientific and organized knowledge, we need not inquire whether it is possible, and so may proceed to ask how it is possible, what its conditions of possibility are.⁷

". . . It seems certain that Kant saw causal knowledge as the only way of guaranteeing the possibility of science, and of science's existence and certitude he never permitted himself the slightest doubt."⁸

It is worth noting that Kant's emphasis on absolute universality here is closely related to that of the Newtonian system which he upholds. The revolutionary character of the laws of motion, and their unique effectiveness for explanation, lay in the fact that they applied to every material object on earth or in the heavens; the law of gravitation must be universal or the point of the theory is lost. As we will see, Kant uses such laws of nature as analogies for the moral law, holding that "knowledge" in his strict sense is limited to those things under universal laws. More importantly, Kant intends to make his theory

the foundation of physics; to deduce certain presuppositions of the latter from the former is the project of his Metaphysical Foundations of Natural Science.⁹ If the laws of physics are to have the universality which Newton (and Kant) want, then Kant's proposed foundation for them must be at least equally universal. Thus Kant has an additional reason for maintaining the absolute universality of causal determination among phenomena: to abrogate it would be to give up the very paradigm of solid and certain knowledge.¹⁰

Kant has thus proven to his own satisfaction that universal determinism must hold among phenomena. Such a determinism is equivalent to "mechanism," that is, the same sort of causation as that operating among bodies of classical mechanics.¹¹ Much later, in the Critique of Judgment, Kant was to question whether mechanism was sufficient to explain the activities of organisms and other seemingly teleological systems.¹² But even here he appears to hold that universal mechanism must be maintained, although teleological explanation is admitted as a heuristic principle while our knowledge is still incomplete.¹³ Thus we may take it that according to Kant, mechanism, or determinism, is universal among phenomena.

It should also be noted that this determinism applies to man as phenomenon as well as to external objects; desires, thoughts, and so forth are also "appearances," and

must be governed by the same laws governing other appearances.¹⁴ The succession of psychological events must also follow according to a rule. If the unbroken unity of the causal system is to be preserved, then the empirical soul, which interacts with the rest of nature, must follow the same rules as those prescribed for nature; it must be an automaton spirituale, to borrow a phrase used by Kant in another connection. Following the same universal laws, it will therefore be predictable, as nature is in Newtonian mechanics.

. . . if we could exhaustively investigate all the appearances of men's wills, there would not be found a single human action which we could not predict with certainty, and recognise as proceeding necessarily from its antecedent conditions.¹⁵

This aspect of the conclusion will raise the problem of freedom for human action, or freedom of the will. For, as the dual structure of the Third Antinomy indicates, Kant has also proven that the will is free and thus not determined.

The Requirement of Freedom

The argument for the thesis of the Third Antinomy is designed to show that there must be at least one instance of causation not following the law of determinism, an absolutely first beginning. This argument does not bear directly on human freedom or freedom of the will, since it is aimed primarily at proving that there must be a First

Cause, in a manner very similar to that of the classical causal proof of the existence of God. However, Kant's statements in the course of the proof make it clear that he has in mind the freedom of the will as well; and, of course, establishing the possibility of one free cause might well provide the foundation for establishing the possibility of many.

In the proof Kant begins with the notion of a thoroughly determined causal system, and calls attention to the problem of an infinite regress. An effect, A, may be fully determined or conditioned by a cause, B, in the sense that the existence of A depends wholly on the prior existence of B. But while B remains unexplained, the whole set of conditions for A has not really been exposed; for whatever conditions B conditions A as well. We must then move to a third member of the series, C, the cause and condition of B, for B must have a determining cause: "the law of nature is just this, that nothing takes place without a cause sufficiently determined a priori."¹⁶ Thus to give the complete set of conditions of A we must give not only B but also C, and we can continue to move past C to C's conditions, and so on. If there is to be a truly sufficient determination, Kant says, the regress must come to an end at some point; and this point would be a cause unconditioned by anything else, an unconditioned condition or uncaused cause. Since it is unconditioned, it is "free"--not deter-

mined by any preceding states or things. It possesses "an absolute spontaneity of the cause, whereby a series of appearances, which proceeds in accordance with the laws of nature, begins of itself."¹⁷ This spontaneity Kant calls "transcendental freedom."

As noted above, this argument could be satisfied by a single spontaneous cause, to save reason from the abyss of seeking a nonexistent sufficient explanation.¹⁸ However, once the possibility of one such cause (and, in fact, its necessity) is proven, the existence of others must also be admitted possible, notwithstanding the fact that such causes within the world would disrupt the unity of experience as proven in the Antithesis.¹⁹ Thus, though it may not be known how such freedom is possible, it must be conceded that it is possible, even within the limits of investigation of the speculative reason.

Much more important than the argument of the Third Antinomy, however, is the moral argument for freedom; and this latter argument is the one most often cited in other defenses of freedom. This argument is mentioned very briefly in the first Critique, but is fully developed only in the Foundations of the Metaphysics of Morals and the second Critique.

In the second edition Preface to the Critique of Pure Reason Kant refers briefly to the notion that "morality necessarily presupposes freedom (in the strictest

sense) as a property of our will."²⁰ As it is later developed, the argument is that the fact of our obligation by the moral law demands freedom as its precondition. Without here rehearsing the entire Kantian doctrine of the moral law, the reasoning may be set forth as follows.

Even the common moral consciousness recognizes the competing claims within itself of duty and inclination. Duty, though, in this situation of conflict, is expressed as an unconditional command to the person, a categorical imperative. The call of duty is the call to follow this imperative for its own sake, not for that of our happiness or any other reason; and since a truly categorical (i.e., universally applicable) imperative can arise only from reason, not from experience, the call can be obeyed only if the acting person (or his "will") can follow reason.

If, however, a rule or maxim is to appear as a command or "ought," it must be the case that the agent being commanded is able to perform the act in question, but does not necessarily do so; if this were not the case, the "ought" would have no meaning. If the agent must necessarily perform the act, then the "law" here is in fact not a moral law but a law of nature; there is no sense in saying that something ought to behave in a certain way if it always does behave in that way and cannot behave otherwise. On the other hand, if the agent could not possibly perform the act, it would be at least odd to say that he ought to

do so; a law of nature makes it impossible. This situation is reflected in the common opinion that a moral law is out of place if it is not possible to obey the law and also possible to disobey it. The call or command is only meaningful as such if the agent is free to obey or to disobey it. If this argument is correct, then this peculiarly moral or "normative" force requires that the agent be free to act or not to act.

Thus in experiencing the obligatory force of the categorical imperative, according to Kant, reason "thereby first realizes that it can of itself be practical,"²¹ that it can have an effect in action, making an event one thing rather than another. And if the action of a human being can thus be controlled by reason, it must to that extent be free of the control of prior natural causes, "wholly independent of the natural law of appearances in their mutual relations, i.e., the law of causality."²² This consciousness of moral obligation, reason's awareness of itself as issuing a command (something which ought to be, but is not necessarily, obeyed unconditionally), occupies a unique position in the critical philosophy; it is a datum which cannot be further analyzed.

The consciousness of this fundamental law may be called a fact of reason, since one cannot ferret it out from antecedent data of reason, such as the consciousness of freedom (for this is not antecedently given), and since it forces itself upon us as a synthetic proposition a priori based on no pure or empirical intuition. . . . it is not an empirical fact

but the sole fact of pure reason, which by it proclaims itself as originating law . . .²³

According to Kant we have no direct consciousness of freedom. We do, however, have a consciousness of the moral law as binding on us in a unique way, not such that it inevitably determines our actions (as would natural causality), but such that it ought to determine our actions, whether in fact it does so or not. Since this "ought" presupposes freedom, our experience of it forms our evidence for freedom.²⁴

One aspect of this argument in particular should be stressed here. It is evident that if the moral law is to be meaningful as an imperative, it must be at least possible for its subject to obey the law. It is also the case, although less obvious, that meaningfulness as an imperative demands that it be possible for the subject to disobey the law. For if the subject had no choice but to obey the law, the "imperative" would be no different from the laws of nature, and "ought" would collapse to merely "does." The peculiar experience of being righteously commanded, but not compelled, to act in a certain way would not exist. If the distinction between a law as determinant and a law as imperative is to be upheld, then the imperative must not fully determine the result; the possibility of its succeeding or failing to do so must be preserved. "Ought" implies "can," but also implies "can not" (as dis-

tinct, of course, from "cannot").²⁵ Thus the experience of the moral law as imperative, according to Kant, proves that at least two outcomes are possible for the agent in a given situation: to obey the law, or to disobey it.

In effect, then, use of the "fact of reason" has enabled Kant to give positive content of a sort to the empty possibility which the argument of the Third Antinomy had demonstrated.²⁶

. . . the moral principle itself serves as a principle of the deduction of an inscrutable faculty which no experience can prove but which speculative reason had to assume as at least possible (in order not to contradict itself in finding among its cosmological ideas something unconditional in its causality). This is the faculty of freedom, which the moral law, itself needing no justifying grounds, shows to be not only possible but actual in beings which acknowledge the law as binding upon them. . . the moral law thus defines that which speculative philosophy had to leave undefined.²⁷

Responsibility and Freedom

The moral argument for freedom can be made from a somewhat different angle by introducing the notion of responsibility. To hold that a person A is responsible for an action X is to hold that A can justly and meaningfully be "called to account" for the doing of X; he can be praised or blamed for it, one "gives him credit" or "holds him accountable" for X. If this is to be just, then the action X must be "imputable" to A: it must have rested in A's control whether X did or did not come to pass. We do not hold inanimate objects responsible in this way for what

happens to them, or for effects of which they are causes; nor do we hold human beings responsible in this way if we find that in the circumstances A could not have helped X's occurrence. In other words, the occurrence of X must depend upon A, such that it would not have taken place but for A, and that it was in A's power to enact X or not; otherwise criticism of the agent would be pointless. In simpler (if slightly less accurate) language, if A is responsible for X, then A did X or made X happen.²⁸

This point is mentioned briefly in Kant's remarks on the Thesis of the Third Antinomy, where he states that the transcendental idea of freedom "stands only for the absolute spontaneity of an action, as the proper ground of its imputability."²⁹ It is stated more completely in the first section of Religion Within the Limits of Reason Alone, where Kant makes it clear that freedom is necessary for responsibility and that responsibility is necessary for morality.

This subjective ground [of action], again, must itself always be an expression of freedom (for otherwise the use or abuse of man's power of choice [Willkür] in respect of the moral law could not be imputed to him nor could the good or bad in him be called moral).³⁰

The meaning of morality, of moral good or evil, cannot be preserved unless one assumes that the moral agent is responsible for his choice, that it can be imputed to him; and this depends on his having done the action freely, on

its having proceeded from his free choice.³¹

Man himself must make or have made himself into whatever, in a moral sense, whether good or evil, he is or is to become. Either condition must be an effect of his free choice [freien Willkür]; for otherwise he could not be held responsible for it and could therefore be morally neither good nor evil.³²

This slightly more extended argument--from morality to responsibility to freedom--further commits Kant to holding that the moral agent must somehow be able to choose among alternative ways of acting. In the later Metaphysics of Morals Kant protests against defining freedom in these terms: "Freedom of choice [Die Freiheit der Willkür], however, cannot be defined as the capacity for making a choice to act for or against the law, . . . even though choice as a phenomenon gives frequent instances of this in experience."³³ But the context makes it clear that what Kant actually wishes to avoid is the attempt to define freedom exhaustively in any way; the separation of phenomena and noumena, as we shall see, precludes any full and complete definition. Kant can hold that freedom of choice is characterized by being able to act for or against the law without holding that it is defined in that way. And in fact Kant's notion of responsibility requires that he maintain the will's freedom of choice among alternatives, even if this is not sufficient to define the will or its freedom.³⁴

Still further evidence on this point may be derived from noting the importance of the concept of personality in

Kant. In the Foundations a person, a moral agent, is shown to be a member of a realm of ends, and to derive from this status a dignity and worth exceeding any other. But "a person is the subject whose actions are capable of being imputed. Accordingly, moral personality is nothing but the freedom of a rational being under moral laws. . ." ³⁵ Thus personhood, which is integral to morality, necessarily involves imputability, and thus freedom. ³⁶ Once again freedom is necessary if Kant's moral edifice is to be upheld.

In what ways must the moral agent be free? More than one distinction must be made here. We may note first the type of freedom which sets up the problem initially for Kant: freedom from natural causality.

As we have seen, nature, including the empirical self, is for Kant a closed system under universal causal determinism. Yet the will must be free of all complete determination, and this must include determination by natural causes, including such "internal" parts of nature as desires, impulses, and feelings. In the first Critique Kant refers already to "practical" freedom, freedom in action, which is based on "transcendental freedom:" "freedom in the practical sense is the will's independence of coercion through sensuous impulses. . . . There is in man a power of self-determination, independently of any coercion through sensuous impulses." ³⁷ If the free will were determined completely by sensuous causes (i.e., causes in the world

perceived by the senses), then the moral agent would have no choice among alternatives. This point is repeated in the Foundations, in the second Critique, and in the Metaphysics of Morals.³⁸

The negative concept of freedom of choice is just that independence from determination by sensible impulses. The positive concept is the capacity of pure reason to be of itself practical.³⁹

Were the will not at least free of complete determination by natural causes, it certainly could not guide its actions by the moral law, making "pure reason of itself practical."

It is important to note that freedom from natural causes must include freedom from the causal structure of the empirical self, which is part of nature. Since a choice between alternatives, both of which are possible, is required, no compulsion which does not allow such possibilities can be permitted, no matter where it may be located.⁴⁰ One's own inclinations or desires, if they fully determined the outcome, would prevent the moral agent from being free in Kant's sense.

The moral capacity of man would not be virtue if it were not actualized by the strength of one's resolution in conflict with powerful opposing inclinations. . . . the [pure practical reason] . . . through freedom . . . gains mastery over the inclinations.⁴¹

The will, then, is able to overcome any inclinations in the empirical self, inclinations which are part of the system of natural causation. It is equally able to overcome any outside causal influences in making its deci-

sion. How, then, is that decision to be made? Is it the result of a causal system similar to that of the empirical self but independent of it, perhaps that of the reason which gives the moral law? Here another distinction must be made, between two senses of the term "will" in Kant, which may be denoted by the terms, Wille and Willkür.

Wille and Willkür

Kant speaks often of freedom as the ability to choose among alternatives, and this sense is necessary for morality, as we have seen. But he also speaks often of freedom as the ability to give and to follow the moral law, and of the will as "free" in this sense. We may distinguish what is involved in these two senses, according to John R. Silber, by noting the difference in Kant's usage of two distinct German words for "will," Wille and Willkür, and the two aspects or faculties of the will which they can be used to elucidate.⁴²

Kant himself makes the distinction overtly only at the late date of the Metaphysics of Morals, in the following passage:

Das Begehrungsvermögen nach Begriffen, sofern der Bestimmungsgrund desselben zur Handlung in ihm selbst, nicht in dem Objecte angetroffen wird, heisst ein Vermögen nach Belieben zu thun oder zu lassen. Sofern es mit dem Bewusstsein des Vermögens seiner Handlung zur Hervorbringung des Objects verbunden ist, heisst es Willkür; ist es aber damit nicht verbunden, so heisst der Actus desselben ein Wunsch. Das Begehrungsvermögen, dessen innerer Bestimmungsgrund, folglich selbst das Belieben in der

Vernunft des Subjects angetroffen wird, heisst der Wille. Der Wille ist also das Begehrungsvermögen, nicht sowohl (wie die Willkür) in Beziehung auf die Handlung, als vielmehr auf den Bestimmungsgrund der Willkür zur Handlung betrachtet, und hat selber vor sich eigentlich keinen Bestimmungsgrund, sondern ist, sofern sie die Willkür bestimmen kann, die praktische Vernunft selbst.⁴³

Translation:

The faculty of desiring according to concepts is called the faculty of doing or forbearing as one pleases, insofar as the ground determining it to action is found in the faculty of desire itself and not in the object. Insofar as it is combined with the consciousness of the capacity of its action to produce its object, it is called choice [Willkür]; if not so combined, its act is called a wish. The faculty of desire whose internal ground of determination and, consequently, even whose liking [das Be-lieben] is found in the reason of the subject is called the will [Wille]. Accordingly, the will [Wille] is the faculty of desire regarded not (like choice [Willkür]) in relation to action, but rather as the ground determining choice [Willkür] to action. The will [refers to Wille] itself has no determining ground; on the contrary, insofar as it can determine choice [Willkür], it is practical reason itself.

The two terms are used in much more haphazard fashion in the earlier works, sometimes incorrectly by this later standard.⁴⁴ In addition, Wille alone is sometimes used for "the will" in general, containing both faculties (Wille and Willkür as described above), since according to Kant they are discrete functions of a unitary faculty.⁴⁵ But the concepts can generally be distinguished in context. Wille is the positive, legislative faculty of the will; it is not directly related to action, but rather gives the universal moral law, on which the person may or may not

act. Willkür is the negative, executive faculty, negative in the sense that it has no single necessary content, no fixed "output" corresponding to the law given by Wille; instead, Willkür is the spontaneous source of action, containing its own ground of determination, which need not be found either in the object or in reason (as presented by Wille). Willkür may be guided either by the law or by inclination, but the ground determining which of these occurs is to be found only in Willkür itself.⁴⁶

The notion here called Wille is not conspicuously present in the first Critique, where attention, because of the argument of the Third Antinomy, is focused on spontaneity. It appears, however, in the Foundations, where the notion of the autonomy of the moral agent is linked to his status as giving the law to himself. It is of the will as legislator of the law of reason that Kant is speaking when he says:

. . . so ist die Freiheit, ob sie zwar nicht eine Eigenschaft des Willens nach Naturgesetzen ist, darum doch nicht gar gesetzlos, sondern muss vielmehr eine Causalität nach unwandelbaren Gesetzen, aber von besonderer Art sein; denn sonst wäre ein freier Wille ein Unding.⁴⁷

Translation:

. . . it follows that freedom is by no means lawless even though it is not a property of the will [Wille] according to laws of nature. Rather, it must be a causality according to immutable laws, but of a peculiar kind. Otherwise a free will [Wille] would be an absurdity.

If Wille is taken here in the narrow sense, then the "im-

mutable laws" are simply those of the practical reason which renders the universal moral law; they are of a "peculiar kind" because reason is guided by its own laws, not those of natural causes. If Wille is taken here in the broad sense, including both legislative and executive reason, then "peculiar kind" renders the fact that it can, by virtue of Willkür, either obey or disobey the "immutable laws" which it (as Wille) presents to itself (as Willkür).

If the will is taken in the sense of Wille, or in the broad sense including Wille, then it will be true, as Kant holds, that morality and the basic principle of morality, universal law, follow directly from the concept of freedom. There will then be no difference between a free will (one not confined to determination by natural causation) and a will under moral law (giving the law or having that law given to it by itself as an imperative, according as Wille is taken in the narrow or broad sense): ". . . also ist ein freier Wille und ein Wille unter sittlichen Gesetzen einerlei (Therefore a free will and a will under moral laws are identical)."⁴⁸

Wille, then, falls under what might be called a sort of determinism: its deliverances are absolutely determined by reason, which in such matters of apodeictic certainty cannot err. In this respect it resembles the ordinary notion of "conscience."⁴⁹ It is not determined by any empirical or phenomenal factors, for this would make

the agent unable to distinguish between law and inclination; in this respect Wille is autonomous, necessarily free of external influences.⁵⁰ But it makes no choices, faces no alternatives. It is independent; no outside forces can compel it to alter the delivery of the moral law, nor can it by itself enforce the enactment of that law, for it does not act. Silber describes it in this way:

. . . Wille is not free at all. Wille is rather the law of freedom, the normative aspect of the will, which as a norm is neither free nor unfree. Having no freedom of action, Wille is under no constraint or pressure. It exerts, instead, the pressure of its own normative rational nature upon Willkür.⁵¹

The "pressure" exerted by Wille is normative and not causal; it commands by right but not by might. As we have seen, the concept of morality demands the awareness of a law which should be obeyed, but need not be obeyed. Wille provides "for inspection" a law answering both these qualifications. While it is not "free" in the sense of choice among alternatives, for it does not choose, it is "free" in the sense of independence from sensuous impulses -- "free of" rather than "free to."

In a certain sense, the universal legislation of Wille fulfills Kant's intention of constructing the moral world on an analogy with the world of physics. Universal laws are presented, laws which are to function as if they were laws of nature, binding on every rational agent. But the "binding" here is not a fully determining one, because

the laws can be disobeyed, something which is impossible (if not nonsensical) in the world of physics. If the laws of morality were causally efficacious as are the laws of physics according to Kant, no choices would remain, and morality would become mere psychology of a determinist sort; responsibility would fail. In fact, the moral laws are equally universal as commands (binding on all rational agents), but not equally universal as compulsions, for if they functioned as causally binding laws (like those of physics) then they would lose their character as moral imperatives.

Wille, then, is free from all empirical "input" as it works out the law of morality. On the other hand, its internal activity may be as determined as that of physical bodies--but not in the same way, for it produces laws of reason, not causal results, and forms a system entirely separate from that of natural causes. As far as Wille is concerned, man might well be simply the automaton spirituale of which Kant speaks, proceeding by invariable laws of reason.⁵² But the fact that the laws of Wille are not immediately put into action indicates already that there is some other factor to be considered.

That other factor is Willkür, the executive agency of the will. Willkür is the power of action, of beginning causal series without itself being wholly causally determined or conditioned, and thus of choosing among alterna-

tives. Such a faculty of absolute spontaneity is the conclusion of the Thesis of the Third Antinomy;⁵³ it is also the requirement of the moral argument for freedom as I have developed it. Willkür's distinction from the immutable law-giving of Wille is made clear by Kant's statement in the Antithesis: "If freedom were determined in accordance with laws, it would not be freedom; it would simply be nature under another name."⁵⁴

Although Kant proceeds immediately from this last statement to characterize the freedom necessary for Willkür as "lawless," this can be misleading. As the theory is developed in the ethical works, Willkür is indeed lawless in the sense that there is no law necessarily determining its choices; but it is not lawless in the sense that it recognizes or can heed no law at all. For it can act on the non-binding law presented to it by Wille, the conception of universal law. "Only a rational being has the capacity of acting according to the conception of laws, i.e., according to principles."⁵⁵ This fact is important, for to Kant a will unable to act on the basis of the moral law would be non-rational, non-human. Willkür is the capacity to act or not to act on the law, and thus forms the other half of the will-structure necessary to account for morality as explained above. The moral law comes to us as an imperative; and "all imperatives are expressed by an 'ought' and thereby indicate the relation of an objective law of reason to a

will which is not in its subjective constitution necessarily determined by this law."⁵⁶ The law given by Wille to Willkür is "objectively necessary," that is, commands obedience by right; but it is not "subjectively necessary," that is, does not compel obedience by force.

The relation between Wille and Willkür, then, is as follows. Wille, operating in purity uncontaminated by empirical motives or inclinations, delivers the moral law. Willkür must then decide whether or not the agent will act on that law, or on its inclinations. It is free to choose either way ("It is not merely from impulse that an individual acts from impulse"⁵⁷), and on this depends the agent's responsibility for the choice: it was Willkür that determined which alternative was realized, and thus the act can be imputed to Willkür. Willkür is morally obligated by the moral law, but not causally necessitated or determined, because in general "nothing determines Willkür unless Willkür chooses to be so determined."⁵⁸ To put the situation another way, Wille presents a universalizable and thus morally correct maxim for action; the inclinations of the empirical self present a nonuniversalizable and immoral maxim or maxims. But the result of this conflict of maxims is not determined by a contest of strength on the analogy of physical forces; for

. . . freedom of the will [Willkür] is of a wholly unique nature in that an incentive can determine the will [Willkür] to an action only so far as the

individual has incorporated it into his maxim . . . ;
only thus can an incentive, whatever it may be, co-
exist with the absolute spontaneity of the will
[Willkür] (i.e., freedom).⁵⁹

Given the confusion in Kant's development of the two notions of the will, it is not surprising that even in Religion Kant speaks at times as if a "subjective ground" were to be sought which would determine Willkür's acceptance or non-acceptance of the maxim of the law.⁶⁰ But it is clear that neither pure reason (Wille) nor any factor of the empirical self (inclinations) can be alleged as determining for the choice made by Willkür.

The close relation of Wille and Willkür and of both to the incentives of the empirical self, and Kant's energetic attempts to keep the noumenal will separate from the incentives, make it almost inevitable that both in Kant and in commentaries the two notions will occasionally be confused, or language used for one which is actually appropriate only for the other. At one point, in a footnote in Religion, for instance, Kant speaks as if the action of Willkür were determined by mathematical summation of the incentives affecting it--exactly as if it were causally determined on a Newtonian model.⁶¹ In earlier works a failure to distinguish the two led to mention of the identity of a free will and a will under moral laws, as we have seen;⁶² while every human will (in the broad sense) is in fact both, the phrasing is apt to obscure the fact that it

is free as Willkür and bound to give determinate laws as Wille, and to create the impression that the free will cannot disobey the law. In very early works, the intertwining of the two notions was apt to lead to extremely obscure formulations.⁶³ Similarly misleading statements of the situation can be found in some commentaries.⁶⁴ To some extent this is simply a consequence of the ambiguity of words such as "obliged," "commanded," "binding," for they can connote either compulsion or the "normative force" of right.

The two aspects of the will are, however, present in Kant's texts, and generally so noted by commentators. This can be seen, for instance, where Kant explicitly states that the difference between the good and the evil man lies in which of two possible maxims they choose to adopt, one of which is the moral law as delivered by Wille or practical reason.⁶⁵ Clearly here the contest of competing incentives is not decided by chance, or by any "force" inherent in the incentives, else, as we have seen, the agent would not be responsible for the result. The agent himself must make the choice, an exercise of Willkür. But if this is the case, then certainly the choosing function cannot be identical with one of the alternatives presented to choice. While "will" is a single faculty, its two activities, presenting the law and making choices, are separate and independent.⁶⁶ Both are free in the sense that

they are independent of natural causality;⁶⁷ but Willkür is determined in its choices by no immutable law, while Wille is determined by laws of its own.

"Rational Freedom" and "Moral Freedom"

One commentator's version of a closely related distinction must be examined in somewhat more detail. Henry Sidgwick pointed out, first in a footnote to his history of ethics,⁶⁸ and two years later in a discussion article in Mind,⁶⁹ two senses of freedom employed by Kant; with the distinction of Wille and Willkür now established it is possible to see how the dual sense of freedom is related to the dual function of the will.

Sidgwick describes the relation of the sorts of freedom in Kant as

. . . a confusion which I found in his exposition, between two notions of Freedom: (1) the Freedom that is only realised in right conduct, when reason successfully resists the seductions of appetite or passion, and (2) the Freedom to choose between right and wrong, which is, of course, equally realised in either choice.⁷⁰

We have seen passages already where Kant speaks in terms suggesting one or the other of these meanings: responsibility demands the freedom to choose to act rightly or wrongly, but only in right action does "pure reason become practical," does the law actually shape events. Sidgwick mentions several references in Kant for each of the two ideas.⁷¹ In order to speak clearly about them, he pro-

poses the following names:

. . . the kind of freedom . . . which a man is said to manifest more in proportion as he acts more under the guidance of reason--shall be referred to as 'Good' or 'Rational Freedom,' and the freedom that is manifested in choosing between good and evil shall be called 'Neutral' or 'Moral Freedom'.⁷²

Moral or neutral freedom, then, is the power to select among alternatives which is involved in responsibility. Rational or "good" freedom represents the extent to which a person's acts are guided by reason as opposed to other incentives--in Kant's terms, by the categorical imperative or the moral law as opposed to sensuous inclinations. Sidgwick distinguishes both of these from what has sometimes been called "freedom of indifference," the power of acting without a motive of any sort; this he refers to as "Capricious Freedom," holding that Kant does not endorse it either explicitly or implicitly.⁷³ According to Sidgwick's interpretation of Kant, action cannot take place without some motive or other; the question is rather one of which sort of motive will dominate, inclinations or moral law. If the will had capricious freedom, it could act without either; if it had rational freedom only, it would act necessarily on the law insofar as it was free; if it had moral freedom, however, it could choose among the available motives, exerting a "power of deciding the conflict between rational and non-rational motives."⁷⁴

We should note, however, that this last distinction

is not as sharp as Sidgwick seems to hold. To deny man capricious freedom is to deny that he can act without some motive; it is still tenable that he can choose the motive he does act on, by virtue of neutral freedom. But what is the motive of neutral freedom in choosing one motive for action rather than another? If this question were admissible, it would lead to an infinite regress, requiring a motive for choosing a motive for choosing . . . a motive for action. Thus it would seem that moral freedom's choice of motives is made without a motive (at least, without a motive in the sense of causal determinant). The distinction between neutral and capricious freedom is primarily one of the stage at which motives are absent: while capricious freedom lacks motives for the action, moral freedom requires a motive for the action but needs no further motive for its choice of a motive for action (that choice of motives, presumably, not being itself a separate "action"). Thus, if man had moral but not capricious freedom, it would be consistent to say that no action occurred without a motive, and yet that actions were not determined by motives (for the will could have chosen to invoke a different motive).

Moral freedom, then, does not itself supply the "drive" for action, but must borrow it from motives; its control is exercised by selecting what motive will dominate the action. According to Sidgwick, this freedom to choose

is confused in Kant with a "freedom" which is simply domination by reason, therefore "free" (as we have seen) from phenomenal inclinations but no less determined by the laws of Wille.⁷⁵ Sidgwick's basic charge is that "two essentially different conceptions are expressed by the same word freedom; while yet Kant does not appear to be conscious of any variation in the meaning of the term."⁷⁶ These two meanings are incompatible, according to Sidgwick, at least in view of the fact that Kant also embraces natural determinism.⁷⁷

What comment can we make about Sidgwick's evaluation, given the Wille-Willkür distinction? The two senses of freedom Sidgwick mentions are undoubtedly present in Kant, and present without clear distinction; this causes considerable confusion, for it often seems that Kant wishes to attribute to the free will both the evaluative superiority of "reason" and the arbitrating power of "choice," and to retain the former as "truly free" only in right action (wrong action being "heteronomy") while retaining the latter in all cases (as "free" to incur responsibility for good and evil acts). Sidgwick, recognizing the power of this link for Kant, mentions "the gain in effectiveness of moral persuasion which is obtained by thus enlisting the powerful sentiment of Liberty on the side of Reason and Morality;"⁷⁸ we might well see such a link as central for Kant.

However, it is not clear that the two senses of freedom are wholly incompatible. Following our earlier analysis, it may be seen, first, that moral freedom is a consequence of the inclusion of Willkür in the human will. Choice among alternatives is the function of Willkür, and its freedom is the ground of responsibility. Rational freedom, on the other hand, is made possible by the cooperative action of Wille and Willkür: Wille is wholly rational, but without Willkür would remain a "still small voice" without ability to change the course of events, while Willkür alone would lack rational guidance, but given Wille can choose to enact its dictates, making reason "practical."

To clarify this arrangement, a further refinement of the Kantian psychology may be noted. The will is clearly free from being necessarily determined by natural causality, including that of the inclinations or empirical incentives. Yet Kant also speaks as if action must be determined either by these inclinations, or by the moral law; and the empirical "will," the acting component of the "empirical self," is governed by strict causal laws, since it is a part of nature. The moral law, then, must be regarded as (at least in appearance) a competing incentive, as exerting some counter-inclination to those of desires and impulses. Such a "moral feeling" of "respect" for the law as such will be similar enough to sensuous inclinations to combat them on their own grounds, as it were, and yet dif-

ferent in that its source is pure reason alone; it is an incentive, but not a sensuous or empirical one.⁷⁹ Under the Kantian psychology the mechanism of action in the empirical soul is, as we have seen, indeed a mechanism; thus the resultant action will be determined by the relative "weight" of the competing incentives, on an analogy with mechanical forces.

But what determines the relative weight, and, specifically, the "weight" of the moral law as an incentive? Its right to command is absolute, categorical. But its empirical power is not, else all people would necessarily follow it (complete "rational freedom," but lacking the "moral freedom" necessary for responsibility). If responsibility is to be preserved, the agent himself must somehow determine the strength of respect, the incentive to obey the moral law, so that it is his doing whether it overcomes the sensuous motives not under his control. Once that determination is made, the process is mechanical or pseudo-mechanical; the interaction of incentives guides the action.

In other words, the agent is necessarily going to have his choice determined in the end by one or the other, inclinations or law--in the sense that one of them will provide the empirical "impetus" to put into action the chosen deed. But which of the two is to be determinant is not predetermined; it must be decided at a logically (not tem-

porally) prior stage, where the incentive of respect for law can be attended to in greater or lesser degree, taken into consideration or ignored, by the agent. The action is potentially free from the laws of natural causation, for the agent may choose to insert the incentive of rational moral law, provided by Wille, to override the incentives of natural causation. Yet the action is also potentially "free" from the force of the moral law, for the agent may choose to ignore the law, leaving the field to natural causation and "letting nature take its course." This choice by the agent is the function of Willkür; and in this context the freedom of Willkür is essentially a freedom of attention. By attending to the moral law presented by Wille and thereby introducing it into the mechanism of empirical causation, or by failing to do so, Willkür determines the outcome of the issue.⁸⁰

If we assume that for Kant it is the insertion of respect for law that demands a special "effort" of Willkür, then the outcome will be controlled entirely by natural inclinations unless Willkür acts. It will then be possible to make sense of Kant's statements that only when following the moral law is the will truly free, and of Sidgwick's dual senses. We can distinguish two senses of "freedom."

(1) An act is free₁ if and only if what it is is not determined (solely) by the natural laws and inclinations of the empirical self; such an act is therefore "free from" nature

in a sense. (2) An act is free₂ if and only if it is determined ultimately by the decision of Willkür to attend or not to attend to the moral law. Given these two senses, Kant could correctly say that only when following the moral law is the will free₁; for it must either follow the moral law or follow empirical inclinations, and in the latter case it is determined by natural causation. On the other hand, it is also correct to say that every action is free₂, whether following the moral law or not; for in each case the result depends on Willkür and its attention or lack of attention to the moral law. Thus man is free₁ only when obeying the moral law, but free₂ in all cases. Now, an act that is free₂ has Sidgwick's "moral" or "neutral" freedom, because Willkür could have chosen otherwise in its attention to the moral law and adjustment of the incentive of respect. And since the only alternative for Kant (because, as Sidgwick holds, he does not accept action without motives) to action guided by inclinations is action guided by reason, an act that is free₁ has Sidgwick's "good" or "rational" freedom, being determined by the interaction of rational and sensuous incentives rather than only by sensuous incentives; and since these are precisely the cases where the motive of reason wins out, one can say (in a sense) that in these cases the act is determined solely by reason. Since the "force" of natural motives is fixed while the "force" of the incentive of respect for law can be varied

at will by Willkür, any act which is performed in obedience to the moral law may be said to depend entirely on the law, thus fulfilling Sidgwick's definition of rational freedom.

It would seem, then, that the two senses of "freedom" are in fact compatible. To state "rational freedom" in a strong sense would eliminate "neutral freedom," if it were taken that an act is rationally free only if it could not have been determined otherwise than by the law; but it is possible to define rational freedom as actual determination by the law, and thus to leave room for Willkür to have done otherwise by the exercise of moral freedom. A right act, then, will be both morally free and rationally free; a wrong act will be morally free (and thus imputable) but not rationally free (and thus "heteronomous," leaving the action dominated purely by sensuous motives). Even heteronomy, according to Kant, is free in some sense, for one has freely chosen (by Willkür) to decide heteronomously, to submit to natural causation.⁸¹

The revision Sidgwick calls for in Kant or Kantianism, therefore,⁸² can be accomplished without fatal consequences for the system. It would involve, primarily, ceasing to call "freedom" both identical to reason or rationality (and thus laudable and superior), and neutral and able to choose among alternatives (and thus a ground of responsibility), in the same sense. Freedom of a neutral or moral sort will not be more laudable per se than causal de-

termination, perhaps, but it renders the agent responsible for his choice of motives, and thus can "appropriate" the credit due to the rational and therefore estimable workings of Wille when it acts rightly, for it is only through Willkür's concurrence that Wille can influence action at all.

Moral freedom, then, depends on Willkür, which chooses whether or not to enact the decrees of Wille. The rest of my discussion, therefore, will be largely confined to Willkür and its "moral freedom," the notion which stands at the center of the free-will problem in general; although in order to preserve his ethics Kant must maintain both freedoms, that of Wille and that of Willkür.

Freedom and Determinism

Given the requirement of universal determinism and the requirement of freedom as outlined above, with freedom and determinism defined as they are for Kant, a contradiction ensues, the classical problem of freedom. The two requirements conflict; there is an antinomy. The empirical self, since it is part of nature, must stand under natural laws, which completely determine each state by the preceding state; this excludes any choice among alternatives which is not itself determined by preceding states.⁸³

Given these definitions and requirements, "so far, then, as regards this empirical character there is no freedom."⁸⁴

Freedom and causal necessity in the self

are contradictory to each other, for [causal necessity] implies that every event, and consequently every action which occurs at a certain point of time is necessary under the condition of what preceded it. Since the past is no longer in my power, every action which I perform is necessary because of determining grounds which are not in my power. That means that at the time I act I am never free.⁸⁵

In effect, for Kant the demands of the science of nature and the science of morals have turned out to be contradictory. According to Kant, both proofs must be held to be apodeictically certain, yet a contradiction exists. And if it could not be resolved, then despite its seeming certainty, there would be no alternative but to give up the notion of freedom, and morality with it.

Hence even if we should never be able to conceive how freedom is possible, at least this apparent contradiction must be convincingly eradicated. For if even the thought of freedom contradicts itself or nature, which is equally necessary, it would have to be surrendered in competition with natural necessity.⁸⁶

Kant's solution to this antinomy must now be considered. Before doing this, however, I must point out specifically the characteristics of the freedom which Kant is concerned to preserve.

In general, of course, as Kant often states, the will must be maintained free of compulsion or determination by the natural causation, the causality under the laws of nature, which holds sway in the empirical self. This requirement holds for both Wille and Willkür, as we have seen. Inclinations must not affect Wille's derivation of

the moral law, or the purity of the law would be abridged; Willkür must not be wholly dominated by inclinations, otherwise there would be no choice to be made among alternatives represented by those inclinations and the law given by Wille. Both rational and moral freedom must be preserved against natural necessity.

But this is not sufficient, for something must be said about the operation of Wille and Willkür beyond the exclusion of natural causation. With Wille I shall not be concerned here; it is assumed that its formulation of the moral law is guided by rational canons of some sort, and canons which are universal so that each individual's version of the categorical imperative will be the same. Our concern is with Willkür, and in fact our discussion so far has revealed two requirements, besides that of freedom from inclination, which Willkür must satisfy.⁸⁷

The first of these is that in virtue of Willkür the moral agent must have been able in performing an action to do otherwise. There must have been, before the choice, at least two alternative possibilities for action; and the possibilities must lie open given exactly the same original state. It is this requirement which conflicts with the pattern of causal determination in general as we have seen it thus far. In cases of morally significant decision, the individual must have been able to act either because of the moral law or not, else he could not be held responsible for

the action he performed. And this "ability" or "possibility" must hold given the whole state preceding the choice; it is not sufficient to say that the agent could have chosen otherwise only if some factor had been different, for this is to say that in the given circumstances no other choice was possible. It is of no help here to say that he could have acted otherwise "if he had chosen," if we must also hold that the choice is itself determined.⁸⁸ We have seen that in the Kantian psychology it is Willkür that performs this function, by either attending or not attending to the moral law and thus making or not making it an incentive.

The second qualification for a sense of freedom of Willkür acceptable to Kant is that it must depend on the choosing agent which of these possibilities is realized. The full force of this requirement will become apparent later, particularly in the fifth chapter. At this point it is only necessary to stress that insofar as the selection of an alternative from among the possibilities does not depend on the moral agent, he will not be responsible for that selection; the choice must be imputable to the agent (in effect, to his Willkür) in order to satisfy the demands of morality.

It should be noted that these two requirements, even along with the requirement of freedom from natural causation, do not for Kant constitute a definition or a

complete explanation of freedom.⁸⁹ How it is that Willkür can act in such a way we do not know and cannot define (and, as we shall see, we can never fully know). But if freedom is to play the part assigned to it in the critical philosophy, Willkür must have at least the characteristics I have enumerated. How Kant intends to provide for such a faculty is to be shown in the following chapter.

II. KANT'S SOLUTION TO THE PROBLEM

Phenomena and Noumena

Kant set forth the antinomy of freedom and determinism, and the solution he would use to resolve it, as early as the Critique of Pure Reason.

The difficulty which then meets us, in dealing with the question regarding nature and freedom, is whether freedom is possible at all, and if it be possible, whether it can exist along with the universality of the natural law of causality. Is it a truly disjunctive proposition to say that every effect in the world must arise either from nature or from freedom; or must we not rather say that in one and the same event, in different relations, both can be found?¹

Kant proposes that, instead of considering freedom and natural causality as alternative explanations of the same sort, we consider them as complementary explanations of the same event in two different realms. He has already established² that the categories, such as causality, are applied not to things in themselves but only to things as they appear to us, to phenomena. "Phenomena" in this sense includes all the appearances of the "sensuous" or "sensible" world, including our knowledge of our own inner states or empirical selves. Things in themselves, noumena, must be considered instead as belonging to a non-sensory, "intelligible" realm; they must not, therefore, be considered bound by the categories of the understanding or by the

laws we discover under those categories (such as Newton's laws of motion). If appearances were in fact things in themselves, Kant states, then a contradiction between freedom and natural causation would arise and freedom could not be upheld.³ But the distinction between phenomena and noumena enables Kant to propose that the causation of universal determinism be taken to apply only to appearances, to phenomena, while freedom applies to noumena or things in themselves. "For there is not the least contradiction between a thing in appearance (as belonging to the world of sense) being subject to certain laws of which it is independent as a thing or a being in itself."⁴

The proof here is negative. Universal determinism must rule appearances, but things in themselves are not appearances; therefore, it has not been proven that things in themselves are ruled by universal determinism. Specifically, man as a thing in himself (homo noumenon) has not been proven to be determined, despite the proof of universal phenomenal determination which Kant accepts. Is there any danger of a further argument that things in themselves, for other reasons, must operate under universal determinism? No; for according to Kant we can prove nothing concerning noumena that would qualify as "knowledge," beyond their bare existence. For Kant "knowledge" cannot be attained without intuition, and we have no faculty of intellectual intuition such as would be required to give direct

access to noumena. The only intuitive data we have to work with are the data of sense, which, as we have seen, appertain only to appearances. Thus we can make no pronouncements based either on the given itself (a posteriori) or on our necessary structuring of the given (a priori) concerning noumena, for noumena are not given intuitively.⁵ No argument for determinism can be made covering noumena, and they are exempt from the argument covering phenomena; thus freedom can be taken as possible in the noumenal realm.

Because of the strictures on "knowledge" of noumena, Kant has not proven positively in the first Critique that freedom may be ascribed to noumena; in fact, he seems to have made it problematic whether anything may be ascribed to noumena. He has freed the moral realm from the realm of natural determinism (if it may be assumed that the noumenal realm is the "moral realm"); but the reader may wonder at this point whether in removing morality from knowledge he has left room only for agnosticism.⁶

In the later ethical works, however, Kant reveals the way in which this empty possibility may be filled in. As we have seen,⁷ Kant holds that the moral law, the "fact of reason," serves as evidence for us of the reality of freedom among noumena. The moral law is not intuition, and so cannot serve as grounds for a theoretical extension of knowledge into noumena; but it can prove for us the reality of freedom, not precisely as knowledge (which must for Kant

depend on intuition), but as a regulative Idea, which we are entitled to take as valid. In the second Critique we discover the reality of "the faculty of freedom, which the moral law, itself needing no justifying grounds, shows to be not only possible but actual in beings which acknowledge the law as binding upon them."⁸ What the first Critique left as only possible, the second shows to be actual.

Kant stresses, however, that we may not then hope to take the existence of noumenal freedom as a starting point for new edifices of speculation, or even to understand fully how such freedom may operate. While we may be sure of our freedom, even more sure than in the case of the other transcendental Ideas, God and immortality, we are still not permitted to consider that surety "knowledge." The Idea is regulative and not constitutive, confined to the sphere of practical reason for its use.⁹

Determination as a Whole

Kant's solution, however, immediately raises problems, and necessitates a closer examination of the relation between the "two worlds" or two aspects of the world. Assuming that the noumenal self is free and the phenomenal self determined, what is the relationship of the noumenal self to the phenomenal action? Are the two "selves" separate, and if so, how can they be referred as authors or performers to the same action? If they are not separate, how

can they interact?

It might be possible to argue that the noumenal self and the phenomenal self are two entities of different orders, or, less paradoxically, to hold that they are two aspects of the same thing in two radically different realms, so different that no connection can be drawn between them except that of belonging as aspects to the same entity. The first of these is obviously not acceptable to Kant, whose solution depends on its being the same human being who is both determined and free; it would be of no help to maintain that one entity was free and the other determined, if only one were responsible for the action. The second sounds much like what Kant holds, for since we cannot know noumena, there is no connection between noumena and phenomena that can be known, beyond the elementary one of appearing or grounding appearance: phenomena are the appearances of noumena. But it would seem to be difficult to maintain a relationship of any more definite sort, or any kind of influence, between "things" so disparate as appearances and realities.¹⁰

Nonetheless, if even this relation of "appearing" is to be maintained, it must be true that some relations exist among noumena corresponding to those among phenomena. Since each phenomenal object, presumably, is the appearance of a thing-in-itself (or several of these), and is related to other phenomenal objects, it seems difficult to escape

the conclusion that the noumena "behind" them reflect that relation in some obscure way. Some sort of isomorphism or parallelism between phenomena and noumena would seem to be indicated. Kant states, for instance, "To this transcendental [noumenal] object we can ascribe the whole extent and connection of our possible perceptions, and can say that it is given in itself prior to all experience."¹¹ But if the connections of possible perceptions (phenomena) are also to be ascribed to noumena, then noumena must reflect or mirror those connections, in some unknowable way. It is not clear how far such a result is to be taken in the face of Kant's refusal to admit knowledge of noumena; knowledge is excluded in the strong Kantian sense of "know," knowledge authorizing speculative inference, but it also seems impossible to take refuge in total agnosticism in order to avoid the question of their relation. Could the idea of causality, or of responsibility, be meaningful in this context without the assertion of some relation of a definite sort between the two?

In fact the doctrine of the moral incentive, set out in the second Critique and discussed above,¹² makes this radical "two-worlds" interpretation impossible. In order for the moral law to become practical, to be put into action, it must be able to enter the field of warring inclinations which is the empirical self; since this field is a field of inclinations, dominated mechanically by incent-

ives, it must enter as an unusual sort of inclination, similar to empirical inclinations (and so able to combat them) but distinguished from them by its origin in pure reason. While the "force" with which respect for law is introduced depends on noumenal Willkür and is thus free, the respect itself must be phenomenal, otherwise it could not conflict with or overcome desires. Phenomena and noumena must interact at least to this extent: the moral law, which is noumenal, must somehow "appear" or be "expressed" as the feeling of respect, which is phenomenal, in order for Willkür to be effective. And it exercises that effectiveness precisely by determining the strength of the motive of respect which is injected.¹³

Compare Kant's remark addressed to critics of the distinction of noumena and phenomena in Religion Within the Limits of Reason Alone:

. . . when mention is made of sensuous means furthering what is intellectual (of the pure moral disposition), or of the former opposing the latter, the influence of two such heterogeneous principles must not be thought of as direct. That is, as sensuous beings we can work against the law, or for its behoof, only in the appearances of the intellectual principle, i.e., in the determination of our physical powers through free choice [Willkür] which expresses itself in actions; so that cause and effect may be represented as actually homogeneous.¹⁴

Here Kant wishes to deny that the intellectual or noumenal principle comes directly to grips with the sensuous or phenomenal, but nonetheless stresses that we can work for or

against the law only insofar as Willkür can determine our "physical powers." It seems clear that the mechanism of moral incentives directed by Willkür is designed to provide the indirect confrontation which Kant's premises require.

But this plunges us back into the problem of interaction between free and determined factors. Kant, as we have seen, must hold that the phenomenal or empirical self is part of a realm which is universally and completely determined, such that any phenomenal event must be fully determined by (and thus fully explainable by) preceding phenomenal events. To explain some phenomenal state only by the conjunction of phenomenal causes and noumenal causes would be to open a "loophole" in the determinism of nature, and this Kant cannot allow. If t_1 and t_2 are consecutive moments, then the empirical self's state at t_2 must, it would seem, be wholly determined by the empirical self's state at t_1 , along with the state of the rest of the universe at t_1 , without reference to possible noumenal states or actions. Specifically, even the occurrence of the feeling of respect, which is phenomenal, must be explainable and predictable on phenomenal grounds. The moral incentive itself, which "represents" magisterial law among phenomena, must be entirely dependent on preceding phenomenal causes,¹⁵ and yet must be dependent only on the noumenal consciousness of the law, "in its purity and apart from every pathological stimulus."¹⁶ Does this not leave us with a

contradiction?

Kant's move at this point is a curious one, and difficult to set forth clearly. Since time itself is a form of intuition, a way of structuring data of intuition, it cannot be held without further information to belong to things in themselves;¹⁷ and such information is not available concerning noumena; thus the noumenal self is to be considered timeless, not in time at all. The freedom of noumenal Willkür is thus not exercised at a time immediately preceding the appearance of respect in the empirical self, for it is not exercised at a time at all. The form of time does not apply to its activity. Thus the question of determination of Willkür by preceding temporal states is not a question at all:

In this existence nothing is antecedent to the determination of his will; every action and, in general, every changing determination of his existence according to the inner sense, even the entire history of his existence as a sensuous being, is seen in the consciousness of his intelligible existence as only a consequence, not as a determining ground of his causality as a noumenon.¹⁸

If this is true, then Willkür itself is certainly free of prior determination. But from this timeless situation it derives another advantage as well. Since the noumenal self is outside time, the entire chain of appearances, of temporal states of the empirical self, seems to be open to the noumenal self "at once." As noumenon, one does not see one's present state as already conditioned by past states,

for those terms involve a temporal relation, and Willkür is not temporally related to any instantaneous state of the empirical self. The will may then be said to be present equally to all states of the phenomenal self from "outside" the stream of time-bound events. Its position may perhaps be compared to that of an eternal God in some theistic views: being timeless itself, it regards the succession of temporal states not from a point within that succession, but "all at once," available equally to all of them, "simultaneous" to the whole series of states which are related to each other, but not to God or to the noumenal will, as successive (if such a term as "simultaneous" can be used here at all). If a temporal metaphor may be replaced with a spatial one, the noumenal self lies outside the linear series of phenomenal states, related to each of them in a different way from that in which they are related to each other.

According to Kant, the action of Willkür is therefore not restricted to any single point in time; free choice can alter the whole series of states as a whole rather than intervening at one point at a time to "deflect" the progress of action. It may act on all the successive states of a life "at once" (from the noumenal point of view, sub specie aeternitatis), across a broad span of states which succeed each other temporally (from the phenomenal point of view).

From this point of view, a rational being can rightly say of any unlawful action which he has done that he could have left it undone, even if as an appearance it was sufficiently determined in the past and thus far was inescapably necessary. For this action and everything in the past which determined it belong to a single phenomenon of his character, which he himself creates, and according to which he imputes to himself as a cause independent of all sensibility the causality of that appearance.¹⁹

Apparently the phenomenal life is to be regarded as a whole which is determined by the timeless causation of Willkür, a "single phenomenon" which includes all the successive phenomena of that life; since Willkür is the cause of the whole series, it is also the cause of its coming out as it does at any particular point.

In fact, the problem in admitting antecedent determining grounds for choice was that antecedent grounds seemed to be out of our control at the time of action, and thus our choice seemed to be predetermined. But if the choosing agency can reach (or "can have reached") those earlier determining grounds, it is (or has been) able to arrange them so as to produce either effect at the time under consideration. Natural necessity holds "only so far as the determining grounds of any action of the subject lie in what belongs to the past and is no longer in his power;"²⁰ but the "no longer" is not meaningful with respect to Willkür, for those temporally prior grounds are as much accessible to, in the power of, nontemporal Willkür as are the phenomena of the "present" act itself. Thus tem-

poral causal necessity is not binding for the agent.²¹

Kant appears to be proposing something like this. The self as noumenon stands under no conditions of time, and thus can affect its appearances at any point indiscriminately through the temporal span of its life. Thus if it wishes to perform a moral action at a certain time by implanting the feeling of respect for law, it need not do so by producing at that time or immediately prior to it an empirical feeling of respect which would constitute an interruption of causal chains, since that feeling would not have existed but for the noumenal action. Instead, the noumenal self or Willkür can accomplish its design by altering the whole causal chain leading up to the point of action; Willkür can so arrange the chain of past causes that the feeling of respect appears by the usual laws of natural causation at the right moment. Such an intervention would not be a matter of changing the past, or of causation backwards in time, because, once again, Willkür is outside time; its action produces a single but temporally extended "character" covering the whole phenomenal career.

The introduction of this incentive, then, will not destroy the integrity of the causal chains, since the whole chain of causes will have been brought into harmony with it; yet its presence will still depend on Willkür, since it is Willkür that properly arranges the causal chains. From the viewpoint in time it will appear that "from early

youth"²² a character has been formed, composed of empirical psychological elements subject to causal determinism, which eventuates in the feeling of respect at the proper moment via strict causal laws. But in fact the whole process of character formation will have depended on Willkür and thus have maintained the choice as a free one:

if we were capable of an intellectual intuition of the same subject, we would then discover that the entire chain of appearances, with reference to that which concerns only the moral law, depends upon the spontaneity of the subject as a thing-in-itself, for the determination of which no physical explanation can be given.²³

Kant's reply to the problem of interaction, then, seems to be that the problem does not arise when one of the "interactors" is timeless. Because Willkür can arrange (to speak timelessly) or can have arranged (to speak temporally) the whole series of empirical events to lead up to the moment of choice in proper causal order, it remains responsible for whatever happens at the moment of choice. Choice may never freely cause the course of my life to "bend" or "swerve" between times t_1 and t_2 in despite of empirical causation, but it is the source of the life as a whole and thus of the smaller decisions contained in it. Determining the entire series includes determining the individual events. If Kant is right in this, then noumenal (and thus free) choice can be held responsible for every moral decision in life, while nonetheless each such decision is thoroughly determined by the antecedent causes in time.

Problems in Kant's Solution

A few words should be said here about the problems remaining in Kant's solution. It might, of course, be possible immediately to object to the Kantian theory of determination as a whole on the grounds of the phenomenology of action. Certainly the experience of moral decision is not, at least apparently, one of "reaching back" to alter earlier events to produce the present act; we seem to feel, on the contrary, that the past leading up to the event is fixed, and only the future needs to be determined, within the limits set by the past. Kant could, however, reply that our experience or feeling in making decisions is precisely the appearing or phenomenal aspect of the self; because of the separation of phenomena and noumena, what the action seems like cannot be used as evidence about what is actually happening noumenally. Decision does not "feel" timeless in any sense, but according to Kant the true source of decision must be a timeless noumenon, regardless of appearances. From the noumenal point of view, of course, the will does not "reach back" from the present into the past at all; rather, it "reaches out" nontemporally from a location outside the time-series to various points on the time-line. The causal relation of noumenal Willkür to phenomenal events is not one in which the two termini are related as before and after.

The main problem remaining with Kant's explanation

is the one he has already avoided several times: the harmonization of determination by free Willkür with determination by natural causation, and the apparent contradiction between them. Can assigning free causation to a timeless agency operating throughout a life really make that freedom consistent with universal determinism?

It seems that even Kant's last argument has only succeeded in pushing the problem back out of sight. If Willkür's responsibility for a decision rests on its having formed the character (i.e., the set of empirical characteristics) which leads inevitably to the decision, then the character-formation itself cannot be accounted for in terms of natural causation alone, else noumenal will would be superfluous. But character-formation is itself a process in time, among phenomena, and so subject to the determinist causal conditioning of phenomena. As character is formed across a span of time, certainly each stage in that formation must be causally determined by the previous stage. And the process must have a beginning, for a human being does not exist from all eternity. But if there is a beginning for character-formation, then there is a first stage (perhaps birth) at which the character begins to be formed; and here we face the same problem again. Is the first stage wholly determined by previous empirical causes, which must now be placed outside the empirical self? If so, then it seems as if the action of Willkür is of no consequence.

If not, then there is a break in the causal chain. Paton summarizes the difficulty this way:

But even his empirical character must itself be regarded as the effect of events happening before he is born; and if this is so, it is hard to see how any remnant of freedom can be saved. Kant never properly faces this difficulty. It would surely be fantastic to suggest that the intelligible character of each individual prepared the way for his empirical character by being the ground of events happening before he was born.²⁴

Because the world of appearances is a complete network of universal determinism, to speak of "the whole series" of appearances constituting the empirical self, as if it could be determined by Willkür as a whole but in isolation from the rest of phenomena, is misleading. In fact the whole "series" of phenomena which would have to be controlled by the will in order to condition any single decision, under Kant's theory of natural determinism, must extend back to the beginning of the world (if any). Can this whole be said to be under the influence of the noumenal will? And if so, what about possible conflicts of noumenal wills involved in forming different individuals' characters? It would seem as if noumenal causes cannot be allowed to alter in any way, at any point, the complete set of appearances constituting the empirical self. But if this is the case, then empirical causes can account for the phenomena of "moral decision" well enough, and there seems no reason to bring up the subject of Willkür at all; the free will could not have "done otherwise," because its

choice must be such as to fit in with the established train of empirical causation from the beginning of the world. If anything, it would seem that Willkür's decision must be conditioned by empirical causes, rather than vice versa. As Beck observes, "If the possession of noumenal freedom makes a difference to the uniformity of nature, then there is no uniformity; if it does not, to call it 'freedom' is a vain pretension."²⁵

To state the problem in another way, one could say that moral action has been placed under too many conditions. Whatever the details of the relation between phenomena and noumena, whether Willkür acts at a single moment or over a lifetime, the theory requires that the single action be causally conditioned by both noumenal will and phenomenal inclinations. And the conditioning of physical causes may not be only partial, as if the action could be conditioned or determined partly by one and partly by the other: the phenomenal conditioning at least must be absolutely complete, determining without room for variation, otherwise a loophole in universal determinism would appear. But two universally determinant conditions for the same action are too many; one is sufficient. If there are two, what guarantees that they will coincide in their determinations? If either is sufficient, is not the other superfluous?

In fact, combined with the argument above²⁶ for

interaction, this objection would seem to hold against any theory attempting to reconcile freedom and determinism while holding the latter to be valid universally. Such "double-aspect theories" must either allow for interaction between the two aspects or realms, or not. If there is no interaction whatsoever, but a complete parallelism, then some sort of pre-established harmony must be introduced--and one of the aspects or worlds may also be dispensed with as superfluous, as adding nothing to explanation; since the diverse descriptions must apply to the same event or act, one set of completely determining conditions is enough. On the other hand, if interaction is permitted, then it must allow the free "aspect" to influence the determined "aspect" in some way, else freedom will be helpless to change the course of events. But if this is so, then determinism is no longer universal.²⁷

If this argument is correct, then Kant's complex apparatus of phenomena and noumena is not sufficient to solve the problem of freedom. Only if noumenally-caused events not explainable in phenomenal terms were allowed to interrupt empirical causal chains could freedom be preserved, and this would involve renouncing universal determinism. But this cannot be pursued further here. It has been noted that Kant's removal of the free will to the noumenal realm frees the will itself from the determinism of

nature; and it is evident from the above argument that some sort of interaction between that will as cause and moral action as effect is taken by Kant to explain the way in which free choice becomes practical (whether or not that view is wholly coherent in the light of this criticism). My project in this paper is to investigate more closely the free causality of the noumenal will, and specifically of Willkür, as stated above.

But before turning at last to the main problem of this paper, we must deal with one further objection. It may be suggested, given the diremption of phenomena and noumena by which Kant attempts to solve the problem of freedom, that even to speak about Willkür in phenomenal terms is to speak nonsense on Kant's own principles. For causality is a category, and categories apply only to the understanding; the noumenal will cannot therefore be called the cause of its appearances, but only their "ground," or so the objection might run. How can we speak of the causality of a noumenal being if causality is exclusively a phenomenal term?

Kant's text gives reason for such concern. He states, for example, that "our use of the concept of cause and effect cannot be extended beyond matters of experience, and hence beyond nature."²⁸ The operation of the will is stated to be independent in general of "the law of causality."²⁹ Noumenal man must be regarded as different in spe-

cies from phenomenal man, "for there is no theory concerning the causal relation of the intelligible to the sensible."³⁰ In the original derivation of the distinction of phenomena and noumena in the first Critique Kant does not argue by inference to a cause of phenomena, but states that the very term "appearance" includes the notion of a correlative term denoting what appears.³¹ Ought we not, then, speak of the free will as a "ground" rather than as a "cause," and discuss the matter without reference to the accumulated philosophical perplexities of the concept of cause?

This argument could be retained, however, only by ignoring the many references of Kant to causation in connection with the relation of phenomena to noumena.³² Noumena in general are spoken of as causes of their phenomenal appearances; note, for example, the terms in which discussion is conducted in the Prolegomena:

. . . provided the cause in the appearance is distinguished from the cause of the appearances (so far as it can be thought as a thing in itself), both propositions are perfectly reconcilable: the one, that there is nowhere in the sensuous world a cause (according to similar laws of causality) whose existence is absolutely necessary; the other, that this world is nevertheless connected with a necessary being as its cause (but of another kind and according to another law).³³

Here causes in phenomenal causal chains and "causes" of appearances in noumena are spoken of together and in the same terms, although Kant is careful to distinguish them in

that the noumenal cause is a cause "of another kind and according to another law." We cannot derive the laws of operation of noumenal causality as we can those of phenomenal causality, but this does not prevent us from calling them by the same name and subsuming them in some sense under the same "category." The dichotomy appears as one of natural and free causes within the notion of causation as early as the first Critique. "There are only two kinds of causality conceivable by us; the causality is either according to nature or arises from freedom."³⁴ And the Preface to the second Critique clearly states that freedom is "a supersensible object of the category of causality."³⁵ Although the categories were introduced as universal forms of appearance, at least one of them is here applied to something beyond all appearances, the freedom of Willkür.

Although this problem cannot here be investigated at length, the answer would seem to be on these lines. While the category of causality is employed by the understanding to organize the data of sensory intuition, it is not derived from those data, but arises a priori from the mind.³⁶ Because of this it is available to the mind for other use, although such use will not constitute theoretical knowledge unless intuitive data can be provided for the category to organize.³⁷ Now, "in the concept of a will . . . the concept of causality is already contained;"³⁸ thus, since the "objective reality" of the free will has been

proven by the moral argument, we must assign that noumenal object to the category of causality as applied very generally. Since we lack intuitive fulfillment with respect to the will, we cannot have theoretical knowledge of that categorized object, and cannot employ the usual apparatus of schemata and principles to form a complete empirical notion of it. I may assign the free will to the category of "cause," but I am not thereby licensed to speculate further and claim sound "knowledge" in that area.³⁹

It would seem, then, that a sort of duplicate set of the categories of the understanding could be produced for use with noumena or with objects in general, if we had the appropriate intellectual intuitions. As it is, we can employ analogues of the categories in dealing with noumena, although we are warned not to assimilate them too closely to the phenomenal use of the categories. We are free, then, to consider more closely the noumenal causality of the free Willkür.

The Intelligibility of Freedom

The project of this paper may now be stated simply. We have seen that the removal of both Wille and Willkür to the noumenal realm suffices to preserve them from the universal determinism of nature, and that the distinction between Wille and Willkür suffices to keep the unchanging legislation of morality from compelling, rather than com-

manding, the execution of right actions. The operation of Wille in detail we leave aside. Can the activity of Willkür as a cause be comprehended? Is such a cause intelligible?

It must be noted that Kant considers a full explanation of noumenal causality impossible from our human vantage point. Because we cannot have theoretical knowledge of noumena "we can get as far as the intelligible cause, but not beyond it;" to fully understand how such a cause works "transcends all the powers of our reason, indeed all its rights of questioning."⁴⁰ Is the question, then, out of order, as long as the reality of freedom has been proven by the moral argument?

But the answer is not so simple. In order to assert the reality of freedom it is necessary at least to be certain that the notion of freedom can be entertained without contradiction.

Morality does not, indeed, require that freedom should be understood, but only that it should not contradict itself, and so should at least allow of being thought, and that as thus thought it should place no obstacle in the way of a free act (viewed in another relation) likewise conforming to the mechanism of nature.⁴¹

Kant asks "whether freedom is possible at all, and if it be possible, whether it can exist along with the universality of the natural law of causality."⁴² Besides the question of compatibility with nature, there is a question of possibility "at all," of intelligibility of the notion apart

from its relation to the determinism of nature. Even if the concept of freedom is not excluded by universal phenomenal determinism, it may fall apart of itself, may turn out to be incoherent or nonsensical. As Paton remarks, "the presupposition of freedom is in need of defence; we must show at least that it is neither self-contradictory nor excluded by experience."⁴³ While Kant has spent by far the greatest part of his argument on the latter question, the former remains at least as a possible difficulty to be raised. Any challenge to the consistency or coherence of the notion of freedom must certainly be answered.

But many opponents of the theory of free will, particularly determinists, have suggested exactly that: "free will," insofar as it means something incompatible with determinism, is incoherent, nonsensical. The notion that a cause could be incompletely determined in producing an effect is contrary to the very idea of causality. C. J. Ducasse, for instance, having noted that a free act cannot be a merely random or fortuitous one, states that for the defender of free will

. . . nothing remains for him but to say that in the circumstances contemplated, the volition V is neither determined nor fortuitous, but is "free." To say this, however, is to say exactly nothing unless some positive account of what "free" then means is furnished. But none is furnished, and "free" therefore turns out to be but a fancy name for the "excluded middle" between the contradictories "determined" and "not determined."⁴⁴

"Many determinists of various sorts . . . hold the notion

of free choice to be mysterious and incomprehensible,"⁴⁵ concluding that freedom is therefore excluded not only by conflict with natural determinism, but in itself. Such arguments challenge free will on grounds that Kant has not yet successfully defended. Is it possible for him to counter them? If so, how?

It is my contention that he can do so, and that the charges cited above can be met. In the remainder of this paper I shall examine possible models of causation in order to discover whether one may be adequate for Kant's notion of the noumenal will, for the free causality of Willkür. The next chapter will set out my strategy in doing so.

III. CAUSAL MODELS IN GENERAL

A Definition of Causality

We have seen that if Kant is to maintain human freedom, he must show that the causality of the will is intelligible. We must therefore now consider Willkür in the wider context of causation in general, a context we have up to now simply assumed in dealing with the conflict of freedom and determinism. To this end, some sort of definition of causation is necessary.

Many definitions of "cause" have been proposed in the history of philosophy, and it would be impossible to consider them all here.¹ Fortunately, however, this is also unnecessary. Since my primary argument takes for granted Kant's philosophical system, attention can be focused on Kant's own definition and a brief analysis of that definition.

In discussing the use of the category of cause by the understanding, Kant stresses its function in structuring appearances or phenomena.

The objective succession will therefore consist in that order of the manifold of appearance according to which, in conformity with a rule, the apprehension of that which happens follows upon the apprehension of that which precedes.²

The stress here is clearly on apprehension, on the order of events as it is an order for some observer. Given that

phenomenal interpretation, the content of the principle appears to be that of a rule, an invariable pattern of succession. In the causal relation, one state determines or conditions the succeeding state; or alternatively, the succeeding state is conditioned by the preceding one. "In other words, that which follows or happens must follow in conformity with a universal rule upon that which was contained in the preceding state."³ Note that in this second formulation the role of the observer is not mentioned; it is stated simply that the second state "must follow." A necessity is imposed on the second state itself by the first. At this point Kant is indeed speaking of appearances, and so this second formulation is equivalent to the first; but we will wish to consider the causal relation in general, particularly that of appearing thing to appearances. Thus it is significant that the principle can be formulated without being necessarily restricted to relations between pairs of appearances. Kant later defines the causality of nature or appearances, as opposed to that of freedom or realities, in this way: "The former is the connection in the sensible world of one state with a preceding state on which it follows according to a rule."⁴

It should be noted that this definition is indebted to Hume's interpretation of causation as necessary sequence or constant conjunction.⁵ Kant wishes here to avoid postulating obscure metaphysical elements in the relation, lest

he slip back into "dogmatic slumber." Thus there is no mention of causes as "communicating existence" or otherwise interacting beyond the sphere of appearance.⁶ "Causality reduces to the thought of necessitated (not necessitating) sequence,"⁷ for the true necessitating grounds lie beyond experience, in noumena.

But to discuss the causality of the noumenal will we must generalize this definition to allow it to include non-appearances "of the category of cause." What, then, is essential in this definition? Evidently the reference to an observer, to a succession of appearances, can be dispensed with; noumena are not appearances and do not appear directly, and in any case we have seen formulations not requiring an observer. Even the temporal relationship of the two relata, "preceding" and "succeeding," seems to be inessential.⁸ As we have seen, noumena are not in time, and so their relation to their appearances is not temporal; and yet noumena, as we have seen, are causes (of a sort) of their appearances. Thus we are left with a relationship simply of two things or events, A and B, without commitment to their temporal position, in this generalized definition of causation. The only factor remaining to constitute that relationship as unique is that of the "universal rule" which connects them asymmetrically: A determines or conditions B. What sort of thing or state B is, what its characteristics are besides its causal relation to A, must de-

pend on what A is. Given that A is a certain kind of thing or state, B must necessarily be a (possibly different) certain kind of thing or state; B's qualities depend on A. "A causes B" involves, at least, the complete dependence of all determinations of B on A.⁹

This broad statement should be qualified, of course, with respect to multiple causes. It may be (and generally is) that some characteristics or determinations of B depend on A_1 , others on A_2 , still others on A_3 , and so on. My car remains basically as it came from the factory, but nicks, scratches, and rust spots on it have varying causal ancestries unrelated to the factory. Thus "complete dependence of all determinations" is often too strong; the "universal determinism" of Kant requires that all determinations depend on some preceding event in nature, not that any single thing or event find all its determining grounds in any single other thing or event (where these determining factors are to be found is a question for natural science). It is generally assumed in discussion that a thing B is wholly dependent on some one cause A or upon the conjunction of a very few such causes, but this is not of major importance here.¹⁰

We may, then, take as our definition in general the above, which in practice also involves such formulations as the following:

And what is meant by saying that an event is caused? The natural answer is that the event is so connected with some preceding event that unless the latter had occurred the former would not have occurred.¹¹

Since if A causes B, A provides the sufficient determining conditions for B, then given A (when temporal modifications are set aside), B will occur. Since if A causes B, A is the necessary determining condition for B, then without A (assuming that no other cause adequate to produce B is present), B will not exist. When the causal relata are considered to be two subsisting things, already existent, their states, or appropriate changes in state, will be thus dependent.

It will be useful to define several senses of "necessity" in order to clarify later distinctions among types of causation, all of which in some way "necessitate" their effects. Senses of "possibility" can then be taken corresponding to these. We may speak of a state of affairs as logically necessary if its denial would involve a contradiction even without any additional (empirical) assumptions; something will be "logically possible" if no contradiction can be derived from it without further assumptions. Thus (as Hume pointed out) it is logically possible for a pen to become a flower or for a typewriter to generate rainbows. We may also speak of causal necessity or causal possibility, and this in a general and a restricted sense. Once given a set of natural laws and boundary conditions

(as additional assumptions), some things may be impossible that were possible in a merely logical sense; for instance, given a mechanistic universe governed by the law of conservation of mass, any temporal state of that universe must (as causal necessity) contain exactly that much mass, although it is logically possible that it be otherwise; this is a causal necessity in general, because it applies to all possible states of a universe, not to a particular state. In addition, given such laws and boundary conditions and a particular preceding (or causally conditioning) state, many things which are logically possible and causally possible in general are now excluded, because of the conditions of the preceding state; given these circumstances, a limited number of succeeding states may be causally or really possible, even smaller than the number of states possible in a general or abstract sense (that is, restricted by the "laws of nature" but not by the given initial state). Thus we may say that a cause "conditions" or "determines" an effect in restricting the logically possible states of the effect, or the causally possible states of the effect in general, to a limited number (one or more) of states causally possible under the given circumstances, i.e., given that cause as conditioning. Such a distinction makes clearer in what sense an effect or its characteristics "depend" on its cause, for the cause sets limits of possibility on what effects may follow.¹²

This account does not, of course, avoid all questions that could possibly be raised, either about Kant's notion of causation or about causation in general. Questions about the logical status of hypotheticals ("would not have existed without"), for instance, we must leave aside. For the purposes of our discussion of the will as cause, the notion of cause as determining the characteristics of the caused event or thing is sufficient, for it answers to the notion of responsibility developed earlier in discussing Kant's requirements for freedom. If the determinations of B depend on A, then (assuming that A is not itself equally determined) A can be called the originator of B and held responsible for it.

In addition, this definition allows for predictability, which is a qualification often associated with causation and, as we have seen, introduced in particular by Kant.¹³ Since A contains the determining grounds of B, if we know that A occurs we can also know that B occurs. This will not be of particular importance in our discussion here, for independent knowledge of the noumenal will (the cause A) is not possible; but it remains important for natural science. In accordance with the reading of Kant outlined above, I will take predictability to be a result of the causal relation rather than constitutive of it, and rest with the general definition: the causal relation of A to B is the complete dependence of all determinations of B

upon A.

Efficient and Final Causality

So far the discussion has been in terms of what is traditionally known as efficient causality, following the line of Kant's own discussion. In the Critique of the Teleological Judgment, the second half of the Critique of Judgment, Kant investigates the possibility of another sort of causation, final or teleological causality. Does this make any difference to our projected discussion?

In section 65 of the third Critique Kant refers to causal relations among phenomena as those of "effective causes,"¹⁴ in which a causal chain progresses forward in time from cause to effect; as we have seen, in phenomena the cause is a thing or event preceding the effect. He then states:

But, on the other hand, a causal combination according to a concept of reason (of purposes) can also be thought, which regarded as a series would lead either forward or backward; in this the thing that has been called the effect may with equal propriety be termed the cause of that of which it is the effect.¹⁵

This sort of relation he terms that of "final causes." The example given is one in which a person builds a house in order to receive income from its rental; the cause which guided or motivated the action of building was the rental income, which did not in fact actually exist at the time of the action. If the rent is legitimately spoken of as the

cause of the house-building, then the cause exists in time only after the effect which it conditions. Kant speaks of such a conditioning as purposive, in line with the example, in which a person acts for a certain purpose projected in the future. This characterization is generally in accord with that of the classical "final cause."¹⁶ Kant also refers to efficient and final causation as "real" and "ideal," because in the case of purpose the cause exists (at the time of action) as idea in the planner. According to Kant this makes clear that only these two sorts of causality can exist.¹⁷

In a thing existing under final causality, a "natural purpose," a thing is seen as "both cause and effect of itself," although, as Kant adds in the second edition, "in a double sense."¹⁸ This case is distinguished from the original example in that no thinking person is seen (at least at first) to be at work through an "idea:" a tree grows in a certain way so as to enter a certain final state (that of a fully adult tree), but seemingly without the intervention of a thinking being. The later state of the tree, the end, is the final cause of the earlier states; it conditions them so that growth will take place so as to produce the final product. Yet the earlier states are the efficient causes of the later states, for each state brings forth and conditions its succeeding state, as we have seen, under natural determined causality, efficient

causality. The same tree, extended over time, is cause and effect of itself in different ways. Kant refers to such a being as "self-organizing."¹⁹

If this is to occur, Kant continues, the parts of a thing must be subordinated to the whole. The end which is aimed at is a state of the whole being; but the preceding states which must operate by efficient causation to produce it are not just states of the whole, but also states of the parts, interacting with each other under "blind" efficient causation. The final state must control or guide its earlier states, and in doing so must also control the elements of those states, making sure that the proper parts are present and are acting as required. "For a thing to be a natural purpose, in the first place it is requisite that its parts (as regards their presence and their form) are only possible through their reference to the whole."²⁰

Kant consistently interprets causation as conformity to a law of some sort; we have seen that natural efficient causation consists in a law connecting beings or states of beings, specifically, one in which determinate characteristics of later states depend on determining characteristics of earlier states. For noumenal purposes the distinction of earlier and later was dropped; that a causal law without such distinction is possible is reinforced by the fact that Kant has now allowed for final causation backward in time. This causation remains, however, con-

formity to a law.²¹ It is used in explaining cases where "the laws of simply mechanical causality do not suffice."²² It is absurd, according to Kant, to suppose that such a self-generating entity as a tree could have come to be through blind efficient causality alone; we must postulate final causation as well.

Yet this would seem to contradict the cherished universality of nature under efficient causation. If final causality must be postulated precisely in order to explain some natural product where efficient causality cannot account for it, then certainly there seems to be a gap in the Newtonian universe of phenomena, a place where prior states do not sufficiently determine posterior states. "It is infinitely important for reason not to let slip the mechanism of nature in its products,"²³ but this mechanistic idea of nature offers us no grounds for invoking final causality.²⁴ If teleology were to be proven for theoretical reason, in what Kant here calls "a determinate way," we would have to "first prove satisfactorily to the determinant judgment the impossibility of the unity of purpose in matter resulting from its mere mechanism."²⁵ We would also have an antinomy, which is discussed in sections 69-71 of the third Critique.

By now Kant's strategy in solving such an antinomy should be fairly evident. The two principles of explanation, efficient causality and final causality, both pretend

to cover all events, and must retain this universality. It is impossible to apply efficient causality to explain some events and final causality to explain others, for "by such mixing up of disparate principles no certain rule of judging would be left."²⁶ But both principles are necessary and must be retained.²⁷ The answer must be the double viewpoint which we have already seen Kant take in order to reconcile freedom and causal necessity: appearances are not things in themselves, and what holds in one realm need not hold in the other. "Thus we should judge nature according to two different kinds of principles without the mechanical way of explanation being shut out by the teleological, as if they contradicted each other."²⁸ The harmonious unity of the two principles could be understood only from a point of view which had knowledge of noumena as well as of phenomena.²⁹ If we had an intellectual intuition of a certain type, we could "see" rather than guess at the action of final causation;³⁰ as it is, we must use only the mechanical principle determinately or constitutively, in appearances, and use the teleological principle regulatively, thinking appearances as being the appearances of noumena among which final causality is exercised.

Once again, it may be noted, a "bridge problem" of a certain sort exists. The end state of a being must control the earlier states to arrange for its own production by efficient causation, in effect using phenomenal causa-

tion to carry out its purposiveness; mechanical causality must be subordinated to final.³¹ The interactions of the parts will take place each one along ordinary efficient lines, but the total result will seem organized only contingently from the phenomenal point of view;³² the necessity for which their end organizes them would only be apparent from a noumenal viewpoint. However, given that the arrangement of phenomenal causes would in fact produce the "purposed" end simply by efficient causality, it may be asked why a second principle of explanation is necessary. Is any more involved than our wonder at the complexity of nature?

Kant emphasizes many times that the teleological principle is not to be applied for explanation, but only heuristically; it guides our investigation, which uncovers new efficient causal relationships.³³ Its application cannot be made without further ado to things in themselves, for a mind other than our own might well find that natural purposes could in fact be explained mechanically.³⁴ The law of final causes is regulative, a guide for our thinking, but not constitutive, an inflexible law of what appears to us.

Hence, the concept of the purposiveness of nature in its products is necessary for human judgment in respect of nature, but has not to do with the determination of objects. It is, therefore, a subjective principle of reason for the judgment, which as

regulative (not constitutive) is just as necessarily valid for our human judgment as if it were an objective principle.³⁵

The necessity is subjective and not truly objective; the conception of purpose is only an analogy in our understanding of natural things.³⁶

It is not necessary here to penetrate the ramifications of Kant's somewhat obscure theory of final causality. It must only be determined whether it makes any difference to the problem of the intelligibility of freedom.

It seems clear on the one hand that insofar as teleology is simply the execution of a "program" possessed by a being at an earlier stage, its realization at a later stage gives us nothing new; for the only explanation necessary is one in terms of standard mechanical causality. If the "final end" supposedly drawing the earlier being toward it is not in fact exerting any counter-temporal causal efficacy, but is only the inevitable product of an earlier being so arranged as to move in that direction, it is no different from any other natural entity acting under natural laws--which, after all, must be so arranged as to approach some state. Positive or negative feedback is explicable in purely mechanical terms.

On the other hand, it is certain that beings with minds do at times act for ends, and it is not clear that this can be interpreted simply as the carrying out of a preset program. For Kant, presumably, the noumenal self

would have such purposes, and could form "ideas" of possible goals; this would enable it so to direct appearances as to achieve them, assuming, of course, that the problem of noumenal "direction" of phenomena can be solved in general.³⁷

But even this interpretation seems to offer us no help with regard to freedom, as the last statement indicates. If we wish to speak of the timeless noumenon as determining earlier phenomena in accord with a timeless idea and thus guiding them toward an end which does not itself appear in phenomena until later, this would seem to be consistent with Kant's theory. But we would still need to determine under what sort of causal model the noumenon acts to put that idea into practice. The "law of connection," essential to causation, is still unclear; whether Willkür can be made intelligible as freely enacting an end has not been decided by the consideration of teleology.

An example may make this point clear. If a man conceives the purpose of gaining rental money and thus builds a house to rent, it is still possible to ask: did he choose to pursue that end freely, or was the building of the house determined once the idea of the rent appeared in the builder's mind? Could he have decided not to build the house, or was only one course really open to him? The question being asked is whether the operation of the final cause on its preceding states is determined or not. Simi-

larly, given that a tree has its adult stage as an end (not, this time, as an idea) and that its earlier stages are arranged by that end-state to produce it, one may ask whether any variance was possible in the end's influence on the means. Could the tree have chosen one of several final shapes or sizes as its end?

The model of natural purpose will be examined more fully in the sixth chapter, and its usefulness for the explication of freedom decided.³⁸ For the moment, it is sufficient to conclude that the temporal direction of causation makes no difference to our problem. Allowing the future to causally influence or condition the past may introduce logically disturbing paradoxes;³⁹ but it does not throw light on the type of "law" connecting the two relata. A future cause with past effects, answering to the description of a natural purpose under teleology, could still operate either deterministically or non-deterministically, and the latter would be no more or less intelligible because of the temporal relation. For our purposes here, efficient and final causation are indistinguishable. We can, then, proceed to consider possible causal models without distinguishing the two, and continue to speak in terms of efficient causation, as Kant generally does.

Causal Models

It is necessary now to give some idea of what is

meant by the term "model" when a discussion of causal models is proposed. The most usual sense of the word today is perhaps the one mentioned by John Austin in his essay, "A Plea for Excuses:"

. . . we come back pretty commonly to pictures or models of how things happen or are done. . . . We take some very simple action, like shoving a stone, usually as done by and viewed by oneself, and use this, with the features distinguishable in it, as our model in terms of which to talk about other actions and events: . . .⁴⁰

Faced with some unfamiliar field of experience or type of thing or operation, we attempt to understand it "in terms of" a more familiar type, to reduce it to a case of that type or at least to form an analogy. If the characteristics of a gas, for instance, seem odd or unintelligible (and thus "lawless" and unpredictable) to us, perhaps it is possible to think of the gas as something other than what it appears to be--for instance, a collection of very small elastic particles in continuous motion; and this picture or model may help us to understand why the gas acts as it does. Characteristics of the gas's behavior which "made no sense," had no discernible pattern (or no reason for the pattern they did exhibit), now can be seen as large-scale statistical consequences of certain assumptions (namely, that the gas is made up of small elastic particles in motion).

Several elements in this notion should be distinguished. First, there is the idea of reduction: behavior

of the modeled object or type of object can be "reduced" to behavior of the other objects used as models, since no new explanatory rules or assumptions must be invoked to provide understanding of the behavior in question beyond those already in use for the behavior of the model. If the modeling process is seen as a reduction, it will, however, be necessary to make the other appropriate assumptions in order to fit the model to the modeled (for instance, the assumption in the above example that gases actually have the particulate nature assigned to them).

Second, there is the principle that the model in terms of which the unknown phenomenon is explained should be itself better known than the phenomenon. Ernest Nagel, for example, speaks of the efforts to "find and exploit structural analogies between the subject matter under inquiry and already familiar materials."⁴¹ Nagel, however, classifies analogies using models into two sorts: substantive and formal.⁴² Substantive analogies take a specific and known system as a model as described above; formal analogies require no more familiar system, but only "some familiar structure of abstract relations,"⁴³ such as a mathematical system. To put the distinction crudely, substantive analogies reduce explananda to models given by other concrete things, while formal analogies use models which may be simply constructed, without reference to any definite concrete analogue.

While some sort of familiarity is assumed in both cases, this requirement is much more in evidence in substantive analogies. Reduction to purely theoretical constructions, no matter how familiar, seems in some way suspect. William A. Wallace, for instance, suggests:

Now, if all scientific explanation is merely logical explanation, the claims of realism become much attenuated in the scientific enterprise. In particular, one wonders if there can ever be explanation in terms of real entities. . . . Should the explanations of modern science lead only to fictional entities, to entia rationis, their value for understanding the world of ordinary experience is minimal.⁴⁴

While we cannot examine this discussion at length, many would disagree with the preference for substantive analogies and concrete models. To take a specific actual system as the model may, moreover, involve us in other difficulties; both Nagel and Austin point out the dangers of mistaking inessential for essential features in the model.⁴⁵

A third element in this ordinary notion of "model" is, however, more important for our purposes, since we seek not to explain the free will in terms of something else or reduce it to something else, but only to explore its intelligibility. This element is the pattern of action discerned in the phenomena being investigated and in the model. Even if no reduction of modeled to modeling objects is made, some similarity between the two is necessary if the analogy is to be of any assistance. When the behavior of one object is illuminated in any way by comparison to

the behavior of another object, the least that can be at issue is some structure or pattern of which both are instances.⁴⁶ Even if we do not wish to hold that a gas is in fact made up of small particles, we may at least cast some light on its behavior by pointing out that its behavior is like that of a certain system of particles. Similarly, one may wish to hold not that light is in fact made up of waves, but that it at least exhibits certain "wave-like" properties or patterns of behavior (perhaps with other "particle-like" patterns as well).

This similarity of form or pattern seems the least extensive meaning that can possibly be assigned to the term "model" when one object is used to model another, or one abstract pattern presented to model an object. In this paper I wish to consider the abstract pattern itself, the abstract form of behavior, as the "model" for our purposes, without reference to other actual or constructed instances of this pattern.⁴⁷ While it may be necessary to invoke a concrete model system in order to explicate a phenomenon or reduce it to an instance of the model system, it would seem that intelligibility can be shown simply by pointing out an understandable pattern, whether it is instanced elsewhere or not.⁴⁸ The determinist accusation against Kant which we are considering does not depend on demanding that he reduce the causality of the free will to a specific model of a certain kind, else it would be much more easily answered.

Such a demand would itself presume the universal adequacy and exclusive efficacy of that certain kind of explanation. The charge we are considering is much broader, holding as it does not merely that free will cannot be reduced to mechanism, but that free will cannot be understood in any way, that it is nonsensical. The answer to that charge must be correspondingly broad: it must show simply that there is an intelligible pattern which can account for free willing as Kant describes it.

To some extent the criterion of familiarity will remain with us, lest the charge of merely explaining the unknown by the more unknown be raised; a pattern so unfamiliar as to be incomprehensible would add nothing to the intelligibility of Kant's Willkür and its operation. But emphasis will not be laid on any superiority of proposed models (patterns) to other models or to the standard pattern of mechanistic determinism. In fact, the next four chapters will present four distinct patterns or models of causation, schemata of operation of causes, and these patterns will be displayed in part by discussion of instances in which they have been proposed in scientific or philosophical theories. But it will suffice for our purposes if by citing such examples the sense of the pattern involved can be made clear and comprehensible, whether the pattern is familiar or not.

In terms of the loose definition of "model" pre-

sented here, then, our problem can be set up as follows. To answer the charge of unintelligibility of freedom of the will, Kant must find an intelligible pattern or schema of action which is consistent with the action of the free Willkür as he has described it. To this end, I shall consider various patterns proposed for causation at one time or another, showing the relation of each to the freedom of the will. Ultimate questions of what in the end such "intelligibility" means must be left aside; the basic idea of the determinist's charge is clear enough, and it will suffice to show that a model exists which is at least as understandable as that of determinism itself, which will be considered in the next chapter.

The salient features of the models to be considered are determined by the characteristics of freedom to which Kant is committed. As I showed at the end of the first chapter,⁴⁹ there are two such important characteristics, besides the freedom from natural or physical influences which the bifurcation of phenomena and noumena is designed to preserve. The first is the ability "to choose otherwise:" the pattern or law of free causality must allow the same original state to be followed by two or more succeeding states, so that the possibilities of obeying and of disobeying moral law may remain open. The second is that which state is actualized must depend on the moral agent himself and not on extraneous factors. Thus the survey of

causal models will stress these characteristics of suggested patterns, in order to discover whether one is available to Kant which is adequate to the exercise of freedom.

IV. DETERMINISM

Examples of Determinism

The determinist model of causation is more familiar than any other, and needs correspondingly less explication. Some brief sketches of determinist theories will make clear the type of pattern with which we are dealing here.

In the writings of the ancient Greeks determinism (as we would now call it) is linked with necessity. What comes to be of necessity can come to be in only one way, for otherwise that way would not be necessary. In modern terms, each state can be followed by one and only one other state. It might be said that if this is true, then even a nontemporal doctrine of necessity might be said to be a sort of determinism; we have already noted that for Kant at least, causation need not be in time. Under this interpretation, Parmenides might be called one of the first determinists; of the plenum of Being he says "It Is and cannot not-be . . . Necessarily therefore, either it simply Is or it simply Is Not. . . . strong Necessity holds it in bonds of limit, which constrain it on all sides."¹ Being cannot be other than it is, and so is determined, although not determined by an outside force, for there is nothing outside it.

A more familiar determinist doctrine can be found

among the atomists of Abdera. Here instead of a single monolithic Being we find separate particles, atoms, and the void or empty space; and the important thing for our purposes is that the motion of atoms, on which all else depends, is seen at least vaguely to be wholly determinate. The surviving fragment of Leucippus' writings tells us that "Nothing happens at random; whatever comes about is by rational necessity."² A report of the teaching of Democritus, his successor, adds: "Everything happens by necessity; and this necessity, particularly the causes of why things come-to-be, he ascribes to vortex [i.e., to vortices of whirling atoms]."³ Such a description seems quite close to that of classical mechanics in those respects which concern us here. Since all things happen by necessity, and nothing exists besides atoms and the void, it must be the atomic motions which exert "necessity;" each momentary state of the totality of atoms, a more modern atomist might say, strictly conditions the next state.

In the universe of Plato matters are more complicated. Here there is no such universal determinism as we have seen in the pre-Socratics (or in Kant); instead, "We are told, you know, that everything whatever which comes, has come, or will come into existence is a product either of nature, or of art, or of chance."⁴ For Plato both "nature" and "chance," as non-rational, are opposed to mind or art;⁵ apparently events in the universe come to pass as a

function of these two sorts of causes, not only one. Thus one who wishes to understand the coming-to-be of the universe must study both:

The lover of intellect and knowledge ought to explore causes of intelligent nature first of all, and, secondly, of those things which, being moved by others, are compelled to move others.⁶

Although we cannot here consider Plato's physical doctrines at length, this description seems to indicate two causes acting in different ways. Nature insofar as it is not under the dominion of mind is characterized as were the atoms of Democritus and Leucippus: it is causally conditioned by preceding states and causally conditions following states. Each thing is "moved by others" and in its turn is "compelled to move others;" the word "compelled" indicates the necessity at work connecting the one to the other, so that no alternatives are possible. On the other hand, mind is distinguished from this mode of operation, and so presumably acts in some other way; but this will not be considered here. Non-mental nature seems here to be a clear example of a determinist causal relation, even if it is not one governing the entire universe without "breaks."

This conclusion brings out an important point. We are now considering models of causal relation in general; but it is not necessary that in any given theory only one such model should be used. In the atomist theories, all causation was determinist; thus the relations character-

izing each causal interaction could be extended without change to characterize the universe as a whole. As the prior state of an isolated pair of atoms completely determines its posterior state, so any state of the universe as a whole fully determines the following state. But in a theory allowing more than one type of causal relation this would not be the case. Consider, for example, the universe of determinist atoms, but introduce also the causal efficacy of a Platonic "mind"--operating presumably under some other sort of causal law (as yet undefined). This mind can affect certain of the atoms, changing their speed or direction of motion. The atoms remain fully determined by the state of the atom-assemblage in the previous moment plus the disturbing mind and its influence, which is (by hypothesis) not itself fully determined by the previous atom-state. But since mind can introduce causal influences which are unpredictable on the basis of previous atom-states alone, the whole universe will have states not predictable solely on the basis of those earlier atom-states, even leaving mind out of the state predicted. When more than one sort of cause is at work in the universe, then the state of the whole will depend upon all the acting causes jointly, and its predictability or lack thereof will depend upon their predictability.

Nonetheless the Democritean atoms remain instances of our first model of causation, determinism; for their mo-

tions are determined fully by the causes acting on them, even if those causes include some which are not themselves so determined. The causal model under which a thing operates represents the relation between the causes influencing it and the following states, the former including its own prior state as a "cause." Plato's non-mental nature, then, can be considered an example of a determinist (or, more precisely, determined) cause.

The cosmos of Aristotle, in a similar way, is partially determinist. It is noted that "we observe that some things always come to pass in the same way, and others for the most part."⁷ For Aristotle the heavenly bodies form the foremost examples of those things which always occur in the same way, though not necessarily the only such things.⁸ Now, "we say that that which cannot be otherwise is necessarily as it is,"⁹ and this applies also to coming-to-be; there is a necessity to any coming-to-be which cannot occur otherwise, and this necessity is linked to compulsion (a reflection of the moral argument to freedom and the requirement of non-determinist freedom).¹⁰ Thus some sorts of change can occur in only one way and not otherwise, so that one beginning state can be followed by only one possible following state; and this answers to our notion of determinism. While not everything in the Aristotelian cosmos happens in this way, he correctly points out that a series of events will all occur by necessity and un-

avoidably if all their connections are of this sort and if the beginning-state of the series is actual; this means that any break in universal necessity, or determinism, must require some starting-point which is not so necessitated or determined.¹¹ In our terms, if any event is to be free (i.e., not previously determined), it must depend on some non-determinist cause, either directly or at a distance.

Epicurus, returning to the world-view of Democritus and Leucippus, depicts a rain of atoms falling through the void, which collide and link together to form larger bodies. In general (although not completely)¹² the motions of the atoms are determined by their own original motion, due to weight, and the force of collisions: "The atom will traverse space with the speed of thought . . . until the atom is deflected either by some external force, or by its own weight which counteracts the force of the earlier collision."¹³ This formulation obviously stands close to that of classical mechanics. Epicurus' successor Lucretius held somewhat the same view.¹⁴ The Stoic schools, over about the same time period, held views similar for our purposes: while atomism was not necessarily accepted, the general rule of fate or necessity was usually maintained.¹⁵

Some theological systems of the Middle Ages and Reformation also held to universal determinism of one sort or another; most certainly allowed some areas where determinist causation operated, as in Plato and Aristotle. John

Calvin's doctrine of predestination provides an example of a theory where, although it is held that human beings retain responsibility of a sort,¹⁶ it is also held that all things are fully determined by God.¹⁷ This might perhaps be called a sort of universal determinism, although one element of the "universe" considered (God) acts here as the sole determiner, and it is not clear whether he is also determined.¹⁸

It was with Descartes and the mechanists of the early modern era that the demand for universal determinism once again gained wide currency on grounds other than the omnipotence of God. Descartes' own model was more mathematical than mechanical, and tended to leave aside the mind as exempt from the causation of nature. Nonetheless, he attempted to demonstrate that certain laws were intrinsic to matter in such a way that even God could not have created it without them,¹⁹ and these laws were the laws of nature as scientists were more and more refining them. Further, he insisted that the human body as such was merely a machine, subject to mechanical laws and therefore determined (perhaps partly determined by the influence of the mind).²⁰ This view, afterward widespread, lay open to a use in which the separate mind was simply left out, and only mechanism remained, giving a thorough determinism among organisms, as in the work of La Mettrie.²¹

The all-embracing scope of the new physics of

Newton lent itself easily to an extension over all organic as well as inorganic nature, over all material existence in general. We have seen the influence of this view on Kant, and Kant's extension of the necessity of determinism to all events in time, all phenomena. But many thinkers refused the distinction of phenomena and noumena, with its attendant problems, and espoused a simple determinism of all things. The classic statement of this view is that of Pierre Laplace:

We ought to regard the present state of the universe as the effect of its antecedent state and as the cause of the state that is to follow. An intelligence knowing all the forces acting in nature at a given instant, as well as the momentary positions of all things in the universe, would be able to comprehend in one single formula the motions of the largest bodies as well as of the lightest atoms in the world, provided that its intellect were sufficiently powerful to subject all data to analysis; to it nothing would be uncertain, the future as well as the past would be present to its eyes.²²

In a mechanistic universe, the only realities are masses with their motions and systems of these; they are completely determined by laws of nature, and thus the state of the universe as a whole is both determinate and (in principle) predictable. Such a view, with various changes, was current until the beginning of this century.²³ Whether the system is in fact mechanistic or not is immaterial for our purposes, as long as the deterministic connection of sequent states of something holds true.

To list modern defenders of the thesis of universal

determinism would be pointless. Perhaps one representative speaker may be cited in psychologist B. F. Skinner, because of his explicit connection of determinism with the absence of human freedom:

Science is more than the mere description of events as they occur. It is an attempt to discover order, to show that certain events stand in lawful relations to other events. . . . If we are to use the methods of science in the field of human affairs, we must assume that behavior is lawful and determined. We must expect to discover that what a man does is the result of specifiable conditions and that once these conditions have been discovered, we can anticipate and to some extent determine his actions.²⁴

Partial or total determinist theories, then, may be of many kinds; some, though not all, are of the sort which we recognize as "mechanistic," based on analogy with machines or automata. With this brief survey of theories behind us, we may now consider the essential characteristics of determinism in general.²⁵

Basic Features of Determinism

Two more general philosophical principles may be briefly mentioned as related to the thesis of universal determinism.

The first of these may be expressed as "Nothing comes from nothing"--no entity appears without a cause of its appearance, and in general no change occurs without its appropriate determining conditions. To name only two instances, the Stoic view is summarized as "nothing happens

without a cause;"²⁶ Lucretius the Epicurean states that "nothing is ever begotten out of nought by power divine,"²⁷ and goes on to outline a general proof unrestricted to "power divine." This principle is stated in terms of explicit ontological and substantive relations--the existence of a thing depends on the existence of another thing.

Closely related to it is the "principle of sufficient reason," again a part of philosophical currency down the ages, but often associated specifically with Leibniz. He places it on a par with the law of non-contradiction, proceeding in the Monadology from the latter:

And second, the principle of Sufficient Reason, in virtue of which we believe that no fact can be real or existing and no statement true unless it has a sufficient reason why it should be thus and not otherwise.²⁸

Here the slant is somewhat more logical and the application is explicitly to change in general, not only to existence, but the general idea is the same. Leibniz applies the principle to contingent truths or truths of fact, to acts of willing, and to the choices of God, among other things.²⁹

As applied to the will, this principle would seem to lead to determinism, since a sufficient reason represents a cause which fully determines its effect; and at times Leibniz seems to incline in this direction, although at others he seeks to preserve some sort of free will for the timeless monads.³¹ In general, the "nothing from no-

thing" principle and the Principle of Sufficient Reason seem to be reasons for holding that only the determinist model of causation (indeed, of change in general, for it is assumed that every change must have a cause) is valid.

As my primary task at this point is to investigate what intelligible patterns other than that of determinism may exist, these considerations, along with other traditional arguments for the determinist position, will be left aside for the moment. If an otherwise intelligible pattern or model for freedom can be found, then the problem posed by the two principles will be considered again.³² In the meantime, we may proceed to draw from these two general statements, as well as from the examples cited, a more general characterization of the model of determinism.

From the above examples, we can now see that, if a general definition is required, the one given by Nagel for deterministic physical theories may be appropriate:

. . . a theory is deterministic if, and only if, given the values of its state variables for some initial period, the theory logically determines a unique set of values for those variables for any other period.³³

If "state variables" may cover all possible characteristics of the contents of the universe in question, then the quoted definition seems to capture the essence of the various determinisms mentioned. Each possible momentary state can be followed by only one other momentary state, since the values of the variables (i.e., all qualities or

characteristics) in the first state fully determine those of the second. Given any universe-state, only one other state may follow. We may further generalize the definition by removing the time-condition, and considering not two consecutive momentary states, but simply two collections of objects or events standing in a (not necessarily temporal) causal relation, such as Kant's noumena and phenomena.

Here the import of determinism is simply that one set completely conditions the other, and not vice versa; given one non-temporal group of "state variables" and their values, the other group is necessarily and uniquely given. Given (in Kant's terms) that noumena are what they are, there is only one set of phenomena that can exist, if the relation of phenomena to noumena is deterministic.

In order to bring out the other important quality of determinism, we must recall the distinction of logical and causal possibility made in the last chapter.³⁴ Consider a mechanistic universe containing a certain collection of bodies and a certain amount of kinetic energy. In the general, abstract sense, many states of that universe are "possible:" many assignments of quantities and directions of motion to the bodies are logically permissible, and causally possible in general (i.e., not forbidden in general by the laws of nature) as well. In fact, if the universe extends, in mechanistic motion, over a period of time, then many such assignments or states do exist, conse-

cutively. Thus determinism obviously does not insist that only one state is logically possible, or causally possible in general. But the existing state at time t adds conditions limiting this field of alternatives to one, de-limiting or de-termining the logical and abstractly causal possibilities by virtue of a causal necessity; so that while any number of states at time $t+1$ are logically possible, only one state at time $t+1$ is fully causally possible, really possible; there is no "real" alternative. Which alternative is realized, from an infinite field of logically coherent and intelligible states (taking into account the general laws of nature in this universe as well as the laws of logic), is determined uniquely by the preceding state.

We may, then, look more closely at the preceding (or, to prescind from temporality, causing) state and ask the following question: Precisely what in the causing state is it that uniquely determines the caused state? Could the causing state perhaps have been different in some respects, and the caused state remain the same? Determinism clearly holds that the "forward" relation from cause to effect is unambiguous, is a function in mathematical terms; given state A, the cause, there is only one state B, the effect. But does the reverse hold true? Given the effect B, is there only one overall state A that could have produced it? The alternative is that some elements of state A might have been different without altering the effect; per-

haps there are some "favored" objects or elements in A which were particularly instrumental in producing B, while others were merely accidental, might have been otherwise without altering the result. Is determinism committed on this question?

There is obviously support for the picking out of "favored" or especially relevant elements here in our ordinary analysis of causal situations. If the window suddenly shatters, I do not glance at the clock to see what time it is in seeking the cause, nor check the color of my shoes or the direction the wind is blowing, given normal circumstances; I may look for a rock or a baseball that might have cracked the window, or look outside to see if a culprit can be identified. Some circumstances (elements of the state of the universe immediately preceding, and lasting through, the incident) seem more relevant than others.

Yet the proviso "given normal circumstances" is necessary, and it is necessary because even circumstances not normally relevant might be relevant in certain cases. If baseball games are scheduled outside my window at certain times, then looking at the clock might give me a clue as to whether the shattering of the window was caused by a rock or by a baseball. If a neighbor has pledged mayhem if I am seen wearing purple shoes with orange stripes again, then examining my shoes may become important; and if a hurricane is forecast, the wind direction may become significant. In

the determinism we ordinarily attribute to nature at large, the laws of nature set up certain relations of relevance holding in general; but it seems plausible that any factor could become relevant if the conditions were strange enough, i.e., in some logically possible state of the universe. No factor is wholly excluded; in a simple mechanistic atomism such as that of Democritus, any atom's motion could (logically, or causally in general) be affected by the motion of any other atom in a collision, and only the state of the universe just preceding the event will determine which atoms might determine the next state and which are out of consideration.

Thus it seems best, in this general characterization of determinism, to place no restrictions on which states of things may be "favored," which elements of state A may be involved in determining state B. In most determinist universes, any part may affect any other part, given the proper circumstances. We may say, then, that the state of some element of the universe at B is in general dependent on the whole state of the universe at A for its conditions of causal possibility, for we do not know in advance which elements of A may turn out to be especially relevant.³⁵ In any specific determinist theory, such factors as "the laws of nature" will come into play to tell us which elements to check; but in our general discussion, it will be most comprehensive to state that the entire state

at A gives the complete causal conditions for any element at B, whether A and B are sets of "state variables" separated in time or whether they represent simply distinct sets, as with Kant's phenomena and noumena.³⁶

The characteristics of determinism which are relevant to our discussion, then, can be simply stated. For each state A there is exactly one state B of its effect which is causally possible in that specific set of circumstances, i.e., given the preceding state A; and which state that is, will be determined (from the range of logical possibilities allowed by "laws of nature") by the state of the entire universe at A.

Determinism and Freedom

It is not necessary here to show again the place of determinism in Kant's own philosophy. We have already seen³⁷ that for Kant all phenomena must lie under complete and self-contained determinism, each state of phenomena determining uniquely a following state, in line with the a priori law of causality, and also with the principle of sufficient reason.³⁸ It may be noted now that, assuming that noumena in some way affect phenomena, their relation is presumably also deterministic: there is no chance of wavering or slipping in the influence of Willkür upon actions in time. Further, Wille, which legislates the moral law, seems to operate under a sort of determinism as

well. This determinism is obviously wholly separate from that of nature (phenomena), by which it cannot be contaminated; but, since in every case the law is to deliver a unique and categorical result, it would seem that Wille derives or develops its directives in some way admitting of no alternative answers, and this fits our definition of determinism.³⁹

We have also seen, however, that according to Kant determinism cannot account for the freedom of Willkür, which is required for morality.⁴⁰ Determinism ensures that the same cause or causing state A can be followed by only one effect or caused state B, and even that specification depends on the entire universe for its determination; but the imperative character of the moral law demands the ability to act in more than one possible way, causally possible as well as logically possible, and that way which is actually realized must depend on the agent if responsibility is to be preserved. "If freedom were determined in accordance with laws, it would not be freedom; it would simply be nature under another name."⁴¹ Kant speaks out explicitly in the Metaphysics of Morals against those who wish to deny freedom of the will in the name of natural determinism;⁴² while determinism in phenomena cannot be given up, neither can freedom of Willkür. The determinist model does not provide a model for Willkür; it fails both the two criteria we have established for such a model.

While my main purpose here is to show that determinism is contradictory to freedom as Kant defines it, a few words may be said concerning the freedom-determinism controversy in general. If in fact the arguments for free choice which I have cited from Kant⁴³ hold true, particularly the moral argument, and if in fact the characterizations I have shown necessary for such freedom are correct, then no theory of "freedom" which fails to meet those criteria can be admitted. For instance, the theory presented by G. E. Moore in Ethics, cited above,⁴⁴ in which "freedom" is taken to mean merely the freedom to do otherwise if one had chosen otherwise, leaving it open for the choice to be wholly determined in its turn, is inadequate. For if the will which "chooses" is in fact involved in a chain of strict causal determinism, then no real alternatives exist. Alternative choices are merely logically or abstractly possible, not causally possible (given the beginning state of the will), and so only one alternative remains really open; that alternative will be set by the universe at large, as it shapes the character and "choice" of the agent. Such a theory cannot account for the morally binding but not compelling nature of moral obligation, nor for responsibility, as we have seen them developed by Kant.

Double-aspect theories (such as Kant's own, if noumena are not permitted to causally determine phenomena), such as those attempting to retain freedom via a distinc-

tion between reasons and causes, will also fail to supply the required sense of freedom, if the arguments I have raised concerning over-determination are correct.⁴⁵ It would seem that any theory seeking to make "freedom" compatible with unambiguous universal determinism must fail in this way; and this consideration adds significance to the project of this paper. An intelligible model for choice other than that of determinism will be necessary, then, for any theory seeking to defend freedom, Kant's being only one instance.

One further argument common among modern determinists claims that determinism is not contradictory to, but on the contrary, necessary for, the ascription of responsibility. This type of argument, however, will be discussed at length in the next chapter, presupposing as it does a second causal model which we are now to examine. Our conclusion at this point is clear: no determinist causal model can be adequate for the freedom of Willkür as required by Kant.

V. INDETERMINISM

Indeterminism and Chance

"Indeterminism" may be a natural name for a notion complementary to that of determinism; that is, any causal model not deterministic might be called "indeterministic," if the latter were used to mean simply "not deterministic." However, the term is also used often in a narrower sense, in which it denotes a specific and identifiable model of causation which is not deterministic.¹ I intend to use the term in this more specific sense, which will be developed via the examples discussed below; for the complementary notion of "determinist" I will use "non-determinist." All causal models, then, must be either determinist or non-determinist; and of the non-determinist models, some may be indeterminist. Whether there are any non-determinist models which are other than indeterminist will become the central matter of discussion further on.

This model of indeterminism is the one often identified with "chance" or "randomness;" and the first task is to distinguish the important meaning of "chance" from other ones often employed. A concise analysis by Ernest Nagel² may serve as our guide here.

Perhaps the most common meaning of "chance" is that

of an unexpected event, caused by a convergence of two or more relatively independent "causal chains" whose convergence had not previously been considered. This sense is often discussed by ancient thinkers. Aristotle's example of "chance" in the Physics, for instance, is as follows:

. . . A man is engaged in collecting subscriptions for a feast. He would have gone to such and such a place for the purpose of getting the money, if he had known. He actually went there for another purpose, and it was only incidentally that he got his money by going there; . . . it is when these conditions are satisfied that the man is said to have gone 'by chance'.³

In this way "chance" is often contrasted to (or connected with) intention, to matters subject to planning. If something can happen by plan, then related things may also happen which were neither aimed at nor avoided by the plan, but simply not taken into account, "fortuitous." Thus Plato, in speaking of mind and the non-mental as two sorts of causes that must be considered, speaks thus of the non-mental, which (as we have seen) is at least generally determinist: "a distinction should be made between those which are endowed with mind and are the workers of things fair and good, and those which are deprived of intelligence and always produce chance effects without order or design."⁴ That which operates non-mentally does so without purposes or plans, and thus the effects it produces can be called "chance effects" in a sense; no one planned them, just as the collector in Aristotle's example, though he did

go to a certain place for a purpose, nonetheless also achieved a purpose which neither he nor anyone else had planned.

While there is, as Aristotle says, a certain "indefiniteness" to this sort of event, it is not an indefiniteness that deprives ordinary determinist causation of any of its force. On the contrary, the whole interest of the case is that the conditions of the "chance" event were wholly determined ahead of time, even though no one (no mind) knew that it would occur. As Nagel says, "an event that is said to be a chance occurrence in this sense is usually not assumed to be 'uncaused' or to lack determinate conditions for its occurrence."⁵ The only interesting aspect of such an event is that the two relatively unrelated (up to this time) causal series "ran into each other" in a striking or unusual way.⁶ This kind of "chance" is not a contradiction of, but rather requires and further elaborates, determinism.⁷ It provides no new causal model, but merely illustrates the complexity of the results obtainable from the first model, determinism.

A second meaning of "chance" which is not helpful for our purposes is an epistemological sense, again often used in ordinary conversation, and related to the sense described above. Nagel states that "the word 'chance' is predicated of an event in another sense, . . . when there is practically complete ignorance concerning the determin-

ing conditions for the event."⁸ This is the case, given a universe in which classical mechanics holds true, exemplified by the fall of a tossed coin. Whether the coin lands "heads" or "tails" is considered a random matter, because it is impossible for us to predict what the result of the next throw will be (although we can predict certain things concerning a series of such throws). It is not here contended that the fall of the coin lacks determining conditions; on the contrary, according to classical mechanics sufficient knowledge of forces, air pressures, weights, etc., would enable an ideal observer to predict exactly what the outcome of the throw would be. Such an observer would have to resemble that of Laplace in the passage quoted in the last chapter. Since we cannot in practice meet these conditions, we cannot predict the result other than statistically; but universal determinism remains in force.

It is clear that insofar as this limitation refers only to our knowledge, it makes no difference to the causality which is at work. Mere unpredictability does not alter the causal model, and even unpredictability in principle is absent from this sense of "chance." Accordingly, this sense, like the first, is compatible with complete determinism.

But Nagel distinguishes a third meaning,⁹ one which is distinct from determinism.

. . . in this sense the word refers to some "absolute" rather than relational character of events. An event of which 'chance' is predicated in this sense is sometimes held to be "uncaused," so that not only do we not know the determining conditions for its occurrence but, so it is assumed, there are no such conditions.¹⁰

If such a notion is coherent, it presents an alternative to determinism. We may therefore examine some examples of indeterminist theories, or "tychism."¹¹

Early Examples of Indeterminism

In many ancient Greek thinkers the "problem of freedom" in its modern sense does not arise at all; attention is focused on other distinctions among causes, perhaps because it had not yet been claimed strongly that only one of our models, determinism, was applicable in the universe. This may lead us to consider whether ancient ideas of causation were in fact thoroughly determinist in the sense elucidated here, for if they are not, then a second model may be detectable.

For example, Aristotle defines "chance," as we have seen, in terms of fortuitously intersecting causal chains. But at the start of that discussion--in the passage we have already seen as evidence of determinism--he makes a tripartite division:

First then we observe that some things always come to pass in the same way, and others for the most part. . . . there is a third class of events besides these two--events which all say are 'by chance' . . .¹²

Those things which come to pass always in the same way, by necessity, follow a pattern which answers well to that of determinism; and the third type does not for our purposes differ. But what of things which follow only "for the most part"? Events in the heavens have a permanence not present in things on earth, where monsters and "sports" appear, and causes (in such matters as procreation of species) seem sometimes to "go awry." Is this merely a case of complex determinism (e.g., the two-headed calf was born because of exposure of the mother to the wrong kind of food, or to radiation)? If so, why is it differentiated from the third sort of event, happening by chance? It seems at least possible that in the sublunary realm it sometimes happens that one cause can produce two possible effects, and the "wrong" or unusual effect may turn up randomly--as with the two-headed calf.

Robert E. Wood, in a recent article, states that "no such a-causal theory is Aristotelian," referring instead to the complexity of determinist causes we have already noted.¹³ Nonetheless, it seems possible that the "changeableness" attributable to sublunary events lies partly in that changes occur only "for the most part," with some small irregularity. The same triple division of events in the world is retained in St. Thomas Aquinas;¹⁴ here the intermediate class of events, happening "in the majority of cases" and neither always nor serendipitously,

is represented by the doctor's prediction of the health of his patient. It is not clear in either Aristotle or Aquinas whether the unpredictability or irregularity in these cases is due to hidden causes which provide sufficient conditions for the difference, or whether there is a real indeterminism, a lack of sufficient conditions for the difference; but it seems possible that the latter is the case.

It seems certain, however, that true indeterminism is present in the atomism of Epicurus. In the few extant writings of Epicurus himself this point is not explicitly mentioned,¹⁵ but it is stressed sufficiently by Lucretius, and thus presumably in Epicurus' own unpreserved writings, to be called "the chief innovation in Epicurean physics."¹⁶ This indeterminism is also linked directly to freedom of the will.

As we have seen, Epicurean space is a void in which atoms of various types fall ceaselessly, rebounding in a mechanical way. But every once in a while an atom makes a sudden, unpredictable turn from its previous course, a turn not caused by a collision or by any other force. The original collisions of the atoms are caused by these first alterations in their steady fall, and the formation of large agglomerations of atoms is thus also due to

. . . the uncaused swerve of the atom . . . According to the new physical theory, at indeterminate times and places any of the atoms may swerve and

strike other atoms. These in turn are forced from their normal courses, . . . The swerve also, as we shall see below, makes possible the freedom of the human will.¹⁷

The description of Lucretius, setting forth the ramifications of the theory, may be quoted at length.

. . . particles, while they are borne straight downwards by their own weights through the void, at quite uncertain times and in uncertain places push a little from their track, only to such extent as to enable you to say that movement has been changed. For, if they were not wont to swerve, all would fall downwards through the void profound like drops of rain, and for the first-beginnings neither shocks nor blows would have been born; thus Nature never would have formed a single thing. . . .

Again, if every motion is connected always with another, and a new one always rises in fixed order from an old, and if the first-beginnings by their swerving do not form a kind of principle of motion which may break through Fate's decrees, that cause may not from time unending follow cause, whence comes this free will o'er the earth to living things--whence has this will, I say, been wrested from the fates, by which we each walk onward as our pleasure leads, and likewise turn aside our motions, neither at fixed times nor in fixed directions, but according as the mind itself has led?

. . . the mind itself is not held by an inward need in doing all its acts, and is not, as though vanquished, forced to bear and suffer it, this the slight swerving of the first-beginnings causes, but at no fixed time and in no fixed direction.¹⁸

We may note several things here. The "swerve" is not introduced solely as a guarantee of free will, but is necessary to allow atoms to collide and form larger objects. It therefore is not restricted to human decisions (whether it can account for these will be discussed below), but applies also to uncaused irregularities in atomic motions before either human beings or nature existed. None-

theless, Lucretius and Epicurus evidently see some sort of interruption of the chain of determinist causes as vital to preserve freedom, and this because of the association of determinism with "force," with compulsion of the "vanquished"--an argument closely analogous to Kant's argument from morality. Exactly how this swerve acts to make human freedom possible is not further explained.¹⁹

Epicureanism, then, gives us a clear example of a tychism or indeterminism distinctly different from determinism. According to strict determinist principles, the falling atom at the instant before the swerve has only one possible succeeding state, that of continuing in its previous direction. But in Epicurus there are two possibilities (at least). The atom might have continued forward (otherwise the swerve itself would be in principle predictable and would occur at a "fixed" time and place); or it might, because it did, turn to the side.

Similar models have occurred elsewhere, although with lesser frequency after the physics of Newton and the rise of universal determinism. After determinism in physics had become a well-established working hypothesis, some thinkers in other fields attempted to leave a way open for indeterminism among organic beings, in the field of biology. Perhaps among living creatures indeterminacy was somehow preserved, even though these creatures were composed of the physicists' atoms and molecules. Marie

François Xavier Bichat, for example, wrote in 1801:

Physical laws are constant and invariable; . . . they can, consequently be foreseen, predicted, and calculated. . . . On the other hand all the vital functions are susceptible of numerous variations. . . . It is impossible to foresee, predict, or calculate, anything with regard to their phenomena; we have only approximations toward them, and even these are often uncertain.²⁰

Again, such a statement may only refer to the complexity of the causes involved in living creatures, and not to a real indeterminism; but the latter seems more plausible. It is not clear how an indeterminism in living creatures could be reconciled with a determinism of atoms, if living creatures are composed of atoms and have no non-material or non-atomic parts. But we may leave this problem aside and simply note the presence of an indeterminist causal model.

In the second half of the nineteenth century some American pragmatists also maintained the existence of indeterminism in nature. In his well-known article "The Dilemma of Determinism,"²¹ William James insisted on the existence of alternative possibilities for action as against the determinist doctrine that only one outcome is possible from a given situation. C. S. Peirce attacked the prevalent assumption of universal determinism at some length. Holding that neither a priori reasons nor evidence from experience supported adequately the contention that "every single fact in the universe is precisely determined by

law,"²² he suggested that indeterministic breaks in such determinism might allow room for freedom of choice.²³

But by this time a revolution in physics, for nearly two centuries the bastion of determinism, was already being prepared. For the most influential theories of real indeterminism we must turn to the physical theories of the twentieth century.

Indeterminism in Modern Science

The question of indeterminacy in modern quantum theory is one which is difficult for those who are not specialists to discuss with confidence. However, only a very limited conclusion is required for our purposes here, and a brief discussion may serve to establish that conclusion, while not pretending to investigate the entire problem thoroughly.²⁴

In general, the situation may be stated as follows. At the end of the nineteenth century, the prevailing model (here in the sense of picture or analogue) of the atom was one in which very small particles of the same type as those handled in classical mechanics interacted by means of collisions and electromagnetic attractions and repulsions. Negatively charged electrons were to be found in orbit around positively charged nuclei consisting of protons and neutrons; the orbits were shaped by the motion of the electrons and the electrical attraction between electrons and

nucleus, with that attraction taking the place of gravitation in a tiny replica of the solar system. Since all the factors involved could be accounted for in classical mechanics (if electrical attractions acting at a distance, like gravity, were allowed), the atom of this era formed a perfect determinist system, in which electrons, having a precise position and momentum at any given moment, found their position and momentum in the next instant exhaustively determined by the various forces acting on them. Further, under the laws of classical mechanics, an electron could theoretically take up any position and momentum in its orbits; that is, there existed infinitely many possible orbits, forming a continuum of position-and-momentum pairs, just as infinitely many planetary orbits about the sun are possible.

Many theoretical difficulties and developments in explaining certain experimental facts, however, led to a change in this picture between 1900 and 1930.²⁵ One sample argument may serve to make the problem clear. The continuum of possible electron orbits described above should, in theory, have led to a continuum of possible energies of radiation from an atom, since the change in an electron's energy as it moved from orbit to orbit would determine the energy radiated away. It was found, however, that radiation did not occur in such a continuum, but rather discontinuously, producing wavelengths only at certain levels in

the set of theoretically possible wavelengths or energy levels. This seemed to indicate that only certain electron orbits were "permitted," and that particles must "jump" instantaneously from one to the other. Such an arrangement would account for the discrete amounts of energy radiated, but would raise a problem: how could a classical particle move from one location (or energy state) to another without passing through the intervening spaces (or energy levels)? Instantaneous "jumps" seemed out of the question for classical particles.

A similar problem was raised by the postulation, for theoretical reasons, that mass and energy were equivalent. If this were so, then any form of radiant energy would have mass and could be considered a sort of particle; and any particle represented an energy content and could be considered a manifestation of a wave. Evidence of both particle-like and wave-like properties of electrons was available. Further, since radiant energy of some sort (such as light) must be used for observation of particles, an epistemological problem arose. Radiant energy can only occur (as noted above) in discrete packages or "quanta;" it also represents mass; thus its collision with a particle, necessary to enable us to "see" the particle, will necessarily alter the particle's position and momentum by interacting with it. If a lower-energy particle is used to locate the particle in question, the alteration of momentum

is reduced, but (because of the nature of waves) our determination of the position will be less exact; if a higher-energy particle is used to "see" by, the determination of position will be more exact, but the alteration in momentum greater. Since the particles or quanta available come only in "packets" of certain sizes, it is not possible to decrease their intensity without limit. Werner Heisenberg's Uncertainty Principle (or Principle of Indeterminacy) gave a mathematical formulation of the fact that one could not determine the position and momentum of a particle simultaneously with more than a certain exactness.

In addition, it should be noted that the mass-energy relation had begun to cast doubt on the very notion of a specific position or momentum for a particle. If the "particle" represented a packet of energy and could also be considered as a wave, what sense could be given to the position or momentum of a wave? Some meaning certainly could be assigned, but it would not correspond to the meaning of those terms for a classical particle.

The result of these developments was a new physics, better able to explain the experimental data, but open to a bewildering variety of possible interpretations both by scientists and by laymen. For our purposes the central point is the "indeterminacy" of the position and momentum of a particle. We must consider both the indeterminacy of position and momentum at a given time, and the indetermin-

acy of one position and momentum with respect to the immediately preceding one. This second indeterminacy applies to the movement of electrons, which are now, if considered as particles at all, thought to occupy discontinuous successive positions within a certain volume of space.

Many interpretations of this indeterminacy can be (and have been) given. We may distinguish three major branches: (1) epistemological indeterminacy; (2) conceptual indeterminacy; (3) metaphysical indeterminacy.²⁶

An epistemological interpretation of quantum theory holds that the theory represents (or need represent) no indeterminism in reality, but only in our knowledge of it, a limit to the knowability of very small objects. Such an approach would concentrate on the measuring or "seeing" aspect of Heisenberg's principle as I have presented it, and might state the situation as follows:

The fact that the epistemological difficulties . . . preclude our knowing what all the specific relevant causal factors are in a particular case does not warrant the conclusion that there are none. Present inability to specify the values of a variable can hardly be construed as evidence that no such values exist.²⁷

Following Willard F. Enteman, we may distinguish two varieties of epistemological interpretations.²⁸ The viewpoint closest to that of classical science might conceive the difficulty as a temporary epistemological problem, as suggested by the passage just quoted. Many times in the past a factor has seemed to vary randomly or by

chance, but later on subtler factors have been discovered which provide deterministic conditions for its variance.²⁹ Similarly, while we cannot now know what determines an electron to "jump" to one spot rather than another, we should assume, at least as an aid to investigation, that some as yet unknown factor does so determine it, and search for that factor rather than claim a permanently insoluble problem.

Someone more deeply impressed by the measuring problem embodied in Heisenberg's Uncertainty Principle, however, might insist that the difficulty was a permanent epistemological one, since the nature of observation assures that it cannot be overcome. Even if there are minuscule factors at work to provide the full determination of an electron's path, we are nonetheless limited to working with radiation-packets of finite size in locating the electron and marking out its path; and this bombardment of the wave/particles by which we "see" must prevent us from gaining more than an approximate notion of the position and momentum of the electron at any time. Because of the unavoidable interaction of the experimenter's instruments with the experimental subject, a residual indeterminacy (with respect to classical particles), expressed by the uncertainty relation, cannot be overcome.

The two epistemological views share the assumption that there in fact exists an electron with a definite loca-

tion and momentum, and that determining factors exist for its state at any future time; but they claim that either permanently, or at the present state of our technology, we cannot have access to those data. Such a view obviously does not represent real indeterminism, the possibility of alternative future states, but only a limitation on predictability. "This would indicate a regrettable gap in the state of our knowledge, and possibly in any future state of our knowledge, but can have no bearing on the metaphysical problem of indeterminism."³⁰

The second major view of quantum indeterminacy represents the problem as conceptual, as bound up with the nature of the scientific "model" in the broad sense, the familiar analogue which is employed in understanding or interpreting the mathematics of the theory. It has been noted that the theory of the equivalence of mass and energy, and of particles and waves, casts doubt not only on our knowledge about particles, but on whether a particle deserves the name "particle" at all. If not only the sequence of position-momentum states, but the instantaneous state itself, is indeterminate, then Ross's remark is apposite:

. . . it may be taken to mean that while an electron has a position and a momentum, these are not in fact definite; and this cannot be anything but nonsense. . . . what is surely quite clear is that nothing in the world can have a position which is not a definite position or a momentum which is not a definite momentum.³¹

If a position or momentum is not definite or determinate, according to Ross, it is not a position or momentum at all; those concepts make no sense if they do not represent determinate values. The implication is that if such "electrons" do not have definite positions and momenta, they cannot have positions and momenta at all; and such "electrons" obviously cannot be the particles of classical mechanics.

William H. Davis's discussion of mechanism and quantum mechanics makes the same point more explicitly:

. . . the real reason we come up to a blank wall, or impassable bounds, in our investigation of the nature of atomic particles is simply because behind these bounds is not the kind of reality we are looking for. . . . It is well known that atomic particles of all kinds manifest a dual nature: under some circumstances they behave just as we would expect a small particle to behave, but under other circumstances they behave in such a manner that they could not by any stretch of the imagination be considered a particle of any kind. . . . No mathematical or logical contradictions are involved. All that is involved is our inability to conceive of a model. . . . They are not like anything with which we have any experience in our ordinary lives.³²

The statistical nature of quantum theory, cited by both Nagel and Wartofsky, supports this approach.³³ If the theory says nothing about individual events or particles, but only about classes or ensembles, then it may be meaningless under the theory to speak of any characteristic of individual particles. On the other hand, if the classes or sets to which statistical analysis is being applied are thought of as sets of classical particles, then the problem

will recur. It seems more plausible to say, more generally, that whatever an "electron" is, it is not a classical particle, not the kind of thing that has a position or momentum (in the mechanists' sense). The "real" electron may be some non-picturable kind of thing having both particle-like and wave-like properties, or perhaps its real properties are neither of these but can best be explicated, in our present state of knowledge, "as if" the electron were a particle (in some cases) or a wave (in others). In either case the notion of an instantaneous position or momentum of an individual electron, and a fortiori the notion of the determination of changes in those values, will be simply meaningless, categories not applicable to the entities involved.³⁴

If the approach of conceptual indeterminacy is adopted, then to speak of indeterminism of the particle will be nonsense; any indeterminism would have to be found in field shapes or the "Psi function" which represents the electron distribution. But apparently at this level, which may be statistical or may represent some non-particulate kind of object, quantum theory is as determinist as is classical mechanics. Here, then, there is no indeterminist model to be found.

Can the third interpretation, metaphysical indeterminacy, provide such a model? Under this interpretation an electron would remain a classical particle, with a definite

position and momentum at any given moment. The difference would be that the position and momentum at time $t+1$ would not depend entirely on, or be determined entirely by, the position and momentum at time t , nor by any other factors in the state of the universe at time t . As Ross describes it, this interpretation would mean that "the phrase may be taken to mean that, while an electron has a definite position and a definite momentum, these are not completely determined by pre-existing conditions."³⁵ The implication is that "precise determination in the antecedent state is consistent with slight variations in the subsequent state"³⁶--not that the subsequent state will give an indeterminate or indefinite position and momentum, but that which determinate position and momentum occur is not fully determined by the previous state.

Consider an electron occupying an orbital of an atom at time t , and let it be assumed that the electron is a classical particle with a definite position and momentum. The orbital which the particle "occupies" will be a volume of space through which the electron moves, i.e., different points in which are occupied by the electron at different times; and the shape of this electron "cloud," and the frequency with which the particle appears in certain regions, determine the bonding characteristics of the atom. Now, each point in the orbital will have a probability number associated with it, giving the "density" of the cloud at

that point, the intensity of the electrical charge which is located there. Under the interpretation of conceptual indeterminacy, the electron is simply the whole "cloud," a field or wave-form or set of probabilities. But under the interpretation of metaphysical indeterminacy, there is actually an electron, a particle which occupies various locations in the "cloud" from moment to moment in roughly the proportion given by the probability numbers at those points.

Now, a real and ontological indeterminism will result if the electron's location at time $t+1$ is not determined by conditions at time t . The particle can "jump" from one location to another without passing through the intervening space in the continuous fashion we usually associate with matter; and which location it jumps to is not determined at the time preceding the jump. It is a matter of chance, or of random selection, which location will next be occupied. If it is misleading to speak of "velocity" or "momentum" in such a situation, we may say that the electron possesses a certain position and energy level at time t , and that at that time there is a set of positions and energy levels at time $t+1$ which are not only logically possible but causally possible. The electron could appear at many locations in the cloud in the next moment, and there is nothing in the prior state of the universe which compels it to move to a certain one. The next moment will find the

electron in some position-state, but which one it will be cannot be determined even in principle from the preceding state.

It is important to note that this indeterminacy of the electron is not complete indeterminacy. The succeeding location of the electron must be a point within a fairly small volume, the volume of the electron orbital; its appearance far outside this volume is of a negligible probability. Further, the very probability-structure of that volume represents a certain limitation or specification of the electron's motion. At any particular moment the particle may move to many possible next locations, but over a long period of time it will tend to occupy certain locations more often than others; this is the meaning of the "probability numbers" associated with the points in the volume. It might be said that a certain amount of latitude is permitted the electron--the order in which points are occupied, and some variation in the frequency of occupation --but only within a certain range, which determines that in general, statistically, a certain probability structure will always appear. Thus the indeterminism admitted for the electron under this interpretation does not lead to chaos; in the long run (which accounts for most macroscopic phenomena), the effect is the same as if the motion were determined by the laws of classical mechanics. Only in certain unusual cases (the ones accounted for by the new

physical theory) does the quantum indeterminacy affect macroscopic events.

This version of quantum indeterminacy seems to provide an example of real indeterminism in the sense used in this paper. A state of the universe at one moment can give rise to more than one possible state at the next, because many possible electron locations are causally possible for our sample electron. Like the swerving Epicurean atom, this semi-classical particle proceeds through time in a way not fully predictable; it does not move in a continuous path as does the atom of Epicurus, but its state can be one of many in the next moment, as can that of an Epicurean particle at the time of the "swerve."

I have now presented three major varieties of interpretations of the data of modern science on this point; only the last, metaphysical or ontological indeterminacy, can serve as an example of causal indeterminism for our purposes. It is not clear which interpretation is correct, nor even what the consensus of physicists' opinions may be on the subject, and I am not qualified to make a decision, although conceptual indeterminacy seems perhaps the most plausible at the present time. However, it is not necessary for the purposes of this paper to determine which interpretation is correct; our discussion of indeterminism does not depend on a proof of real indeterminism in nature. The metaphysical interpretation of quantum theory, while

open to many objections, nonetheless provides a sample, a portrait of an indeterminist model. Like Epicurean atomism and eighteenth-century philosophy of biology, quantum indeterminism as metaphysical can be seen as an example showing that indeterminism in general is conceivable or apparently conceivable, since it is considered a possibility by many thinkers.

Having noted these actual examples of indeterminist models, we may now consider the essential features they reflect.

Basic Features of Indeterminism

Determinism demands a one-to-one relation of cause to possible effect; indeterminism maintains a one-to-many relation. Out of the large number of logically possible states, many remain causally possible after the causal conditions are added. Only one, of course, is realized; but that one is realized not because the state of the universe compels its realization, but by chance, by accident. The selection of the outcome from the causal possibilities is random.

To define such "random selection" is difficult.³⁷ Let a range of possible outcomes be specified in advance, and assume that they are equiprobable; one might consider an idealized six-sided die, whose fall is not determined mechanically, but is indeterministic in our sense. Each

time the die is spun, any of the six sides may appear. Over a long period of time, all of them will tend to appear in roughly equal frequency; this is the meaning of "equiprobable." The frequency itself will show no very definite order.³⁸ But the assumption on which this long-term pattern (or lack thereof) is justified is that no one of the six sides is "favored" over the others; each is equally eligible for appearance as the actual outcome each time the die is spun. Such a relation of randomness can be easily imagined, although it is extremely difficult to define.

Now a system of alternatives may also have a "probability-structure" such as that referred to in the preceding section, and one more complex than the equiprobable situation just described. In a random reshuffling of genes, for instance, two controlling a single trait as dominant and recessive, the probability distribution will tend to be 3/4 dominant and 1/4 recessive; this, rather than equal numbers, will be the long-term pattern. In the case of dominant genes, the pattern is explained as the result of a probability-pattern at another level which is equiprobable: the chances of the presence of dominant and recessive in each place are equal, but only one dominant gene is required to give the dominant trait. One can imagine, however, a complex arrangement of probabilities which would not so depend on equiprobables; it could nonetheless be represented as such, by assigning a range of "chances" to

each result depending on its probability of appearance, and then allowing an equiprobable selection to occur over that range. Such would be the case with the atomic electron, if the metaphysical interpretation of quantum mechanics were correct. Of the many possible locations for the electron, some, where the cloud is densest, would be preferred; those locations would possess more "chances" of coming up in an equiprobable selection over a large range, somewhat as a holder of several lottery tickets increases his chances of winning without thereby subverting equiprobability among tickets.

We may describe selection over any sort of probability-structure, then, as reflecting a sort of equiprobability, and this answers well enough to the notion of "randomness" derived from such experiences as the throwing of dice. This randomness is essential to indeterminism as we have seen it illustrated from Epicurus to Heisenberg: given the original probability-structure, the "choice" falls upon alternatives impartially. An organism in Aristotle will reproduce itself accurately in the majority of cases, but (if my interpretation is correct) the occurrence of a monster in a certain case means simply that "its number came up," not that some unknown force affected the process of generation. The Epicurean swerve presumably occurs less often than straight-line motion, but the swerves that do occur come at random, not by plan. And an ontologically

indeterminist electron jumps from place to place at random, unbiased in its selection of future locations.

Such a model, then, is not at all one of absolute chaos. The range of causally possible alternatives is wide, but narrower than the range of logically possible ones: the indeterminist die must land on one of its six sides, not crumble into dust or sprout wings and vanish. Further, the distribution of outcomes over a long period bears a certain pattern, even though the individual events do not; there is a probability-structure, expressible in terms of equiprobability, which makes it appropriate to refer to indeterminism as "relative disorder (or relative randomness)." ³⁹

The model of indeterminism, then, can clearly be distinguished from that of determinism. In terms of the two qualifications in which we are most interested, there are several possibilities remaining open once the causal conditions are exhaustively specified; and which possibility is realized depends on random selection, is a matter of chance. The difference is apparent in both points. Determinism leaves only one causal possibility open for the effect; indeterminism allows two or more. Determinism leaves the effect open to determination by anything in the universe; indeterminism, while allowing such factors to set the general limits, selects or determines within those limits randomly.

Can such a model be admitted? Certainly, if determinism is looked upon as an a priori category necessarily covering all events in nature, indeterminism will not be considered admissible. We have seen that Kant holds this view for phenomena, and others have held like opinions.⁴⁰ But no such exclusive rights can be claimed for noumena and thus for Kant's freedom of Willkür. The notion that indeterminism may be at large in the universe may seem less menacing if it is stressed that, as I have shown above, it does not mean absolute chaos or absolute randomness. Quantum-mechanical indeterminacy, whether or not it is interpreted as indeterminism, is compatible with all the order of natural laws; a small amount of "looseness" in causal connections removes absolute order, but it does not thereby remove all order. Further, the use intended for a causal model here in Kant's system should not (according to Kant) import any indeterminacy into the world of nature. We may consider it for use in noumena without qualms as to the destruction of all science or knowledge.

Similarly, it would seem that any attempt to rule out "absolute chance" immediately and a priori as unintelligible or incomprehensible would be out of place.⁴¹ Even the principle "everything has a cause" quoted in the last chapter might perhaps be accommodated to indeterminism by postulating a cause which is "adequate" to producing any of several effects; the position of an indeterminist electron

depends to some extent on its preceding position and momentum, but is only one of several possible positions which that preceding state "had the power" to produce or be followed by. That any effect has a cause need not, perhaps, be seen as wholly excluding the possibility that its cause might have produced other effects.⁴² Because of the limitation of the range of possibles, indeterminism need not be absolute, if this is taken to mean all-embracing or unmitigated. We have seen that an indeterminist causal relation may limit the possible effects quite closely, as in the case of the indeterminist die, and that the selection of effects follows a certain pattern of its own in any given case, although a pattern which does not wholly exclude any of the possibilities. This notion of random selection would be nonsensical only if it were assumed that every effect must be exhaustively determined by something in the preceding state of the universe, or the relation would be unintelligible; but this would be argument in a circle. Whether or not there are any actual instances (such as electrons) which obey such indeterministic laws, it seems clear that the concept of indeterminism is as understandable as that of determinism, and that of random selection little less mysterious, in the end, than that of one-to-one "compulsion."

It may be suggested that the oddity of random selection, that individual events may vary but that a series

of such events forms a pattern, represents a causality of the whole on its parts, reminiscent of the causation discussed by Kant in the third Critique.⁴³ This interpretation would suggest that the system of events as a whole (the series of die-throws, for instance) exerts an influence on the individual events which forces them into the proper pattern. Aside from metaphysical difficulties involved with allowing wholes to become separate entities acting on their parts, which are too complex to discuss here, the same problem may be raised with respect to this view as was mentioned in discussing Kant's teleological theories:⁴⁴ such a causal relation must itself fall under some law of connection, some model, either one of those so far discussed or some other. It may be asked whether the total system determines its members completely, in determinist fashion, or with some allowance for randomness, in indeterminist fashion; and the problem simply recurs. The variance or independence of the individual events must still be explained, or denied. In many explications of randomness, in fact, it is stressed that one event in the series does not influence another, that they occur independently; after rolling ten consecutive sixes the die remains able to produce a six on the next roll with a probability of $1/6$, despite the unbalanced nature of the "whole system" or series of events. The probability structure is determined, but does not seem to act by virtue of an influ-

ence of the whole or any of its parts on other parts. We may thus disregard the questions of teleology and of wholes and parts in our consideration of indeterminism.

Indeterminism or tychism, then, as I will use the term, is a causal relation in which precisely the same cause (and state of the universe as a whole, insofar as it may become part of the causal conditions) can be followed by more than one causally possible effect, and the selection of the effect which actually occurs from these is random or "by chance." This model or pattern is an alternative to that offered by determinism. We may now consider whether it may provide an adequate model for Kant's free will.

Indeterminism and Freedom

We have already seen that Kant can admit no indeterminism among phenomena: "in mundo non datur casus."⁴⁵ Leaving aside once again the problem of the relation between the noumenal will and phenomenal actions, can Willkür be considered as part of an indeterminist causal chain? Presumably its own action in carrying out its decisions would not be indeterminist, but straightforwardly determinist, else it would simply "make mistakes" in execution. But Willkür could be considered indeterminist as an effect; its relation to any causes on which it might depend would be such as to leave it some "play" or "looseness" to repre-

sent choice. The will, being what it is and given the state of the (noumenal) universe, would nonetheless be open to more than one alternative; it has several possible decisions, it could have done otherwise than in the end it does. As we have seen, such philosophers as Epicurus, Peirce and James have seen in such intrusions of chance the activity of "free will."

If the will were an indeterminist cause, its individual choices would follow no rule, but would occur randomly, while its long-term series of choices would presumably follow some statistical pattern. Yet this does not seem to be what is meant by a free choice which lends imputability or responsibility to an action. One does not hold the falling die responsible for its results, even if it is assumed to be acting indeterministically, nor would one prosecute an electron for making its random motions. "I couldn't help it," the determinist plea, is an excuse from accountability, but so is "it just happened, it was a matter of chance." While the free will must not be subject to phenomenal necessity, it does not become responsible for its actions if it produces them randomly. Kant denies that the universal determinism of nature can be broken on the grounds that "making such an exception would be equivalent to delivering this being to blind chance,"⁴⁶ and this obviously does not mean freedom for Kant, or he might favor such an alternative. But moving the "blind chance"

to the noumenal realm would not improve the situation.

Kant strongly objects to the notion that freedom is identical with lawlessness, with randomness, even in contrast to the determinism of nature: "conceiving a cause operating without any laws whatever (for determination according to natural laws is excluded by the fact of freedom); this is a self-contradiction."⁴⁷ More specifically,

freedom is by no means lawless even though it is not a property of the will according to laws of nature. Rather, it must be a causality according to immutable laws, but of a peculiar kind. Otherwise a free will would be an absurdity.⁴⁸

It might be argued that, as I have defined it, an immutable law of a certain kind would hold for an indeterminist will: the law of statistics. But here the indeterminist has merely expanded the difficulty to a dilemma. Insofar as the determined and specific network of probabilities is stressed, we fall back into determinism; insofar as the indeterminacy of the selection is emphasized, we find choice reduced to "blind chance" and randomness. And this randomness cannot account for freedom as Kant has ascribed it to the will.

For indeterminism satisfies only one of the two conditions necessary for Kantian Willkür. It allows more than one possibility for choice, freeing it from the resolute linearity of determinism; but that choice does not depend upon the choosing agent, but on nothing, or on the laws of probability. The agent cannot take responsibility

for the choice because he has made no choice, and he cannot meaningfully be asked to attend to the moral law because his attention does not depend on him at all. Under this model the agent's decision reaches its single outcome by a process analogous to dice-throwing, and it would make more sense to say that the agent has exercised no control over the outcome at all, since as far as he is concerned it has remained a matter of chance. If such choice is determined by some random selection as in a roll of dice, then the dice-rolling or coin-tossing could take place anywhere other than "in the agent," and give the same result, for the agent himself is not involved in specifying or controlling the outcome in any way.

This point may be made in a slightly different way. S. Körner has pointed out that placing freedom under the model of random selection "would rule out the possibility that all men should be able to do their duty simultaneously and continuously."⁴⁹ Since individual choices would be able to vary, but the long-term series would have to converge toward a certain statistical distribution, it would be necessary that a certain percentage of moral agents decide for good and a certain percentage for evil, although which ones did which would remain a matter of chance. While the laws of probability might allow it to happen that all men act dutifully, just as the statistical laws of thermodynamics might allow random molecular heat motion to

cause a stone to shoot into the air spontaneously, this state of affairs, if it occurred, would occur entirely by chance. No human effort or energy could influence the result. Further, it would also be a matter of chance which men chose well and which chose badly, out of that series; certainly this is not what is meant by "voluntary" or "intentional" action.

To leave humanity's fulfillment of the moral law up to chance would also do violence to Kant's theory of history. While Kant refers specifically to certain actions of men which fall into statistical patterns,⁵⁰ he also holds that human history is progressing necessarily toward certain ends.⁵¹ Such a necessary progress reflects the determinism of phenomena; yet, in Kant's dual perspective, it must also be up to humanity whether that progress occurs, it must be an outcome of free choice that the actual "kingdom of ends" comes to be: man "should bring forth everything out of his own resources."⁵² That this historical victory should be his own achievement is necessary to man's rational self-esteem, which is based on his freedom.⁵³ And if statistical laws required that all men could not simultaneously act rightly, Kant's utopian final state of history could never come to pass. Thus indeterminism cannot be made to account for the freedom of Willkür, or in fact for any sort of freedom which retains responsibility and the peculiar character of moral obligation. As Ross concludes,

. . . if we could believe in occasional or even in universal indeterminacy in the physical world, that view, which is equivalent to a belief in blind chance, would furnish no support either for our intuition of freedom or for our awareness of duty.⁵⁴

The "Loophole" Argument

One further view concerning indeterminism must be taken into account. We have seen that indeterminism as a causal model for the free will cannot account for the characteristics Kant holds necessary for such a will. It has been thought by some, however, that indeterminism in nature at least leaves open a sort of "loophole" in determined laws through which freedom from some other source, such as an immaterial soul, may be able to enter. Note, for example, Peirce's formulation of a solution:

. . . On the other hand, by supposing the rigid exactitude of causation to yield, I care not how little--be it but by a strictly infinitesimal amount,--we gain room to insert mind into our scheme, and to put it into the place where it is needed, . . . and in so doing we resolve the problem of the connection of soul and body.⁵⁵

It seems to be implied here that the true source of freedom is an immaterial mind or soul which acts causally on the body in certain ways. Its action takes the form only of selecting one among the alternatives of otherwise indeterminist states; while according to the laws of nature state A could be followed by B₁, B₂, or B₃, the mind intervenes to make sure that B₂ is the one realized. In doing so it seems to contravene no natural laws, since the laws of na-

ture do not determine precisely the individual event and do not demand that one alternative rather than another be realized. Compton's formulation is: "it is permissible to assume that such psychic factors determine actions which from physical considerations alone would be a matter of chance."⁵⁶ Because the statistical laws controlling randomness exercise no "grip" on the individual events, but only on series of such events, mind or soul can intervene (presumably exercising a determinist, one-to-one causation between the mind and the physical state leading to the action) in the individual act of choice. Compton compares the brain, as the point of contact between soul and body, to a radio receiver,⁵⁷ picking up signals from one realm and transforming them into events of a different sort.

In this "loophole" argument, indeterminism is seen not as itself being "freedom" of the will, but as allowing a certain looseness or play, a certain openness of alternatives, which can then be further determined by something "outside" the system of nature, such as mind or soul. The assumption here would seem to be that all matter or material objects must be either determinist or indeterminist, and that allowing some part of material reality to be indeterminist opens the way for influence from other, nonmaterial sorts of causes.

Two fairly obvious points must first be made about this theory. The first is that it is of no assistance in

the project of this paper; Kant is committed to universal determinism in nature and can no more admit indeterminism in causal relations among phenomena than he can admit the as yet undefined "freedom." Kant must hold "that the solution must not come through any breach in the chain of natural causation."⁵⁸ Thus, even if such a theory were plausible in itself, it would be inconsistent with the rest of Kant's theory and could not be accepted as a solution there.

More important is the point that the quantum indeterminacy now thought to exist, even with the difficulties discussed above, may not be able to support a theory of indeterminism which could allow any affect on ordinary human action. Human beings are made up of atoms with electron shells, but the interactions which lead to bodily movements take place at the molecular level, and it is disputed whether the minor and momentary indeterminacies at the level of individual electrons could make any significant difference in physiology.⁵⁹ Even if indeterminism were admitted for electrons, this might not allow enough "play" to permit any other cause, by acting on quantum states, to produce any discernible difference in the macroscopic realm.

A subtler point must be considered, however: whether quantum indeterminism could in fact allow for influence by mind on body. For if the outcome of certain

states is in fact determined by some "outside" agency, then it is no longer random; it is no longer indeterminist, because given the whole state of all things, including the soul, the outcome is fully determinate. This both returns us to the first model in describing the interaction, and undercuts the very natural indeterminism which the "loop-hole" theorist had relied upon as an ally. It may be noted that the laws of quantum mechanics are considered to be just as determinist as the laws of classical mechanics, as long as they are applied in their proper field, that of statistically governed series of events; and while one intrusion of free choice affects only one event, repeated such intrusions affect many. Erwin Schrödinger notes:

. . . quantum laws, though they leave the single event undetermined, predict a quite definite statistics of events when the same situation occurs again and again. If these statistics are interfered with by any agent, this agent violates the laws of quantum mechanics just as objectionably as if it interfered--in pre-quantum physics--with a strictly causal mechanical law.⁶⁰

Compton argues that series of repeated "free" actions can be treated as conditioned by a single free choice to act freely a number of times, and thus attempts to evade disrupting the statistics of indeterminism;⁶¹ the choice, for example, to deliberately or freely place a coin "heads up" a thousand times can be seen as a single free decision to make a thousand motions, followed by a "habit" that carries out (deterministically) that one decision in a thousand

movements. Since the initiating cause was free, the resulting movements will also be "free" in a derivative but closely related sense. But obviously not all free decisions can be placed in such a series, and those that cannot will form a new series disrupting the probabilities of chance. Compton notes that one cannot "experiment" on the same choice more than once, for after one trial a new habit is formed, the conditions are different; but surely this applies to any natural event as well and any experiment involving inanimate objects, in principle. It would seem that any intrusion of a determining cause other than the "random selection" we have identified would destroy the indeterminism of the state as I have defined it. And unless the overall statistics could be changed by free action, one could repeat Körner's argument mentioned above to show that a broad-scale randomness was at work.

It should be noted here that the idea of interaction between the body and some other kind of entity (or element of the same entity) is not what is at issue. One could easily construct a theory in which any state of a material body responded deterministically to the causes acting upon it, but in which some of the causes were not material objects or states of such objects. This would not necessarily be an indeterminism or incompleteness of determination in principle for the material objects or states determined. One could say that the effect B could have

been quite completely determined in a certain way by a collection of material causal conditions A_1, A_2, A_3 , if it were not that an immaterial cause is also acting upon it; just as a system of three bouncing billiard balls need not be thought to involve any mysterious indeterminacy simply because the introduction of a fourth ball (or of a hand reaching down from "another realm") would alter the outcome. The following state is completely determined by whatever acts on it, but we might widen the scope of "whatever acts on it" to allow more than only material causes. If the immaterial cause itself is not deterministically conditioned, then its effects in the material world will also be non-determinist in a sense, being at the end of an otherwise determinist causal chain containing one non-determinist link; but the "passivity" of matter to determination would not have to be denied. Such a theory of interaction would (as a modified form of Kant's theory might) simply remove the problem of the action of a non-determinist cause to the immaterial rather than the material realm; immaterial causes may be involved, but their action is not made clearer by introducing indeterminism in the material they affect.

And this point brings us to the final problem with the "loophole" theory, made visible by the perspective this paper has developed. If interaction of the material body with some extra-material factor (such as noumenal Willkür)

is to account for freedom, a causal model will still be necessary for the non-material entity. We may wish to hold that matter remains fully determined, although its determinism is not "closed" in the system of material bodies, but is affected by other influences as well; but to solve the problem of the intelligibility of freedom, we must come to understand how those other influences work, what the pattern of their action is.⁶² We have seen already that determinism cannot account for calling such action "free," whether in a material or in an immaterial entity, and neither can indeterminism; our search for a causal model must go on. The "loophole" theory leaves us with the problem of understanding what is acting through the "loophole."⁶³

Indeterminism, then, is no solution to our problem. As Boyle et al point out,⁶⁴ the introduction of indeterminism (if it has in fact been introduced) in modern science may weaken the case for universal determinism, in particular derailing the argument that science has revealed nothing but steadily advancing determinism and so we should expect determinism to be extended to the human mind in the future.⁶⁵ Indeterminism may also serve as an analogy of a sort: if indeterminism is possible, then at least one causal model other than the determinist is possible; indeterminism may serve as an example of non-determinist causality, and we may look for other examples better suited to explicating freedom.⁶⁶ In particular, the consideration of

indeterminism may lead us to doubt the contention that all matter must be an exhaustively and exclusively deterministic system--that matter must both respond deterministically and respond only to determinist causes. If matter can be determined or conditioned either by previous material states or by random selection where indeterminism holds sway, then perhaps it can also be determined or conditioned by immaterial causes--which might not themselves lie under determinism. But this move brings us only to the point reached by Kant in his removal of Willkür to noumena. If the charge of unintelligibility even in noumena, or in the immaterial, is to be answered, a causal model must be found besides those of determinism and indeterminism.

Now that we have established the first two models, however, it is possible to note one important fact about a certain kind of argument sometimes made by determinists, which I will call the "determinist dilemma." Before considering other possible causal models, we will turn briefly to this argument and examine it in the light of the notion of causal models.

The Determinist Dilemma

By "the determinist dilemma" I do not mean to refer to such problems as those mentioned by William James or by James N. Jordan under that name.⁶⁷ I shall use the term as a name for a family of arguments often used by determin-

ists, which rely on posing a certain sort of dilemma to their opponents, a choice between two unattractive alternatives wherein determinism appears as the "lesser of two evils." The actual form of the argument, then, is that of the disjunctive syllogism.

Consider, says the determinist, the causal antecedents of the "free" act. Such causal conditions must either be under a thoroughgoing determinism, or involve some indeterminism, some chance or "uncaused" event. But surely an action proceeding from blind chance or randomness cannot be moral; the agent cannot be held responsible for something that happens fortuitously or accidentally. Thus by your own arguments (those of Kant cited above, for instance), one must look to determinism for the explanation of responsibility and morality, for it cannot be found in the sphere of chance. If true responsibility for action is to be found anywhere, it must rest firmly on a determinist basis.

At this point the determinist may conclude either that since both determinism and indeterminism lead to the exclusion of responsibility, then responsibility must be given up; or he may conclude that responsibility must be saved by some re-interpretation which leaves it compatible with determinism. In either case, the central point is the claim that the alternative to determinism, indeterminism, is equivalent to "blind chance" and thus is useless for purposes of morality.⁶⁸

We have already seen formulations in which Kant himself seems to speak in these terms. For example, he states that the will cannot be excepted from the laws of phenomenal nature, for "making such an exception would be equivalent to delivering this being to blind chance."⁶⁹ Here Kant must retreat to the notion of "immutable laws" of freedom in order to avoid the specter of indeterminism as we have defined it, of chance. Yet in the first Critique he had stated that "if freedom were determined in accordance with laws, it would not be freedom; it would simply be nature under another name."⁷⁰ Ewing is led by such phrases as these to propose that Kant actually holds a theory of determination by the "whole person" which is certainly foreign to Kant's ethical writing, but which "may be at least as reconcilable with morality as an indeterminism which asserts that moral actions occur without an adequate cause in the character of the agent."⁷¹ As we have seen, however, Kant's reluctance to speak of freedom without reference to "immutable laws" can be explained by the distinction of Wille and Willkür, the former providing such laws on which the latter may act (or may not). Kant, as we have seen, cannot accept either determinism or indeterminism for Willkür.

Others, however, are convinced that the dilemma provides a conclusive rebuttal to opponents of universal determinism. Hume employs an argument recognizable as a

form of the dilemma, saying:

But according to the doctrine of liberty or chance, this connexion is reduc'd to nothing, nor are men more accountable for those actions, which are design'd and premeditated, than for such as are the most casual and accidental.⁷²

In the same way, John Stuart Mill, discussing the question of freedom, speaks of actions arising "from no cause in particular."⁷³ Paton, commenting on Kant, is perplexed by the same point.⁷⁴ A. C. MacIntyre, arguing against determinism, and M. C. Bradley, arguing for it, agree on this one point: "uncaused" actions must be random.⁷⁵ The most well-known account is perhaps that of R. E. Hobart, who states clearly:

In fine, then, just so far as the volition is undetermined, the self can neither be praised nor blamed for it, since it is not the act of the self. . . . Either it decided in a particular way because, on the whole, it preferred to decide in that way, or the decision was an underived event, a rootless and sourceless event.⁷⁶

And Moritz Schlick's discussion makes evident the dilemmatic character of the argument, where the anti-determinist or libertarian is presented with two and only two alternatives, determinism being the only tenable one:

. . . if we should conceive of a decision as utterly without any cause (this would in all strictness be the indeterministic presupposition) then the act would be entirely a matter of chance, for chance is identical with the absence of a cause; there is no other opposite of causality. Could we under such conditions make the agent responsible? Certainly not.⁷⁷

These considerations lead directly to universal determinism:

If one makes clear to himself that a causeless happening is identical with a chance happening, and that, consequently, an indetermined will would destroy all responsibility, then every desire will cease which might be father to an indeterministic thought.⁷⁸

Further examples could be given almost at will.⁷⁹

Some versions of the dilemma specify further that certain features of determinism are necessary for the maintaining of freedom and responsibility. Three may be examined briefly here. The first is the intimation that if determinism does not hold, then action as we know it would be impossible, for one could never tell what results his actions might lead to and so could not foresee even approximately the consequences.⁸⁰ This charge obviously depends on assuming that the alternative to universal determinism is complete and unrelieved indeterminism or chaos, and such an assumption merely obscures the question; most libertarians and indeterminists certainly hold that causal connections are determinist at most points and that chance or choice, where they operate, provide variance only among fixed and fairly limited sets of alternatives. The indeterminism of quantum mechanics, if it is such, does not affect the dependability of events in our ordinary lives. The most common libertarian assumption is probably that only in persons does some model other than determinism hold, so that (for instance) we can predict confidently the course of the pitched baseball until it encounters the bat

wielded by a free individual, and after that until it is again affected by some free cause. And the limited unpredictability or uncertainty that this would lend to action has in fact been remarked by some writers.⁸¹

A second and very common approach is to hold that we must be able to rely on the consistency of the actions of those very individuals, on being "true to character," if morality as we know it is to exist. The actions of persons are to some extent predictable.⁸² We expect a good man to continue to act well, an evil man to commit further evils, and so on, without unpredictably "swerving" aside. To a certain extent this is obviously true, and, of course, can be accepted by non-determinists, if they are willing to admit a good deal of determinism as well as some other factor in the inner workings of the self: a habit formed by free acts, which then leads to new acts in deterministic fashion, can be considered a tool or instrument of a free cause and thus lead to free and responsible actions. But the determinist attempt to interpret actions as wholly determined by character, often related to the Moorean type of redefinition of "freedom" mentioned above,⁸³ must involve all the difficulties for freedom and responsibility discussed in our first chapter. The usual move at this point is to redefine "freedom" of an act as its arising from causes within us, albeit determinist ones. "Each particular act of mine is determined from outside itself, i.e., by a cause, a

prior event. But not from outside me."⁸⁴ The adequacy of this sort of model, however, will be discussed in the next chapter, and so this move may be left aside here. We may simply note at least that, while in ordinary moral discourse we do rely to a large extent on constancy of character, we also think it not impossible for changes in character to occur, and even for a person to (slowly) change his own character. Indeed, allegations of praise and blame, and moral exhortation, seem to assume that such change is possible, and that determinism of character is not complete.⁸⁵

This last point leads to the third determinist argument: praise and blame and exhortation must be able to exert some sort of influence on the will, or they would not be used, but an indeterminism of the will would make this impossible. Hume's statement of this argument from incentives is:

'Tis indeed certain, that as all human laws are founded on rewards and punishments, 'tis suppos'd as a fundamental principle, that these motives have an influence on the mind, . . . We may give to this influence what name we please; but . . . common sense requires it shou'd be esteem'd a cause, and be look'd upon as an instance of that necessity, which I wou'd establish.⁸⁶

If the will is considered to act as an Epicurean atom, making its choices at random, then obviously attempts to influence it via moral language (or, for that matter, threats and promises) would be misplaced. But a libertarian, of

course, as other determinists have acknowledged,⁸⁷ may hold that such incentives "incline without necessitating;" more precisely, and in Kant's terms, the freely choosing Willkür has available to it the moral law, presented to it by Wille, as well as all the pros and cons developed by rational scrutiny, and the moral exhortations of others, as well, on which to base its decision; but the whole set of such "incentives" does not completely determine or fully condition the choice. Willkür may choose in accordance with one or another of them; but to do so will be by its own decision.

This response from the libertarian, of course, presumes that an intelligible sense can be given to that "choice" or "decision" other than that of indeterminism, and this returns us to the central problem of this paper. The three specific determinist arguments just discussed, as well as the general form of the determinist dilemma, depend on contrasting determinism only with indeterminism as we have defined it--randomness, chance, fortuity--insofar as they retain any force when met by the arguments above. If, once the various claims or "forces" of character, desires, moral exhortation, etc., are taken into account, the decision is made by a random selection such as the tossing of a coin, then the result is not responsible action. The determinists making such arguments are in agreement with the conclusion established earlier in this chapter: an inde-

terminist causal model is not sufficient for freedom of the will. But to draw the conclusion the determinist wants, that determinism must be accepted, one must also show that these are the only two alternatives.

Boyle et al state the crucial point succinctly.

If the [determinist] regards chance as an ontological category, he must give a reason why this category could not include free choice, or why there cannot be at least three categories of events: those necessitated, those happening by chance, and free choices.⁸⁸

The determinist dilemma is designed to force the libertarian to agree to determinism by showing that indeterminism is wholly unable to account for morality or responsibility, and thus that determinism must be adopted as the only other possibility. But there may be other possibilities, if there are more than two causal models. As I have defined "indeterminism"--and as it must be used in the determinist dilemma--it means, not any alternative to determinism, but that particular one in which selection among alternatives is made in a random way. This model is obviously inadequate, for it fails our second criterion, that the choice be attributable to the agent (and not to blind chance); but it may not be the only other model available. Proponents of the determinist dilemma generally appear to assume that "indeterminism," tychism or the causal relation of chance, is identical with "non-determinism," the logical complement of determinism; but this has not been proven.

It is now our task to look further to see whether any third model is in fact available.

The determinist dilemma, or the idea that the only alternative to determinism is pure chance, seems to account for much of the feeling that no non-determinist model for freedom can succeed in maintaining morality and responsibility. We have now seen that as a proof this argument is logically incomplete. If another causal model can be found to explicate the freedom of the will, then the determinist dilemma and its related arguments will lose their force, and the way will be clear for a coherent exposition of free choice.

VI. INTERNAL DETERMINISM

Examples of Internal Determinism

A phrase of Kant's suggests a third type of causal model which might be invoked to explain freedom. In the Foundations he states:

As will is a kind of causality of living beings so far as they are rational, freedom would be that property of this causality by which it can be effective independently of foreign causes determining it, just as natural necessity is the property of the causality of all irrational beings by which they are determined in their activity by the influence of foreign causes.¹

It seems to be suggested here that the central point of our first model, determinism, which prevails in nature, is the determination of a being from outside it, by "foreign" causes. This openness to determination from without, and ultimately to possible determination by the whole state of the universe at the preceding moment (or by any part of it), became part of our definition of determinism. But if so, then causes determining a being from within itself do not count as "foreign causes," and thus escape the charge of determinism. Such a model was also suggested by arguments having to do with character at the end of the last chapter.² We must now, therefore, consider such models, to discover whether they can be distinguished from that of determinism and, if so, whether they may ac-

count for freedom of the will.

The discussion of such a determination from within may begin with Aristotle. We have already seen that, in his view, there is a certain determinism in nature, and also that it is not complete, for some things come to pass by mistake or chance; but he also distinguishes both of these from the way in which things come to pass in "natural products" or organisms, including plants, animals, and man.³ This is in fact the etymological sense of the word physis, "nature."⁴ According to Aristotle, such beings possess an inner source of movement, an "originative power,"⁵ which makes it possible to call them "self-moving" in a way that inanimate objects are not. This power is at least one of self-nutrition and the internal maintenance of the body;⁶ it is thus also identified with the entelecheia or end, the telos, of the organism, insofar as its actions are directed from within toward specific goals, such as the maintenance of its life.⁷ "The soul is also the final cause of its body."⁸ Thus Aristotle links the notion of inner determination with that of teleology or final causality; the end toward which a thing is drawn is internal to it, not imposed from outside as is the force applied by an artisan.⁹

This notion of the self-moving seems promising for the explanation of freedom; it meets the second of Kant's criteria for freedom, at least apparently, and, as we have

seen, is favored by many writers on free will. And Aristotle, in the Eudemian Ethics, refers to the fact that we do not speak of force or compulsion when the moving principle is from within,¹⁰ lending credence to such an approach.

This biological notion of inner determinism, or immanent teleology, was maintained and generalized by the Stoics, of whom Gordon H. Clark says:

Motion is explained, not mechanically, but rather by a biological analogy. Each particular thing develops as if from a seed, and hence the source of motion is internal rather than external.¹¹

An illustration of this theory of unfolding or development, reproduced in Clark, is: ". . . a plant has its principle in the roots, which from there penetrates to all its parts; and with respect to action, passion, and mutual interrelation, it has one government, a sort of fate for the plant, as one might say."¹² The whole future of the plant is in some way contained within the seed, a pre-existing necessity or "fate," and new changes occur only as actualizations or externalizations of a preordained plan.

The idea of potencies which could remain latent and at a later time unfold as if new became part of medieval metaphysics, providing, for instance, a way of accounting for new developments as nonetheless included in the original creation. Such thinkers as Bonaventure utilized a theory of "seminal reasons" or "seminal virtues," explicitly

comparing the developing potential to a seed.¹³ Aquinas discusses several senses of this term.¹⁴ In addition, the original Aristotelian notion of the self-contained nutritive power in living creatures was also taken up as the "vegetative soul," held to exist in plants and animals.¹⁵ Here, too, some connection at least appears to be made between internality and freedom.¹⁶

As was the case with indeterminism, the rise of the theory of universal determinism or mechanism after Descartes tended to make this other causal model less attractive. One notably similar theory, certainly, was maintained by Leibniz, whose "windowless" monads are wholly independent of each other, and thus change only by unfolding from within, or by the direct action of God. "In the strictly metaphysical sense no external cause acts upon us excepting God alone, and he is in immediate relation with us only by virtue of our continual dependence upon him."¹⁷ Every possible development of such a being is contained in its essence (and thus present in it, in some way, from the beginning), and no influence from without can alter, or even serve as the catalyst for, such changes.

. . . this is the nature of an individual substance or of a complete being, namely, to afford a conception so complete that the concept shall be sufficient for the understanding of it and for the deduction of all the predicates of which the substance is or may become the subject.¹⁸

In the Monadology he states this view in terms close to

those I have used: "Every present state of a simple substance is a natural consequence of its preceding state, in such a way that its present is big with its future."¹⁹ Future states are determined by past states, but only by states of that thing, not of other causes acting from outside it.

As with indeterminism, biology remained a stronghold of internal determinism long after physics or chemistry, a natural consequence in view of the fact that internal determinism originated as primarily a biological model. The debate of vitalism and mechanism in the eighteenth and nineteenth centuries found many theories of the internal determinist type put forward, suggesting in one form or another that living beings required some sort of immanent guiding force if their unique behavior were to be explained.²⁰ But in fact the progress of biological science tended to discourage such theories, as more and more phenomena were explained deterministically in terms of physics and chemistry; the vitalists tended to vanish from the field. In the last part of the nineteenth century idealists such as Green and Royce continued to speak of human acts as proceeding from one's individuality or total self, no longer in a biological context but in one of personal development; spirit or mind could be seen as a location of such teleological processes if biology were abandoned.²¹ But in general, interest in the third causal

model has been less in the twentieth century than in most eras heretofore.

An exhaustive history of ideas of teleology or inner determinism cannot be given here. We may take the theories described as examples of this model, mentioning further only two ways in which internal determinism has been used to account for freedom in recent times. As we have seen, many recent writers have attempted to define freedom as that quality of actions by which they spring from one's own character, unhindered by external circumstances or forces.²² Such an approach obviously is akin to a theory of teleology, for it places emphasis on the notion of a being's development from internal springs of motion or change, rather than from any causation originating outside that being. Others, such as David L. Miller, have related freedom to action proceeding in some way from the whole or total person, from a being as a sort of organic unity: "According to our original definition of human freedom, one is free when he can act as a whole, . . ."²³ Here, if "the whole" is to mean anything other than the complex but deterministic system composed of the human being's parts, it must refer to some sort of teleological quality of the whole or entelecheia, such that the natural end of the whole can act on and shape the actions of the parts.²⁴ This approach, then, also involves a use of the model of internal determinism. Thus it is necessary to examine that

model more closely and to isolate its basic features.

Basic Features of Internal Determinism

Under the model of internal determinism, a being starts out in the state of a "seed:" it is a certain way in actuality, but is other ways in potentiality, being able to change through various stages to become the same thing in a different state. Obviously, however, the mere possibility of change is not enough; if that were the case, any entity susceptible of alteration would qualify. The difference is that in the case of internal determinism, there is a specific alteration, or pattern of alterations, which is in some way "prescribed," predetermined: the seed becomes a small leafed plant, a plant with buds, with flowers. As a matter of mere possibility, the seed could also be ground to meal or burned, just as a stone could be crushed or melted; but, if certain other conditions are satisfied (such as water, soil, air, etc.), the seed will follow a certain "route" of change, while the stone will not. (A similar formulation could be constructed for the non-temporal case where the states are not successive, but merely separate.)

Yet the growth of the plant is not wholly unaffected by outside conditions, as was just noted. If the seed lacks air, growth will not occur, but some other sort of alteration instead. If one pattern of sunlight exists, the

adult plant will bear one shape; if a different pattern, a different shape. Clearly some external causes affect the plant as it grows. But in this it is no different from the stone.

One could also say that, given a certain range, fairly broad, of external conditions, the seed will follow a generally similar path of development. If one considers that conditions of sun, rainfall, soil composition, and so on may vary a good deal without changing the resulting adult plant except in minor details of shape, one could define internal determinism as a case in which a certain general course of development occurs with some "resistance" to outside influences. In determining the shape of a leaf, the plant's nature or "essence" (or, in modern terms, heredity) is more important than the details of sunlight intensity or other environmental factors (although some extreme sunlight intensities will have a noticeable effect). While the stone also, if left to itself, will follow a fairly predictable and predetermined course (that of remaining a stone), the plant follows a predictable course that also involves change, different states and not simply a perpetuation of the same (or roughly the same) state. For this reason the model of a plant is considered more appropriate for explicating human action than that of a stone, for while both have a certain resistance to outside forces or tendency to follow a prescribed course, the plant

changes in doing so, and human action generally involves change, doing one thing after another (or involves many dissimilar states rather than many similar states).

We may say, then, that internal determinism involves a relative, but not a complete, independence from causal influences external to the being in question. Internal factors will be more important in determining the later states than external factors, in general. One might call such a being "spontaneous" in a certain sense, since its determinations arise largely from within, yet predetermined, because those determinations are fixed from within and not random. This formulation recalls our discussion in the fourth chapter of a possible deterministic theory in which some elements of the causing state were "favored," were especially important in the determination of the outcome.²⁵ In internal determinism, the elements of the preceding state which are the state of the being itself are "favored" in this sense, and play the leading role in the selection of that being's next state. This relationship to simple determinism justifies the name of "internal determinism" by which I have chosen to call it. Versions of determinism in which different elements of the causing states were "favored" might be possible, but these are seldom put forth as much different from simple determinism, since such differences in the laws of nature relating things are what distinguish types of determinism from each other (mechan-

ical determinism, for example, from theological determinism, where God is the "favored" element). Only internal determinism as I have defined it is commonly upheld as a real alternative to simple determinism; only this variant gives a plausible sense in which the choosing being can be said to be "self-determined" and therefore responsible.

It should be noted, conversely, that the more the "being" in question is expanded, the closer the model of internal determinism approaches to that of ordinary determinism, because more and more of the elements of the universe are considered "internal" to the being. When the entity whose alterations are considered is the entire universe, then internal determinism becomes identical with simple determinism, for all forces or causes acting to change any part of this "thing" are internal to that thing. The universe would then be seen, not as a large mechanism, but as a large plant; but for our purposes there would be no essential difference, as long as the course of development (or "change") remained unalterable. Such a view of the universe as unfolding in a definite and unchangeable way from an original "germ" seems to have been held by some of the Stoics,²⁶ and also by some modern thinkers, such as Pierre Teilhard de Chardin.²⁷

It may be argued here that to call such organism-like development "determinism" is a misnomer, because variations are possible from the basic course; as we saw above,

the shape of the plant may change somewhat, while remaining that of a certain kind of plant. Such a picture seems to answer well to the notion of choice within limited alternatives, where a man may choose to act one way or another, but cannot choose to become an ostrich, any more than the rose bush, though it may vary in shape or size, can become a crepe myrtle.

As far as such variations are assignable to the effect of outside causes on the plant or plant-like entity, the model obviously does not change; if determinist causes within the being and determinist causes outside the being combine to produce a determinist outcome, it is of no use to suggest that with different outside causes the result would have been different. More important might be the suggestion that growing things possess a certain inherent variability, not dependent on outside forces. As Aristotle says, things which come to be by nature (entelecheia) in some cases come about only "for the most part," not invariably, and no cause can be assigned for such variation. Plants and animals may produce "monstrosities" in generation, and may similarly produce unpredictable anomalies in their own development. If such a point of view is granted, would this serve to distinguish internal determinism more strongly from simple determinism?

We have, however, already discussed such variations, in the last chapter. There we interpreted the notion of

causes which "go awry" as a case of indeterminism, of randomness or chance. If in fact the growing plant may take one course or another slightly different one, and there is no cause determining the result, then this represents simply an admixture of indeterminism in an otherwise determinist system, like the swerving of Epicurus' atoms. Insofar as the outcome is determined by internal or external causes, it falls under determinism; insofar as the outcome is left to chance, it falls under indeterminism. The sole distinguishing mark of internal determinism is the location of the determining cause within the being itself.

Internal determinism, then, may be described in this way: succeeding states of a being have only one causal possibility, and that one is determined by causes inside the being. Of the logically possible alternatives, only one is causally possible, the one selected by the predetermined pattern or "program" embedded in the seminal state of the being. Nothing can be "unfolded" except what is already there. A mixed case may be produced by leaving some room for randomness in the carrying out of that "program," but this does not alter the nature of the third model, for it only describes a universe containing causes acting under more than one model (as in Epicurus' universe). Internal determinism is a theory in which a being may develop "on its own," left largely insulated from outside forces, but is nonetheless a determinism, for no alternatives remain

open to that being. Its future is wholly determined by its own seminal state and, to whatever extent that is not true, by outside forces or by chance.

Internal Determinism and Freedom

The model of internal determinism has fallen largely into disfavor in recent times. Scientific investigation since the seventeenth century has tended to reduce instances of this third model to instances of the first, to very complex deterministic causal systems. Causal chains looping back on themselves, for instance, in many systems have been shown to give rise to positive and negative feedback, accounting for much of the self-regulating and self-adjusting that led earlier thinkers to postulate immanent teleology in living organisms. Darwinian evolutionary theory, in particular, has attempted to explain the interdependence of parts in the wholes of organisms as a consequence of a process of natural selection, taking place entirely by means of determinist causation (with perhaps an admixture of indeterminism to account for mutation).²⁸ Although both Aristotle and Kant consider the possibility of life's arising in this chance manner far-fetched,²⁹ recent evidence seems to make it more plausible, and thus to weaken the claim of the model of internal determinism.

A further problem in introducing internal determinism in modern contexts would seem to arise from the problem

of "insulating" or "immunizing" the inner essence of a being from outside determination. Kant's Second Law of Mechanics states that "every change of matter has an external cause,"³⁰ and this law would apply to human bodies as well. Certainly a good deal of such causation could simply wind back and forth, as it were, within the body, but external influences would have some effect, and that effect would grow greater over time. Of course, for Kant all matter is ruled by determinism in any case, and the problems of reconciling this with free noumenal Willkür have already been discussed. But a more serious difficulty arises in the fact that, whatever the inner nature or "character" of the noumenal self may be, the body is not only pervaded by external causality but also came to be in the first place by external causality; and if any correspondence or parallelism is to obtain between phenomenal causation and noumenal causation, then the noumenal self might seem also to depend on some other noumenal cause. Certainly the noumenal self cannot be a First Cause in the strong theological sense, producing itself out of nothing; but then it must depend on some other cause for its creation, and so for its inner character as well.

Consider Kant's argument in the Religion:

But it is absolutely incomprehensible to our reason how beings can be created to a free use of their powers; for according to the principle of causality we can assign to a being, regarded as having been brought forth, no inner ground for his actions

other than that which the producing cause has placed there, by which, then, (and so by an external cause) his every act would be determined, and such a being would therefore not be free.³¹

The argument here strikes at the general approach we have seen used to justify internal determinism as an explication of freedom. Acts may, insofar as they arise from within and not from without, be "expressions of the inner self" and thus in a somewhat distorted sense "free;" but that very "inner self" was produced at some past time by other causes, for it has not existed forever, and thus any nature or essence it has would seem to depend for causal determination on those other causes. Such an argument would apply among noumena as well as among phenomena, if similar causal relations exist. Körner arrives at the same conclusion:

He is responsible according to the theory if he is or 'contains' the cause of his action, which is then, as it is put, 'freely chosen'. But if we accept the principle of natural causality, every event in time is caused and every cause is part of a causal chain which started before the birth of the doer. By receiving the title of 'freely chosen' a cause does not cease to have been caused. This way of tackling the problem, e.g., by calling inner causes 'free' and external causes 'mechanical', is no more than a way of ignoring it.³²

The same point has been made from a psychoanalytic viewpoint concerning modern theories of "character" as the locus of freedom.³³ If the very character which is considered "internal" is in fact a product of ultimately external influences, then it is quite implausible to arbitrarily call its effects "free." If inner causes can trace them-

selves back to an originating external "parent," the internality required will not, after all, have been preserved. And if such is the case in phenomena, it seems not unlikely that it be the case in noumena as well.

But beyond this, even internal causation, if it is unambiguous in development, does not preserve freedom. Let it be assumed that the noumenal self can be modeled on a plant "unfolding" wholly or largely as determined from within itself, and let it be left aside that even this self must have been produced ultimately by some other cause. There remains the problem that the course of development of such a being is nonetheless predetermined, open to no alternatives.

In a key passage of the second Critique, Kant states the condition for lack of freedom in this way: ". . . this being is under necessitating conditions of past time which are no longer in his power when he acts."³⁴ The argument is here applied to phenomenal sequences in time, but could be transferred easily to non-temporal noumenal states of being: if the acting cause is itself under causal conditions over which it has no control, it is not free. An internal determinist may wish to suggest that what is actually happening is that one part or region of the being is exercising "control" over another, e.g., attention to law over attention to desire; but the same question can always be asked about the "controlling" section, until there

is no section left which is both "controlling" and not determined in its action. Unless the cause, all of it taken into account, can change its course, can choose either of two alternatives, it is not free; and this is just what the model of internal determinism denies, for the point of the model is that the being develops in a fixed way. Any wavering or ambiguity in that development must lie in interference by chance or by external causes, by determinism or indeterminism, and we have already seen that these cannot account for freedom. External or internal causes, spiritual or material, Kant holds that none can account for freedom as long as their mode of action is deterministic: such freedom "would in essence be no better than the freedom of a turnspit, which when once wound up also carries out its motions of itself."³⁵

The sense of freedom demanded by Kant as a condition for morality and responsibility, and claimed by him to coincide with that of the "common moral consciousness," is more radical than the mere "freedom of a turnspit," and demands a more radical revision in the notion of deterministic causation than that of internal determinism. Silber observes:

That freedom involves the independence of the will from external influences has been generally recognized. It has not been so clearly seen that freedom involves independence from all antecedent determination as well. . . . Genuine self-determination does not consist in the determination of effects through the self; it requires rather the de-

termination of effects by a self which is not determined by anything else--not even by its own prior nature.³⁶

We have seen that a causal model suitable for Will-kür must satisfy two criteria. Of the logically possible caused states, it must depend on the choosing agent which of the possibilities is realized; and this requirement may perhaps be said to be satisfied by internal determinism, for the actions of a being of this type are determined at least in the main from within that being. But in addition, there must be at least two alternative states causally possible as well, possible even given the same state of the choosing agent, and which of these is realized must also depend on that agent. Internal determinism fails to satisfy this criterion. Only one outcome is possible for the predetermined or pre-programmed "seed" in its development; insofar as any variations occur, they are determined by outside forces or by chance, not by the "seed" or agent itself.

It may be noted that given two criteria, each of may or may not be satisfied, four combinations are possible. A theory may fail both criteria, as determinism did: only one effect is possible, and that one is selected by the state of the entire universe or the entire set of causing factors. A theory may meet the first criterion and fail the second, as did indeterminism, where various alternatives are offered, but the selected one is "chosen" by

chance, not by the agent himself. A theory might also meet the second criterion while failing the first, and this is the case with internal determinism: the nature of the effect has been made dependent on the agent (in some sense), but the agent has no alternatives, only a predetermined "course of action."

The fourth type of model in the division made by our two criteria, of course, would be one in which both requirements were satisfied, and only such a model can fulfill Kant's need to explicate the intelligibility of Willkür. In the next chapter I shall attempt to set out and discuss some of the characteristics which such a model would possess.

VII. AGENT CAUSALITY

Early Examples of Agent Causality

The fourth model may be suggested, once more, by a statement of Kant's: "There is in man a power of self-determination, independently of any coercion through sensuous impulses."¹ If we leave aside the emphasis on freedom from phenomenal compulsion, there remains a reference to "power" exerted by an agent and to "self-determination," which, as we have seen, cannot mean only determination by other causes through the agent. This latter term is also used by Silber in the quotation at the end of the last chapter. Can a consideration of what is involved in self-determination lead us to a distinct model of causation?

In a sense it might be argued that any defender of freedom in the sense I have defined must implicitly be committed to a fourth model of causation, under the arguments already advanced. But obviously not all writers have focused on such a model or made it explicit. Thus I shall discuss briefly only a few possible representations of agent causality, presenting examples to illuminate the important features rather than attempting an exhaustive survey. Nor will I attempt to prove here that such a model is in fact instantiated, except insofar as Kant's arguments for freedom have accomplished this.

In certain places Aristotle appears to hold that human beings are sources of action in a way not occurring in plants or other animals: "man alone of animals is also the source of certain actions; for no other animal would be said to act."² In fact, further on he makes a distinction which corresponds well to the fourfold distinction of models:

. . . for we do not praise or blame for what is due to necessity, or chance, or nature, but only for what we ourselves are causes of; . . .³

If "necessity" is taken to mean determinism, "chance" an indeterministic or random production, and "nature" the self-developing model set out in the last chapter, then the way in which "we ourselves are causes" must be some other way. In the Metaphysics Aristotle discusses "originate sources" and observes that "each of those which are accompanied by a rational formula is alike capable of contrary effects, but one non-rational power produces one effect."⁴ Because reason understands opposites, a rationally directed power of origination may originate opposites. This would seem to suggest that the rational agent can act in more than one way, and that that way is selected by some power of the agent.

Certain passages in the Nicomachean Ethics suggest the same interpretation. An act is to be considered compulsory, and thus non-voluntary, "when the cause is in the external circumstances and the agent contributes nothing;"⁵

some special contribution from the agent to the causality of action seems necessary for voluntariness. The "moving principle is in the agent himself."⁶ Since choice is directed to what our activity may affect, "choice seems to relate to the things that are in our own power,"⁷ under our control or command.

The Aristotelian psychology of moral choice is subtle and complex; choice and voluntariness are not co-extensive,⁸ and many important distinctions are made which cannot be examined in detail here. It is not clear whether Aristotle in fact means to endorse a self-directing power to choose among alternatives; certain metaphysical problems concerning self-reduction from potency to act would arise, and questions of the relationship of teleology to such a power would have to be considered. Further, the treatment in On the Soul seems to suggest a view more akin to teleological determinism, for here only the good sought is an "unmoved" mover, the appetite which seeks it "at once moves and is moved," determined by the good, and it is appetite that gives an animal "self-movement;"⁹ rational self-movement depends on the rational or calculative imagination, and it is not clear whether this is free or determined in some way. In addition, at least one passage in the Metaphysics seems to maintain that the choosing power is in fact determined by desire.¹⁰ It is not necessary to determine here whether Aristotle provides an actual example

of the fourth model, but only to note those features of his theory which suggest it: a power able to choose among opposites without being determined by chance or from outside.

Consideration of the will as originaive power gained a new urgency with Christianity; the origin of and responsibility for evil under an omnipotent God necessarily became an important question. In Augustine's work On Free Choice of the Will, for instance, the problem of evil gives rise to a dialogue which reveals that "our will, therefore, is not a will unless it is in our power. And since it is indeed in our power, it is free in us."¹¹ The will is able to choose good or evil, and is not compelled to do so by God or by any outside force,¹² and thus it assumes responsibility for the evil it chooses to enact. When Augustine's interlocutor asks for the cause of the will's choices, Augustine points out that the question is out of order, since it must lead to an infinite regress if admitted, because it is impossible that God be the cause of evil:

After all, what cause of the will could there be, except the will itself? It is either the will itself, and it is not possible to go back to the root of the will; or else it is not the will, and there is no sin. Either the will is the first cause of sin, or else there is no first cause.¹³

In some very restricted sense the will must be admitted to be a "first cause." While its power to choose is derived from God, God does not determine the actual choice that occurs, and to this extent the will is the sole cause of the

act.¹⁴

Agency in Aquinas

The treatment of St. Thomas Aquinas in the Summa Theologica may be considered briefly, as involving a combination of Aristotelian and Augustinian influences.

Aquinas states that "the will is compared to the exterior action, as its efficient cause,"¹⁵ thus placing the problem in a causal framework. As the principle of an act, the free will is a power, rather than a habit.¹⁶ Since the will is not the act of a corporeal organ, it is free from determination by matter, such as the influence of the heavenly bodies;¹⁷ its acts are distinguished from actions which occur "by nature" in general, as we saw suggested by Aristotle, for "will and nature differ in their manner of causation, in such a way that nature is determined to one, while the will is not determined to one."¹⁸ Whether "nature" here indicates our first or our third model, will acts differently from causes of its sort. Agreeing, again, with Aristotle, Aquinas holds that "wherever there is intellect, there is free-will."¹⁹

For our purposes an important point is that the free will has the power to choose among alternatives: "we say that we have a free-will because we can take one thing while refusing another."²⁰ Human liberum arbitrium is capable of acting or not acting in a given situation, a given

initial state. According to Aquinas this results from the fact that the reason can apprehend each alternative as good in some way, and thus as able to be sought by the appetitive power of the will.²¹ When free will is to be exercised, more than one alternative must be causally possible to the agent.

In addition, as with Augustine, the will is a sort of "first mover" or "first cause," a source or origin of action. The soul in general is "self-moving" in a certain sense;²² more specifically, the will moves all faculties of the human soul, although it must be preceded in motion by the intellect.²³ Among those things directed to an end, the rational nature is self-directing, moved toward an end by its own power.²⁴ It is this internality of the moving principle which makes acts voluntary, and, while this "voluntariness" might be applied to animals as well as man, it is applied especially to man because of his knowledge of his end.²⁵

The existence of alternatives alone might be taken to imply randomness; the internality of the moving principle might simply be the "internality" of the third model. But the combination of the two seems to indicate that Aquinas' will follows our fourth model, for both qualifications apply to it. It moves itself in some sense, but in a way compatible with choosing among two or more alternatives.

The will is mistress of its own act, and to it belongs to will and not to will. But this would not be so, had it not the power to move itself to will. Therefore it moves itself.²⁶

Alternatives are available, "to will and not to will;" and the selector of the outcome is the will itself. Aquinas explains the paradoxical ability of the will to actualize itself on the analogy of the agent intellect:

But it is evident that the intellect, through its knowledge of the principle, reduces itself from potentiality to act, as to its knowledge of the conclusions; and thus it moves itself. And, in like manner, the will, through its volition of the end, moves itself to will the means.²⁷

This "self-actualization" is not absolute, but takes place only in one respect, and depends here on the willing of an end toward which a means is to be chosen. Nonetheless to some extent there is a self-direction with respect to alternatives. As Katherine Rose Hanley points out in a recent article on moral fault in Aquinas, "the radical autonomy of liberum arbitrium assures that human freedom itself, by a contrarying use of its power, is the determining factor that makes the choice."²⁸ The selection of an alternative depends on the agent's free will.

Two subsidiary points may be made. The first is that, in an inversion of a form of the determinist dilemma, Aquinas argues that freedom of the will is presupposed in "counsels, exhortations, commands, prohibitions, rewards and punishments,"²⁹ since such moral language (unless it is conceived of as purely utilitarian, a form of operant con-

ditioning) assumes that the person addressed is able to respond to it but not compelled to do so, or able to respond in many different ways. The second, more important, point to be noted is the role of attention in choice according to Aquinas. The will cannot act except in respect of some good; its power over alternatives comes from the fact that it can perceive any alternative as good in some way, even if it is evil in other ways, and control its actions by controlling its focus on the various aspects of possible goals.³⁰ Hanley's formulation is: "liberum arbitrium in the exercise of its power of attention allows the object of its choice to be specified by concupiscent desire and sense apprehension."³¹ In fact, she states the situation as a dichotomy of reason and passion as possible directing forces at one point:

Liberum arbitrium can move reason to specify its choice or let passion specify its focus or refuse to act either on passion's or reason's specification using its power of attention and inattention.³²

Such a formulation is strikingly similar to Kant's picture of the activity of Willkür with respect to inclinations and the moral law presented by Wille.³³

Many complex problems would have to be worked out to provide a thorough rendition of St. Thomas's views on this subject.³⁴ Here, however, we can only consider some arguments that might be made against attributing a theory of agent causality to Aquinas. One such argument might

note that in speaking of the will, Aquinas distinguishes several sorts of necessity, and holds that necessity of coercion is incompatible with freedom of the will but that other sorts, including a "natural necessity" of inclination, are not.³⁵ This would result in a model like that of internal determinism. However, in the next article Aquinas clarifies the point, stating that the will adheres to some things of necessity and to others without necessity; happiness, the last end, is chosen or sought necessarily, as are those things seen as necessarily ingredient to it, but lesser ends are not chosen of necessity.³⁶ A certain movement of the will is natural and necessary, and this is basic to all willing, since "without this universal motion, man cannot will anything."³⁷ But given this necessary willing, individual instances of willing apparent good are under man's control, since he can attend or not attend to good and evil aspects.

Because of the possibility of such a mixed model, a certain amount of free choice in our sense may be retained. It would seem here that the will is to some extent under internal determinism, to some extent open to agent causality, pointing up the fact that "having a principle within" can mean either of the two according to whether this principle is capable of alternatives or not.³⁸

More serious is Aquinas' response to an objection concerning external influences on the will:

To be moved voluntarily, is to be moved from within, that is, by an interior principle: yet this interior principle may be caused by an exterior principle; and so to be moved from within is not repugnant to being moved by another.³⁹

If this passage is to be taken at face value, then Aquinas must be seen as accepting a variant of internal determinism, allowing determination of the "internal principles" previously from outside. However, this may not be the case. It should be noted first that allowing the interior principle to be "caused by an exterior principle" is not necessarily equivalent to allowing its every determination also to be so caused; it might be arguable that God must create the will, but that once created its determinations or activities proceed from itself and are not wholly predetermined in the act of creation. In addition, one sense at least in which the will is said to be "moved" from outside is that in which it is attracted by the good with which reason presents it.⁴⁰ Since, as we have seen, the agent may or may not attend to this good, and is not compelled to do either, freedom may be preserved in a choice as to which external "cause" will determine action under the aspect of good, as in Kant Willkür allowed either inclinations or moral law to "determine" action.

It is not necessary to settle here the question of agent causality in Aquinas; once again, the views quoted may serve as at least an indication of the possibilities to be pursued. While Boyle et al speak of St. Thomas as advo-

cating free choice in our sense,⁴¹ Paul Ricoeur takes a more critical position with respect to the Thomist tradition:

In brief we could say that Thomism tends toward the recognition of the power of thinking without recognizing absolute originality in it. . . . Thomism appeals to this determination of the self by itself sufficiently to do good psychology, but right away attaches it to the entire order of nature sufficiently to avoid pushing this good psychology to the point of a genuine metaphysics of subjectivity.⁴²

Whatever Aquinas' stand on agent causality may actually be, we may note at least three points on which he stands close to Kant here: the assertion of something like free choice as I have defined it, the mechanism of attention through which it operates, and the consequent tendency to consider right action somehow "freer" than the admittedly free choice of evil.⁴³

Reid's "Active Power"

One modern proponent of a theory of agent causality, directed specifically against Hume, is Thomas Reid. In his Essays on the Active Powers of the Human Mind (1788) he sets forth a theory of the principles of action in general, and specifically of the will, in which we may note several important features.

Like Kant, Reid holds "that we are efficient causes in our deliberate and voluntary actions."⁴⁴ He accepts the argument from responsibility to freedom, which we have found to be present in Kant,⁴⁵ and also makes the point

concerning moral language which we have just seen Aquinas cite: if the will were not free, it would be senseless to speak of reward and punishment, or of deliberation, promise, purpose, effort, counsel, command, words used commonly of human action but not of nonhuman objects.⁴⁶

The will is to be called an "active power," according to Reid, as distinct from the speculative or intellectual powers which have to do not with action but with knowledge.⁴⁷ Reid also distinguishes the will from passions, appetites, and affections, although he holds that it is related to them;⁴⁸ such an approach allows him to avoid character-determinism or some variant of internal determinism focused on one's own desires from the start. The active power of the will is possessed by man alone, and thus can serve as well as the intellectual powers to distinguish man from animals.⁴⁹ We can call this power active, rather than passive, because it is the ground of the difference between what we do and what merely happens to us. "This is the infallible criterion by which we distinguish what is our doing from what is not; what is in our power from what is not."⁵⁰ One proceeds from the will, from our own activity or efficacy through such a faculty, and the other does not do so.

More important, for our purposes, is the fact that for Reid this "active" standing depends on our having it within our power either to act or not to act. If we could

not have avoided "acting," then the occurrence is really passive, not active at all, and the same applies if we could not have acted. "Power that cannot be exerted is no power. . . . Power to produce any effect implies power not to produce it."⁵¹ This is a power to decide among alternatives, to make one thing or another happen, or, in our terms, to determine a future event: "Every man is conscious of a power to determine, in things which he conceives to depend upon his determination."⁵² If we are to be "active" at all, it is necessary that we be able "to do otherwise," and that we have this ability given the exact prior state of our wills;⁵³ Reid notes and rejects the Moorean argument that freedom consists merely in being able to carry out what we will or choose, and thus also denies freedom to internal determinism, even if the determination is to action that would otherwise be called "good."⁵⁴ Once again, for the good to redound to our moral credit (for us to be responsible for it), freedom is required. Reid also observes that such freedom is not absolute and unlimited, since it requires only that some alternatives remain open, and that in particular it is consistent with the will's having been created and thus with its being causally dependent on another being, as long as that creation and dependence do not predetermine its choices.⁵⁵

Reid identifies the determinist dilemma, the accusation that any non-determinist outcome must be merely "ca-

precious," and rejects it.⁵⁶ In addition, Reid deals with the charge that if "free" is defined as "moved by the will," then a will that is called free will require another will to move it, and so on indefinitely. We must call the will itself free, he maintains, in a slightly different sense from that in which we call actions free; for if an infinite regress is not to occur, something must be considered as moving itself, not as moved by something else.⁵⁷ Reid rejects indeterminism in holding, not that free actions are causeless, but that they are caused by something which is able to exercise or not to exercise its own causality.⁵⁸ His statement of the application of the notion of cause here is instructive:

I consider the determination of the will as an effect. This effect must have a cause which had power to produce it; and the cause must be either the person himself, whose will it is, or some other being. The first is as easily conceived as the last. If the person was the cause of that determination of his own will, he was free in that action, and it is justly imputed to him, whether it be good or bad.⁵⁹

Any effect must have a cause, Reid concedes; but the next step is not to conclude that the will's determination must have an outside cause, but to ask whether that cause is itself or is something else. Either alternative is conceivable, and to avoid determinism it is necessary to consider the first: that the cause of this determination was the will itself and not another thing. Lest it seem paradoxical to call the will the cause of "willing," Reid notes

that "power is one thing; its exertion is another thing."⁶⁰ The power of willing is the cause of the activity of willing; and since, as we have seen, a power which cannot be exerted is no power, we must conclude that the human will is a cause which can choose to exert or not to exert its causation. It is in this sense that it is "active."

According to Reid we are directly conscious of the exertion of such a power.⁶¹ We cannot be called conscious of the power itself, for we can know any disposition or possibility only in its actualization,⁶² but in exerting effort or power of the will we discover indirectly that we have the power to do so, since without the power or potency the actuality could not come about. This human activity is the original and proper sense of the terms "cause" and "agent" in Reid's view, not a dubious extension of them to an unknown mental power. Because it is simple and directly known, however, it cannot be defined:

But it ought to be observed, that the most simple acts of the mind do not admit of a logical definition. The way to form a clear notion of them is, to reflect attentively upon them as we feel them in ourselves. Without this reflection, no definition can give us a distinct conception of them.⁶³

Reid contends that in fact the notion of active causation is perfectly well understood from a common-sense standpoint, and begins to seem dubious only when "darkened by philosophers."⁶⁴ Thus the lack of a definition involves no unintelligibility or absurdity.⁶⁵ A certain obscurity may

remain in the notion, which we cannot penetrate; we do not know how the will operates; but this is not sufficient to invalidate the concept for our use.⁶⁶

It may also be noted that Reid speaks here against the Humean notion of causality in general. Constant conjunction, or regularity, or even necessary and sufficient conditions, are not sufficient to define causation according to Reid; some such additional factor as "efficiency," or "power," will have to be included, and it is this that Reid wishes par excellence to attribute to human beings.⁶⁷

Finally, we may note that Reid admits motives or incentives for consideration, although he refuses to identify them with the will.⁶⁸ Motives may influence our decision, but they do not themselves act, nor compel the will to act; rather, they must "plead their cases" before the will as advocates before a court, the will retaining the final decision as to which motives will be acted upon.⁶⁹ Reid holds that some actions may be possible without motives, but he concedes that these have no moral value, for moral value lies in the choice between animal and rational motives.⁷⁰ What motiveless action proves is only that motives do not determine actions completely:

For, if there ever was any action of this kind, motives are not the sole causes of human actions. And if we have the power of acting without a motive, that power, joined to a weaker motive, may counter-balance a stronger.⁷¹

The free power of the will, then, decides which motives

will be put into action by acting as the arbiter among them, by casting its weight with one or another.⁷² Freedom is thus not identical with reason or with acting rightly;⁷³ nor is it uncaused capriciousness, indeterminism, or a blind movement unable to take motives into account. Instead, it is the deciding power which controls which motives will and which will not be acted upon--in Reid's terms, whether animal or rational incentives will determine the action.

This rough outline of Reid's theory indicates the shape that a theory of agent causation begins to take in the face of modern notions of causality and of action. Without going further into Reid's approach, or undertaking an extensive survey of other possible examples of a fourth causal model, we may then move to consider briefly some more recent candidates for such a model.

Recent Examples of Agent Causality

A number of twentieth-century treatments have raised once again the idea of what I have called agent causality, under a variety of names and descriptions. The fourth model has sometimes been distinguished (if all too seldom) by critics of freedom of the will, most notably by C. D. Broad in his essay "Determinism, Indeterminism, and Libertarianism."⁷⁴ In this section I will describe very briefly some of the positive treatments of agent causation

by libertarians, then examine two such presentations more fully in the succeeding sections, those of C. A. Campbell and Richard Taylor.

It may be noted first that such views as that of Jean-Paul Sartre in Being and Nothingness have affirmed freedom strongly, and sometimes in ways compatible with our delineation of the fourth model. Sartre, for instance, insists that the very notion of "action" requires freedom,⁷⁵ as we have seen Reid argue, and in addition Sartre holds that freedom requires negativity or the existence of open possibilities in the world among which choice may take place.⁷⁶ Freedom (the free agent) itself is not determined from outside, and thus is not describable in certain ways.⁷⁷ According to Sartre, actions may be said to have "causes" in their motives and ends, but this does not alter the fact of freedom, because any consideration can become a cause only by being regarded as such by the agent: "In order to be a cause, the cause must be experienced as such."⁷⁸ This approach obviously recalls the stress on attention which "allows" motivating factors to act; we have noted this in Aquinas as well as Kant, and it passes down in discussions of intentionality through the later Scholastics, Brentano, and Husserl. Sartre's approach, of course, seems to make it impossible to regard the self as a cause, and thus cannot be applied directly to the discussion here; but the elements just noted can be seen to ap-

pear later in causal contexts.

In the Gifford Lectures of 1953-54, John Macmurray developed a theory of agency in the course of setting forth a theory of the self. With Macmurray, as with Sartre, this action is unique to humanity, a different sort of activity than the "action" of nonhuman causes. "In the strict sense of the term only a person can 'act', or in the proper sense 'do' anything."⁷⁹ While this "action" is not restricted to moral action in the usual sense of the term, it includes moral action. Like Sartre, again, Macmurray notes that this human agency requires the openness of possibilities for its action:

In action, then, the Agent generates a past by actualizing a possibility. This 'generation', or 'bringing into existence', is practical determination, and the actual is the determinate. To act, therefore, is to determine; and the Agent is the determiner.⁸⁰

Macmurray's formulation is closer to the ones applicable for our purposes. Possibilities, as yet undetermined, are spread out before the Agent; and the Agent is the determining factor which resolves the selection of an outcome. Nor is he himself predetermined, as in the third model, for "an agent is in his movement, and consequently can always alter or modify it at will within the limits of his resources."⁸¹ For Macmurray action would make no sense if not involving a free determination of the future; "this is implied in the very conception of action. The Agent is the determiner.

To deny free-will is to deny the possibility of action."⁸² While he is reluctant to call the Agent a "cause," nonetheless that Agent has the properties required by the model cause we have been seeking.

In the course of a general exposition of the modes of consciousness, J. N. Findlay expresses a similar model of agency and explicitly links it with causation.⁸³ Human and "minded" activity is not acausal or "contra-causal;" "mental activity is, in fact, a special case of causality, causality in which conscious orientations play a dominant part."⁸⁴ While the notion of causation must involve some recognizable continuity or continuance, a growing of one state out of another, this continuity need not be of a kind that excludes freedom. The problem may be solved not by rejecting freedom as acausal, but "by modifying our notion of causal explanation so as to accord with our notion of freedom."⁸⁵ Causality may include many models, and more than one way of "growing-out," not all of which need be determinist.

Freedom, if seen in this perspective, will not violate causality, but will be a species of it: it is the sort of causality, not felt as mysterious in ordinary contexts, which fixes its precise direction as it goes along.⁸⁶

It is emphasized that this sort of causation need be no more strange or unintelligible than a determinist sort, and needs no supplementation by sufficient conditions of choice, reducing it to determinism, in order to become in-

telligible.

It is, we think, until philosophers have taught us otherwise, by no means mysterious that a precarious poise among several alternatives should come down on the side of one of them, that what is 'open' should become 'closed'. . . . It is still true that an activity could have been developed differently, even though it has now taken one actual course.⁸⁷

Because of this independence of determination by any prior state, even its own, this free will's attention to motives or reasons need not be construed in deterministic fashion; the motive does not act as a cause except as the will allows itself to be so "moved."⁸⁸ For the same reason, the phenomenon of moral effort and moral weakness is fully intelligible, because the will is able to "throw its weight" either way, and can overrule a motive or impulse, although this may be difficult, requiring the exertion of great "power" by the will.

All this makes good sense in our ordinary talk about these matters: which does not shirk from holding that a thing may, without outer provocation, exert itself in a number of distinct ways, each with a different distance from certainty and impossibility.⁸⁹

This notion of moral effort is intimately linked to the ability of the free will to choose among undetermined alternatives, for it is the expressing of a power, making something happen that would not have happened otherwise, and thus can be used against inclinations or against otherwise compelling psychological "forces." Roderick M. Chisholm makes a similar point in arguing against the Moorean

interpretation of "being able to do otherwise," and mentions both aspects of the necessary freedom.⁹⁰ Being able to do otherwise is not mere indeterminism (in our sense), for such randomness would not be "doing" at all;⁹¹ as we have seen in Macmurray, the notion of action involves that of accomplishment by the agent, not by chance. A power to decide alternatives, then, must be attributed to the possessor of free will: "the things that an agent can make happen, then, will be those things which are in his power to make happen."⁹² Chisholm also rejects the model of internal determinism, even of character-determinism, citing Reid's approach.⁹³

Chisholm observes that calling the agent the cause of the action leads to a denial of the opinion that causal relata are always events; for in this case one relatum (the action) is an event and one (the agent) is a person or perhaps an entity of some sort (although Chisholm does not use this language). He proceeds to coin some technical terms to refer to this distinction:

I shall say that when one event or state of affairs (or set of events or states of affairs) causes some other event or state of affairs, then we have an instance of transeunt causation. And I shall say that when an agent, as distinguished from an event, causes an event or state of affairs, then we have an instance of immanent causation.⁹⁴

Such a distinction allows the libertarian to escape the insinuation that what really caused the act was a particular state of the agent, something which is difficult to con-

ceive in other than determinist terms. The agent can then be called an "unmoved mover" of a sort, for no state or event need determine his action: "in doing what we do, we cause certain events to happen, and nothing--or no one--causes us to cause those events to happen."⁹⁵ Chisholm notes here a general point about causality, that immanent causation is known before transeunt causation and that the latter is known only because of our knowledge of the former.⁹⁶ In fact, no one accepting determinism can accuse a theory of agency of unintelligibility, for "the nature of transeunt causation is no more clear than is that of immanent causation."⁹⁷ According to Chisholm, we attribute causality to objects only by analogy with the causality we ourselves exercise as agents, as Reid argued; and this in fact involves a denial of a purely Humean or "regularity" theory of causality.

Such recent defenders of free will as William H. Davis generally mention these points, although without developing a full-blown description of agent causality. Davis, for instance, emphasizes the difference between an agent as caused nexus of determinist forces and an agent as in some way a causal source: "the decision is appropriated; it is freely and deliberately taken by the agent. Decisions are made, not caused."⁹⁸ Davis draws from this the conclusion concerning moral effort which we have seen in Sartre and Findlay, that we can act against what we "most

want to do" if this "wanting" is taken to mean the desires, motives, etc., present before the "act of will." In effect "we can choose to desire something more or less."⁹⁹ And while such a power to act freely may not be perfectly clear or susceptible of perspicuous analysis, it is at least not less so than determinism itself.¹⁰⁰

Frederick Ferré, in a 1973 article entitled "Self-Determinism," proposes under that name a theory closer to our fourth model than to our third. He notes that indeterminism is of no assistance for the libertarian,¹⁰¹ and also excludes internal determinism, mainly on the grounds of the non-isolation of the real subject.¹⁰² Introducing "self-determinism" as similar but not identical to the views of Campbell and Taylor, which we shall examine shortly, he phrases the distinctive character of his model in this way:

. . . I should stress that I am not denying that all human behaviors have sufficient conditions of some sort. . . . My suggestion, rather, is that for some human happenings--those which in Taylor's useful distinction are actions rather than mere events--the sufficient condition is supplied by the conscious agent himself and that his exercise of this determination is not simply fixed by prior events.¹⁰³

Under this view, once more, motives are not determining factors, but leave a range of possibility for some "fresh contribution" made by the acting self.¹⁰⁴ The view is summarized in Ferré's definition of an agent: "a creative initiator of events within a limited and evanescent nexus of open possibilities."¹⁰⁵ While an agent's exercise of such

self-determination may be detectable only by introspection, it is a necessary (though not sufficient) condition for responsibility.¹⁰⁶

Boyle et al, while they are less concerned with constructing an appropriate causal model than with surveying the arguments for and against free choice, also make some of these important points toward a causal model. As with Ferré, they insist that free choice does not mean that the act lacks sufficient causal conditions; it means, rather, that one of those conditions is the "person's very choosing itself," and that this need have no sufficient conditions.¹⁰⁷ They thus reject the term "contra-causal" for free acts, "because it suggests that choosing freely is not itself a mode of causing but rather a mysterious interference with a determinate and mechanistic course of nature."¹⁰⁸ As with Findlay, choice is seen as a type of causation, not a violation of it. This position is free from the charge of nonsense leveled by the determinist dilemma:

A [proponent of free choice] can reply in another way to the argument that choices, if uncaused, are mere chance events. He can say that they are acts of human persons. Choices are not quasi-miraculous happenings or entities which seem to appear from nowhere, like rabbits out of a magician's empty hat. People make choices; choice is a familiar aspect of human action. The experience of choice, . . . is not the experience of something which befalls a person, but of something a person does.¹⁰⁹

And this notion of a person's doing something, once again,

involves us in the notion of a power or capability, of what is within "a person's own power."¹¹⁰

Finally, in a 1977 article by James A. Fulton, we find the same points made yet again. An act is not the same kind of thing as an event;¹¹¹ it may involve motives or intentions, but they do not determine the will or affect it as causes.¹¹² Indeterminism is not adequate to explain this, even as a "loophole."¹¹³ Instead, the person makes the act happen;¹¹⁴ this notion is already understandable and needs no analysis to make it intelligible.¹¹⁵ This approach solves the determinist dilemma¹¹⁶ and is preferable to a simplifying but destructive insistence on a single, determinist, mode of causation.¹¹⁷

These brief summaries indicate that a model of agent causality has been suggested in many quarters in recent times, and give some idea of the common picture which may be distilled from them. To further clarify the fourth model, we may look more closely at two more fully developed theories, those of Campbell and Taylor.

Campbell's "Creative Activity"

C. A. Campbell has been an advocate of the freedom of the will in various writings over a period of nearly thirty years.¹¹⁸ While it is impossible to discuss in general here his philosophical psychology and theology, a synoptic outline of his position on freedom will bring to-

gether many of the points we have already seen as part of theories of agent causality.

Campbell argues in favor of free will from the argument concerning responsibility. If we are to hold people responsible for acts, and legitimately praise or blame them, free will in some sense must be presupposed. Campbell further identifies, as necessary characteristics of this freedom, the same two criteria which we have employed and which produce the fourfold partition of causal models.

We must lay down, therefore, that an act is a 'free' act in the sense required for moral responsibility only if the agent (a) is the sole cause of the act; and (b) could exert his causality in alternative ways.¹¹⁹

Condition (a), Campbell acknowledges, may seem extreme; surely many causes cooperate in producing any given outcome. But Campbell notes the fact that what we do hold the agent responsible for is exactly those features of the act which do depend on him as sole cause.¹²⁰ If certain features of the outcome are molded by other causes, not by the agent, we absolve the agent of responsibility to that extent; we hold him liable only for the choice he has made within the parameters set for him by circumstances. People are not blamed for finding themselves in circumstances where all choices are unpalatable (unless, of course, that situation itself results from a previous choice of theirs). Thus dependence of the act on the agent as cause is central to freedom.

Similarly, more than one alternative must lie open and thus depend on the agent's decision; else the absolutism just mentioned would be applicable to all acts. This openness cannot be of a merely Moorean type: "the proposition which we must be able to affirm if moral praise or blame of X is to be justified is the categorical proposition that X could have acted otherwise because--not if--he could have chosen otherwise; . . ."¹²¹ The choice on which the action depends must not itself be compelled, or the point of the theory is lost.

Because of this careful distinction of criteria, Campbell detects and correctly disarms the determinist dilemma. "The disjunction is invalid, for it does not exhaust the possible alternatives."¹²² Chance is not free will, and neither is the predetermined unfolding from within which he refers to as "Self-determinism" and I have called internal determinism.¹²³ Freedom need not accept a charge of unintelligibility if another alternative can be described.

This fourth alternative is described by Campbell as self-activity or self-origination. The exertion of the power to choose does not "happen" to us by chance or by necessity; "we regard our self not as the blind origin of the effort, but as its conscious originator."¹²⁴ The self is not only a character producing actions in determinist fashion, but contains a source of activity which is creative in

the sense that it selects among alternatives without coercion from outside.

Reflection upon the act of moral decision as apprehended from the inner standpoint would force him [the Determinist critic] to recognise a third possibility, as remote from chance as from necessity, that, namely, of creative activity, in which (as I have ventured to express it) nothing determines the act save the agent's doing of it.¹²⁵

To clarify the notion of a power of creative activity, Campbell distinguishes it from other factors with which it might be confused. The self according to Campbell, as we have just seen indicated, is complex; it contains formed character, desires, rational faculties, as well as the spring of free action needed for moral responsibility. Thus one must first note that activities taking place in the self are not always activity of the self. Feelings or impulses, etc., are not all "active" in the unique sense in which the choosing faculty is active.¹²⁶ This arrangement allows the possibility of a "self divided against itself," a self in which various factors urge different actions; but such a conflict is not resolved mechanically or deterministically, but by a decision of the will to side with one or another of those impulses. Thus the familiar experience of moral struggle is explained by the distinction of "self-activity" from self's activities.

For similar reasons the creative self is not identified with desires or wants; "there is a significant felt difference between desiring something and actively setting

one's self to obtain it."¹²⁷ Nor, as was stated a moment ago, is the acting self identical to "character" or (in an Aristotelian sense) habit, even virtuous habit.

The 'nature' of the self and what we commonly call the 'character' of the self are by no means the same thing, and it is utterly vital that they should not be confused. The 'nature' of the self comprehends, but is not without remainder reducible to, its 'character'; it must, if we are to be true to the testimony of our experience of it, be taken as including also the authentic creative power of fashioning and re-fashioning 'character'.¹²⁸

Since in moral decision one often is involved precisely in choosing against the system of formed wants, habits and inclinations that constitutes one's character, the agency making the decision obviously cannot be that character itself. The existence of such an agency distinct from the acts themselves, and also from the habits or dispositions, yet bound up with these other parts of the "self," seems to imply the existence of some substratum or substance in the Aristotelian sense, within which these powers constitute a "self;" this point will be touched on again somewhat later.¹²⁹

While character does not determine all actions, according to Campbell, nothing prevents the advocate of agent causality from holding that in very many cases character is determinant of action, and even from attributing this action justly to the agent performing it, if the formation of character itself can be traced to action by the free will.¹³⁰ "Creative" decisions may be few and far between

in most cases. The constraints of character, sometimes self-made, limit the scope of freedom considerably, so that "there is no question, on our view, of a free will that can will just anything at all."¹³¹ For Campbell any such choice must be made either for inclinations or for "moral ideals," somewhat as in Kant Willkür must "unleash" either phenomenal inclinations or moral law.

The agency of the will can also be distinguished from sheer impulse, as might be expected once the determinist dilemma has been rejected.¹³² In addition, its action cannot always be identified with rational action; some distinction must exist here like that of Wille and Willkür.¹³³ If the agent self is to be responsible for both good and bad acts, it must be free to have done either, regardless of whether the rational action would have been in fact the better or "higher" choice.

In defending free will against its numerous critics Campbell must present a theory of the way in which freedom can be known. Responding to various determinist arguments, Campbell insists that if it can be found at all, the free will cannot be found in certain ways: "the critic cannot find anything deserving of the name of 'activity', because he seeks for it where it cannot possibly be found."¹³⁴ Parallel to this is the claim that certain sorts of explanations or answers, if the libertarian is correct, cannot be expected by the critic, for they would mean abandoning the

position of free will entirely; one cannot expect the libertarian to account for the free choice in determinist terms.¹³⁵ This will mean that the libertarian claim is not intelligible or explicable in certain senses, those which depend on identifying a separate determining cause for everything, although this does not preclude intelligibility or explicability in every sense. Once the libertarian has pointed to the creative activity of the self as the source of determination of an act, the determinist is apt to ask what caused or determined that activity, and to claim incomprehensibility when the question is refused. But "this can hardly rank as a criticism of Libertarianism. It is just a description of it. That there can be nothing unintelligible in this sense is precisely what the Determinist has got to prove."¹³⁶

According to Campbell the agency of the will is made comprehensible by direct acquaintance, by introspection which comes to know and understand (although not in determinist fashion) the action of the will directly. Campbell urges this point repeatedly against critics of libertarianism: even if the introspective method is unappealing, it is the only possible alternative in this case. "Only from the inside, from the standpoint of the agent's living experience, can 'activity' possibly be apprehended."¹³⁷ Introspection is not an infallible source of knowledge, to be accepted uncritically; but it should not be

ruled entirely out of court either.¹³⁸ Given this provision of revisability in principle (like that of the evidence of the senses), the activity of the will is known directly and immediately. It is "incapable of being analysed in terms of anything but itself,"¹³⁹ not reducible to other factors of a determinist or indeterminist sort, and thus direct acquaintance is the only avenue of knowledge open to it. Campbell admits that our understanding of creative activity, which already cannot be of a deterministically causal type, may be limited;¹⁴⁰ but it is sufficient to allow us to maintain its reality.

Campbell, like Findlay, focuses closely on the notion of moral effort. When there is a conflict between our duty and our strongest inclinations, the decision is made by a putting forth of some energy or power which could have been withheld, which depends on the agent's decision alone. We can resist our strongest desires

because we have the power to introduce a new energy, to make what we call an 'effort of will', whereby we are able to act contrary to the felt balance of mere desire, and to achieve the higher end despite the fact that it continues to be in the line of greater resistance relatively to our desiring nature.¹⁴¹

That this effort is in fact the locus of responsibility is borne out by the common-sense judgment that even if a man is not fully responsible for the eventuating act, he is fully responsible for the effort, which depends "solely upon the self itself."¹⁴² It may be noted also that Camp-

bell endorses the Kantian view that the effort needs to be exerted on the side of moral duty rather than on that of desires, because if no effort is made then the desires will take over anyway. When no free effort is exercised, inclinations always win out. Thus the only case in which effort is determinant is one in which duty is placed above inclination;¹⁴³ in this sense one might be said (were it not so misleading) to "act freely" only when one acts out of duty, because if one acts out of inclination one merely "lets oneself slide." In line with this, the acquiescence of the will to desires by means of "attention" to them, which we have already seen in Kant and Aquinas, is also mentioned briefly by Campbell.¹⁴⁴

Campbell, then, seems to hold quite closely the view which I have argued is necessary for Kant as well. The argument from moral responsibility, requiring two characteristics of freedom, leads us to seek a source of activity which in Campbell's view (although not in Kant's) is detected introspectively and directly. It is not reducible to character, desires, impulse, or rationality; it is this source of choice that is responsible for putting forth moral effort and thus acting as an absolute originator of a sort. "Creative activity" is evidently an instance of the model of agent causality.

Taylor's Theory of Agency

Richard Taylor, writing somewhat more recently, developed a theory of agent causality in a series of articles culminating in his book Action and Purpose (1966).¹⁴⁵

While his work is not aimed at providing a justification for free will, it incorporates several features which we have seen to be important in such a theory. A brief survey of this scheme may thus provide us with a final example of the type of model in which we are interested.

Taylor's primary concern in Action and Purpose is to reinstate the agent as a power-exerting cause. While he is reluctant to use causal language with respect to agents, he accepts such language as legitimate:

To say that any change, such as the motion of one's limb, is the act of some agent implies at least that it is caused, for to say that an agent performs an act is exactly synonymous with saying that he makes something happen or is the cause of it.¹⁴⁶

This sort of "causing" involves being the initiator in some sense, the "beginner" of the action: "nothing can be represented as a simple act of mine unless I am the initiator or originator of it."¹⁴⁷ Acts require activity, not passivity, on the part of the agent, for he must be the source of the act in some sense: "I again characterize an act, then, as anything that an agent does, as distinguished from things that are done to him."¹⁴⁸ Actions do not just happen to a person, they are accomplished by that person. Obviously this must be called a sort of causation, although

Taylor considers it very different from causation of the ordinary sort (as Chisholm separates "immanent" and "trans-eunt" causation). "This kind of causation--causation by agents--is so different from the kind of causal sequence found in events that it is unfortunate, and the source of much error, that we use the same word for both."¹⁴⁹

As such a distinction requires, Taylor draws a sharp line between persons and things, although he does not attempt to investigate the ontological foundations of this division. Agents have abilities or powers in a way in which non-agents cannot.¹⁵⁰ Insofar as they can be spoken of in the same way, it is the causality of agents that is basic and that of objects which is derived, rather than vice versa: "causation by agents remains, however, the fundamental idea of causation that all men possess."¹⁵¹ The division is also one between their behaviors, where a strong distinction is made between "acts" and "events," where "an act of an agent is therefore essentially different from the behavior of any inanimate thing, in which no agency is involved, . . ."¹⁵² There is something more involved in acts of agents than is involved in behavior of things.¹⁵³

This "something more" might be called power, efficacy, operation, agency, active power. In action "I seem to be making something happen, initiating something, or bringing it about."¹⁵⁴ Actions are performed or origin-

ated, and Taylor even suggests that this "may be what Kant meant when he obscurely spoke of a 'noumenal' self that is free."¹⁵⁵ According to Taylor this relationship of producing or originating is not analyzable simply in terms of necessary and sufficient conditions, for it possesses a directionality that these notions do not.¹⁵⁶ Because of this exercise of power or efficacy, an agent accomplishes change in a way in which objects do not, for it also originates that power rather than merely transmitting it; and an explanation in terms of agency thus accounts for change in an equally special way.¹⁵⁷ Echoing Campbell, Taylor refers to this production of change or motion as "creative activity."¹⁵⁸ Such activity does provide the determining conditions for its effects,¹⁵⁹ although more than this is necessary to make a relation a case of agency.

Causality--of which causality by agents is for Taylor the fundamental sort--cannot be analyzed or reduced to other sorts of relations, as Hume tried to do. After a consideration of causing in general, Taylor concludes:

To say of anything, then, that it was the cause of something else, means simply and solely that it was the cause of the thing in question, and there is absolutely no other conceptually clearer way of putting the matter except by the introduction of mere synonyms for causation.¹⁶⁰

It is an ultimate philosophical category, incapable of further analysis. The notion of "act" is similarly elementary:

. . . we have abundantly seen that there is no good, non-question-begging analysis of this concept. . . . We all know, or think we know, what is the difference between acting and being acted upon, between doing something and having something done to us, but it seems quite impossible to say, in any more philosophical way, just what that difference is.¹⁶¹

As the passage last quoted indicates, Taylor also holds that these notions are already understood in some sense; they do not lack intelligibility because they lack analysis. Agent causality could be called mysterious or opaque in the sense that no further, and in particular causally determinist, explanations can be given; but on the other hand it seems too familiar a thing to be mysterious. Taylor refers, not to introspection as Campbell does, but to ordinary non-philosophical experience to validate his claim.

If we find something in our daily experience, and if we also find that we cannot, without being led to absurdities, represent it as a special case of something else that is already familiar and well understood, there is surely no point in calling it mysterious other than to indicate that it is not a special case of something else that is well understood.¹⁶²

As with Campbell, we find that where a notion is simple and therefore ultimate, certain kinds of answers cannot reasonably be expected. To ask for an explication of agent causation in terms of non-agent causation begs the question, because it assumes that agent causation is reducible; if this is not the case then the question will be unanswerable, not because agent causality is unintelligible, but

because it is not analyzable in the way the question assumes it is.¹⁶³ Specifically, it need not be assumed that the agent is in turn determined or caused in his action from without; such a determinism was not part of the original notion of "cause" and cannot be imported into agent causality without begging an important question.¹⁶⁴

Here it becomes apparent that Taylor's notion of agency can contain an alternative to the three unsatisfactory models we have seen developed. As was just noted, an agent need not be determined from without. This notion of causation is also not definable in terms of "causal contingency," which represents things that happen without a cause, what we have called indeterminism.¹⁶⁵ Further, placing a cause within the agent, to produce what we have called internal determinism, does not make the relation one of agency or the behavior an act, if the cause in question is in turn determined by causal chains passing beyond the agent, or even within the agent.¹⁶⁶ Teleological systems, self-directing in the sense examined in Chapter Six, need not be agents, and thus agency must involve something more.¹⁶⁷ For "secondary causes," which merely transmit causal efficacy without originating it, do not "act" in Taylor's sense;¹⁶⁸ they are only means to some end in a process initiated by a primary cause, such as a human being. Thus it would seem, although Taylor does not use this language, that an agent must in some sense be an abso-

lute beginning, and one which does not operate in random or "contingent" fashion.

In a somewhat roundabout way, Taylor attributes to agent causality the properties necessary for freedom. The Moorean interpretation of "could have done otherwise," which analyzes it as "would have done otherwise if . . . had chosen otherwise," is not adequate, for my "power to do otherwise" is cancelled by physical conditions making it impossible for me to accomplish the intended act, and this is not the case with the links in ordinary, determinist causal chains. As Taylor explains the difference,

The most we can say is that, were it not for the cast, I could move [my finger], that it would be within my power to move it. A looser way of expressing this difference is to say that when every impediment to the realization of an ordinary causal capacity of an inanimate thing is removed, then that capacity is forthwith realized, whereas when every impediment to the exercise of a simple human power is removed, then that power can be exercised. It is still up to the agent whether that power is in fact exercised or not.¹⁶⁹

It seems, certainly, that even when all necessary causal conditions are present for an action, the agent can perform it but need not; it remains "up to the agent." A few pages further on, Taylor notes that the existence of possibility or capacity here contains the openness to alternatives which is present in the indeterminism of an ideal roulette wheel; but it must involve something else as well, namely, that whether the movement is made or not, which alternative is realized, is "up to me" or "in my power."¹⁷⁰ Agent

causality requires both that alternatives be open, as in indeterminism, and that the selection be made by the power of the agent, as might be considered part of internal determinism. But both these qualifications are present in Taylor's notion of agency.

In addition, Taylor relates the notion of action to that of command or imperative, not in that all actions must be or should be commanded, but simply in that it is absurd to command anything which is not an action but merely an event, such as one's heartbeat or perspiration.¹⁷¹ And this must surely be because what is not an action cannot be under the agent's control.

Taylor claims in several places that his theory is compatible with either determinism or non-determinism, and that he has not set out to prove or support libertarianism. According to Taylor, "to say that a man does something is perfectly consistent with supposing that there are, sometimes or always, conditions which are causally sufficient for whatever he does."¹⁷² Taylor does his best to discard the question completely, and claims that the issue of freedom and determinism is unprovable either way.¹⁷³ The theory is, however, open to the possibility of libertarianism, and Taylor mentions various considerations which make determinism seem unlikely (for instance, it is inconsistent with certain experiences in deliberation).¹⁷⁴

It is not necessary here to determine whether this

position is consistent or not. It would certainly seem that once Taylor has rejected indeterminism and internal determinism, he must accept the first or fourth model for agent causation; and if agency is not to be mere "secondary causation," and is to be an origination of some kind, it would seem that the agent must be the beginning of a causal chain, that what Taylor cites as possible must be true in every case of agency. To retreat to an internal determinist interpretation would be inconsistent for Taylor given the remarks cited; to leave the "I" in "I am the cause of the act" wholly unanalyzed, as Taylor at times seems inclined to do,¹⁷⁵ is merely to avoid the question or to endorse some version or other of the double-aspect theory.¹⁷⁶ Turning to purposefulness or teleology, as Taylor does in the latter part of his book,¹⁷⁷ must fall either into a double-aspect approach, if no connection is made between the world of "purposes" and the world of "causes," or into internal determinism, if a connection of a fully determining sort is made. We have seen that invocation of purposes alone will not solve the problem of the selection of a causal model.¹⁷⁸ If this is generally applicable, then Taylor must either endorse libertarianism in order to maintain the spontaneity or "originating" power of his agents, or show how this initiative is compatible with one of the other causal models. Since Taylor seems to admit the possibility of acting "freely" in a very strong sense, that of

acting without explanations in terms of either causes or motives,¹⁷⁹ the question of the agent's causal model remains open; and it would certainly seem sufficient for Kant, who needs only a model admitting free choice between determination by inclinations and determination by the moral law of Wille. Taylor's hesitancy on libertarianism may perhaps be taken as expressing only the insistence that acts do have determining causes, their agents, while the agents themselves do not have determining causes;¹⁸⁰ but in any case, if the agent is to remain more determining (and thus originaive) than determined, it would seem that Taylor must be led to conceive libertarianism as inherent in his model of an agent's causation.¹⁸¹

One further point may be noted: Taylor's agent causality, like Campbell's, requires the notion of an agent not reducible to a mere sequence of events, but one persisting through time in some way. Taylor notes that such a concept was part of the original notion of causality, as applied either to a person or to an object: the cause was a substance and not merely an event or state.¹⁸² The reference to an agent required in the description of an act would seem to be to the same sort of cause, a substantive entity rather than a transient state.¹⁸³ Taylor states this more explicitly in his earlier essay:

. . . it involves the conception of a self or person (i.e., an agent) that is not merely a congeries or series of states or events, for on this view

it is an agent who performs certain acts (i.e., who acts) rather than states or events in his history that causally determine them . . .¹⁸⁴

Taylor's theory, then, is similar to Campbell's, and to others which we have seen briefly, in some but not all respects. The central notion, once again, is that of the agent as a cause of a unique sort, and possibly as a substance or continuant as well. The exercise of causal power or efficacy by this agent explains the difference between acts and events, and causally explains the change which it accomplishes. While Taylor does not share Campbell's emphasis on introspection, he holds that agent causality is unanalyzable and directly known; it may or may not be compatible with both freedom and determinism, but it is clearly compatible at least with freedom. As a form of self-determination open to alternative exercises of power, it qualifies as an instance of our fourth model.

Basic Features of Agent Causality

We have now seen a number of defenses of free will which suggest something like a fourth model of causation, and at least one theory, Taylor's, which presents such a model while not pretending to settle the free-will controversy. Obviously there are many differences as well as similarities among the examples I have cited, and very many fine points which need development. Further, I have not attempted to prove that these models do actually apply,

that they are instantiated in reality, even if they are comprehensible; this will be a conclusion derivable from Kant's argument concerning obligation and responsibility, if agent causality is found intelligible. Obviously a complete treatment of agent causality cannot be carried out here; even to present a comprehensive history of such notions would require many volumes. We may only use these instances as starting points for a brief sketch of the fourth model in general, and attempt to characterize it sufficiently well to make clear what sort of pattern is necessary if Kant is to rebut the charge of unintelligibility.

The first point to be emphasized is that the model of agent causality is not a violation of, but an instance of, causation; it is causation of a peculiar sort. H. J. Paton's rendition of Kant's view provides evidence of the closeness of this position to Kant's:

If we conceive the will to be free, we must mean in the first place that the will is a power to produce effects without being determined--or caused --to do so by anything other than itself. Freedom is a quality belonging to a special kind of causality. Perhaps it would be simpler to say that it characterizes a special kind of causal action.¹⁸⁵

For any act, on this view, does have an entirely sufficient cause: the will that has made it occur or performed it. Because the selection of this act among alternatives does depend on the will (and does not occur randomly), that will must be seen as providing necessary and sufficient condi-

tions for the action; to miss this point is to obscure the entire issue by confusing the second causal model with the fourth, repeating the determinist dilemma. While the action is fully determined (by the will), the will's performing of that action is not predetermined, but is made to happen by the will at that moment; this is why the will is held responsible for it.

Since the action of the will is a species of causing and not an exception from it, such criticisms as the one Ross expresses both in his commentary on Kant¹⁸⁶ and in his own ethical treatise¹⁸⁷ are fundamentally misguided. Ross claims that freedom to choose among truly open alternatives "involves us in holding that the law of causation . . . is untrue when applied to human action;"¹⁸⁸ but the correct conclusion is that a somewhat different law of causation does operate in human action, one in which results depend on the free choice of the will. As Silber puts it, "freedom is itself a mode of causality with its own law."¹⁸⁹

What this special sort of causality requires is the notion of spontaneity, or self-determination in a sense which does not connote predetermination: the conscious going-out of a cause in one direction rather than another, by choice and not by chance. As Kant describes this cause in the first Critique,

. . . reason creates for itself the idea of a spontaneity which can begin to act of itself, without requiring to be determined to action by an antecedent cause in accordance with the law of causality.¹⁹⁰

This pattern of action represents a type of cause that acts "from within" in a much stronger sense than the internally determinist sense of that phrase. In agent causality the act springs directly from the will of the agent, and is not simply transmitted through the "within" of the agent, as in "soft" determinism. Without the will's choice, the act would not have occurred; and nothing else is sufficient to have made it occur, whether acting through the will's choice (in the internally determinist sense) or independent of it. Similarly, since the choosing Willkür can take into account in its choice all the reasons and desires of the self, its decision may be called that of "the whole self," but calling it this would not be sufficient to make the decision free if the "whole self" were only a determinist mechanism. If "action" is to be sharply distinguished from "passion," pace Taylor, the ultimate source of the action must lie within the agent in this strong sense.

Some of the derivative characteristics of the model of agent causality may now be noted. First, the will under the fourth model can exercise power against resistance; it can overcome the "strongest desire" in favor of some better (or worse) but initially weaker motive or reason; to a certain extent (perhaps not in every case, and this would be

where responsibility would cease) it seems able to modify the strength of motives, if these are considered to mechanically determine the agent's actions after the will's intervention, as with Kant. This makes clear the familiar fact of moral effort and moral struggle. The will, as Findlay puts it, is able to be

as it were mediatorial, to occupy, as it were, a position neutral and unbiased among particular wants, reasons, etc., to side with them or to lend itself to them, rather than to be intrinsically directed to an object . . .¹⁹¹

Because the will chooses to allow reasons or motives to affect action, or not to allow them, it can by its exercise of causal power bridge the gap between these "rational" or mental factors and the familiar worldly apparatus of natural causes:

But the order of causes and the order of reasons are different, and influence choice and conduct differently. And it would seem that only some source of power not earmarked to either, and hence having no intrinsic direction, could be capable of mediating between them.¹⁹²

And the striving of this "source of power" against the causal potencies which would otherwise compel behavior is felt as moral strife or effort. To do the right thing while wanting to do otherwise is to "overcome oneself" in a sense not possible where results come about merely by mechanistic interactions.¹⁹³

Since the free will is open to acting "on behalf of" any number of pre-existing reasons or motives or de-

sires, it is clear that a freely acting will need not be motiveless, or "irrational" if this means unable to attend to reason. Between a will which could do nothing but attend to the dictates of reason (Wille) and a will which could not attend to them at all, of itself (the phenomenal "will"), lies the possibility of a will which can attend to reason or stubbornly ignore it (Willkür). One might say here, as Kant does, that "human choice [Willkür], on the other hand, is such as to be affected but not determined by impulses."¹⁹⁴ Paul Ricoeur quotes the classical formula as "motive inclines without compelling,"¹⁹⁵ and adds later on that real freedom "is not an absence of motives, but the freedom of considering either this or that motive within the determination of choice by motives."¹⁹⁶ As long as the choice as to which motive becomes determinant is free, the action is free to that extent. A "motive" can then be interpreted not as a causal condition "pushing" a powerless will about "from behind," but as a possible reason in view of which or toward which the will may guide its action, if it chooses.¹⁹⁷ My original description of Kant's theory of moral incentives has shown sufficiently well that in Kant's system every action does in fact have a motive, either that of respect for law or that of a phenomenal inclination; but it is Willkür that decides which motive governs the action.¹⁹⁸ The act is then morally judged according to which motive Willkür has allowed to predominate. Kant here

takes a line not far from that of Campbell, who held that freedom is only exercised in cases of moral conflict, where duty and desire are opposed. It is not necessary to hold that this is the only possible use of freedom, for an agency able to decide among its motives freely might also be able to make purely arbitrary selections or choices without any motive at all; but at least the free Willkür is able to select either of two competing motives, and this is sufficient for Kant's theory of moral psychology.

Similarly, to admit the model of agent causality in human action does not mean excluding the role of character or habituation, any more than admitting indeterminism in physics leads to absolute chaos. A proponent of agent causality can agree that many or most actions flow directly from character in deterministic ways, as long as it is stipulated that the character itself has been formed by the free will, that it is not simply "given" to the agent by outside or even inside "forces," but chosen freely.¹⁹⁹ Perhaps constant exercise of moral effort is necessary in the beginning, while a habit is being formed, but after a certain amount of this activity the pattern builds up a certain "inertia" of its own, which can then take over the execution of virtuous or vicious action without constant supervision by free choice. Agent causality does not imply a Sartrean agent without "essence" or fixed qualities of any sort, but only a core of power to choose which serves

as the ground of responsibility and obligation. While the notion of character or habit is not often stressed in Kant, it does appear in the Religion as Gesinnung or disposition,²⁰⁰ and it is described in a way consistent with the causal model I have suggested for Willkür:

To have a good or an evil disposition as an in-born natural constitution does not here mean that it has not been acquired by the man who harbors it, that he is not author of it, but rather, that it has not been acquired in time . . . this disposition itself must have been adopted by free choice [Willkür], for otherwise it could not be imputed.²⁰¹

Kant appears to interpret this "disposition" as the most general maxim adopted timelessly by Willkür and applied in the varying circumstances of phenomenal existence.²⁰²

Since it must raise up phenomenal motives of respect for noumenal law in order to have an effect among phenomena, "virtue in this sense is won little by little and, for some men, requires long practice."²⁰³ What is a constant disposition in noumena will thus appear as a gradual progress in phenomena: "a man is under the necessity of, and is therefore capable of, a revolution in his cast of mind, but only of a gradual reform in his sensuous nature (which places obstacles in the way of the former)."²⁰⁴ While we cannot further examine Kant's theory of dispositions here, it is clear that an avowal of agent causality as the root of moral responsibility is compatible with the ascription of many or most actions to character (acting deterministically), if character is itself conceived of as a product of

will.

Another noteworthy characteristic of the model of agent causality is that it seems to require asserting that the agent is in some broad sense a "substance," that he has a permanent underlying existence not reducible to a mere sequence of events. If this were not so, then there would be no "self" or "will" separable from the series of its states to which the act could be ascribed; and it is clear that the prior states alone cannot determine the act.

Boyle et al observe:

If the self is regarded as a collection of discrete experiences bundled together only by various sorts of regularities, then any event which is not integrated into these regularities in such a way that it could be called "caused" must be regarded as a mere chance event.²⁰⁵

To sustain responsibility, the acting person at one time must remain the same individual as the acting person at another time; and if the exercise of the will is to be considered an act "of the self," the power of the will must belong to the self, must be a part of the same self which includes "character" or habit. Both character and this free power, the will, must be considered, in a loose sense, "part of" some single entity. Kant's theory can, of course, accept this requirement without revision; the noumenal self, which is timeless and serves as the ground of its appearances, fulfills the role of the permanent substratum from which decisions are made. Thus no further

discussion of this point can be included here. We may perhaps note only that the very notion of responsibility for past acts alone seems to require a continuant of some sort which can "bear" the responsibility into a later time, and thus the model of agent causation may here demand no more than the freedom which it has been constructed to explain.²⁰⁶

One further point must be mentioned only briefly, although it deserves much fuller consideration. The use of such phrases as "power," "efficacy," "making something happen" in describing the causation of the will indicates that some notion of causation going beyond the traditional Humean analysis of constant conjunction is required if agent causality is to make sense.²⁰⁷ It must be comprehensible to speak of an entity (the willing self) as having the power to determine happenings of some sort (its actions), if we are to speak of its being able to determine them in more than one way. It has, of course, been argued that any viable notion of causation in general must take this aspect into account, whether determinist or non-determinist; both Taylor and Reid argued against the Humean analysis, and the argument is made in detail by R. Harré and E. H. Madden in a recent book, Causal Powers.²⁰⁸ In the theory of Harré and Madden, a notion of causal efficacy is developed which is similar to the one generally asserted as part of a theory of agent causality: the key elements

are "powerful particulars" which have a given nature and whose activities, the exercise of powers, depend upon that nature.²⁰⁹ Ascription of this productive power, as we have seen, provides a directionality to causation, and this directionality is somewhat obscure on an analysis merely in terms of necessary and sufficient conditions.²¹⁰ These powers are ultimate in the end, in the sense that although they can be analyzed as far as the natures of the things possessing them permit, ultimately explanations must be in terms of entities whose natures and powers coincide, although Harré and Madden do not think that any such have yet been discovered.²¹¹ Such ultimate powers will be "inexplicable" in the sense in which we have found freedom to be inexplicable under the fourth model.²¹² In other cases than the ultimate, explanation is advanced by the usual scientific technique of seeking structures and patterns of action within the nature of the thing;²¹³ even the ultimate powers may be described in their pattern of action, if not defined or reduced. This conceptual structure of natures and powers provides a "natural necessity" not equivalent to logical necessity,²¹⁴ which matches our notion of causal necessity, that which the causal context makes possible and impossible.

Harré and Madden deny strongly that their notion of causal power depends on experience of volition or action,²¹⁵ and are thus in conflict with many of the agency

theorists discussed earlier. But they do not consider the notion mysterious or obscure.²¹⁶ Further, they seem sympathetic to the notion of a non-determinist powerful cause, as long as this is not taken as the necessary paradigm for all causality,²¹⁷ and they explicitly deny that determinism is a necessary consequence of the theory:

Nothing in the conceptual system we advocate rules out the possibility of the appearance of the novel or the spontaneous. Indeed, natural science, while maintaining the powers-natures conceptual system in general, is ready without inconsistency to contemplate spontaneity in quantum mechanics, in cosmology, and in the sphere of human action.²¹⁸

Such tolerance in science is possible, according to this theory, because the general notion of causal power does not restrict the exercise of that power to the pattern represented by any one of our four models. While Harré and Madden do not distinguish between "spontaneity" of an indeterminist sort (quantum mechanics) and of an agent-causality sort (human action), there is evidently room for that distinction within the sphere of causality in their system. They do not, then, present a theory of agent causality; they do present a conception of causality in general within which all of our four models could be accommodated. In such a conception the notion of "power" which seems necessary for the model of agent causality would be perfectly at home, and the variants of causation we have sketched could be seen properly as types of causation rather than violations of it.²¹⁹

Agent causality in general, then, is a distinct fourth model of causal activity, related to questions of moral effort, character, substance, and power as indicated briefly above. This general model, derived from the examples discussed, can now be applied to the problem of the intelligibility of freedom in Kant.

Agent Causality and Freedom

It is evident that the model of agent causality satisfies the two conditions necessary for an adequate pattern for action in Kant's sense.²²⁰ We saw that indeterminism fulfilled the first qualification, openness to two or more alternatives; the notion introduced there of a cause which had the power to produce more than one possible effect can be taken over into agent causality without change, as far as it goes. In the fourth model, the free will, given one initial state, can be followed (in a causal but not necessarily temporal sense) by two or more next states. This ability to select among alternatives, all causally possible, was stressed in particular by Aquinas.

We saw also that internal determinism, while it failed to allow more than one alternative, did emphasize the fact that the result depended upon the agent and not on other causal factors or on the laws of chance. Since the result in internal determinism is unique, however, it would be possible under that model to say that the state or na-

ture of the agent in fact determined the outcome. But this cannot be said in agent causality, for such a formulation prohibits openness to alternatives in other than a random way; the act must "depend" on the agent, not as necessarily flowing from his prior state, but as selected from among alternatives freely by the substantial agent, else determinism will reappear in a search for what element in the "agent's own prior state" was effective in determining the outcome. The same initial state of the agent can eventuate in more than one possible outcome, so one cannot say that the state of the agent explains which outcome occurs, except insofar as that state is precisely one in which either of two possibilities may be selected by the willing self. Agent causality, then, must emphasize an even more stringent "inwardness" of the source of action than internal determinism, which may provide an analogy but no more than that. In the fourth model the effect is determined, not by the character or prior state of the agent, but by the agent's freely exerting his power to determine in one of many ways. It is this second qualification of agent causality which is stressed, for instance, by Taylor, who is reluctant to consider whether many alternatives are in fact open. To fulfill this criterion it seems that agent causality must employ some notion of causal power such as those developed variously by Taylor and by Harré and Madden.

If these examples and elucidations have now distin-

guished agent causality from the various other causal models and interpretations with which it has often been confused, we may at last deal with the determinist's charge of unintelligibility, stated at the end of the second chapter.²²¹ Its ramifications for the notion of moral responsibility championed by Kant are stated by Hospers, the charge that self-determination is nonsensical: "Instead of saying that it is false that we are responsible for our own characters, I should prefer to say that the utterance is meaningless;"²²² responsibility must be accommodated to character-determinism or become nonsense. But our analysis has reduced the accusation to the one noted succinctly by Wartofsky in another connection: "The charge is that action models of causal relation fail, then, because they are either opaque or redundant."²²³ The question now is whether the determinist can hold the model of agent causality to be incomprehensible.

Certainly, given that the first three models are intelligible, the fourth seems no less so; it has been generated by the same set of alternative possibilities, the two criteria. Acceptance of the indeterminist model argues that open alternatives are comprehensible; acceptance of the internal determinist model seems to involve comprehension of something "self-determining" in at least some sense; cannot the two be combined? The notion of power developed by Taylor and others may be added to these to make

clear why the freely chosen action is not obscurely "causeless." A free will is a cause adequate to several possibilities, a condition sufficient for more than one action (to this extent like an Epicurean atom); it may go out to any of them and has enough "causal power" to accomplish and thus account for any of them.

Further, though, it may be argued that agent causation is more than a permissible pattern: it is a familiar one. Although I have not made familiarity or instantiation in the everyday world a condition for acting as a "model" in our sense, it is arguable that the abstract pattern of agent causality is at least as commonplace and lucid as that of determinist causality. For a model can always be made to seem opaque or ridiculous by looking obstinately in the wrong place for an explication of it, even if it is in fact familiar,²²⁴ and many of our examples of agent causality have charged determinists with such a move. Determinism is rendered plausible by pointing to billiard balls, indeterminism by mentioning dice or coins, internal determinism by indicating plants or animals; cannot agent causality legitimately point to human beings as familiar instances (prima facie) of its schema? For we quite commonly (if uncritically) assume that people act freely and by choice among alternatives; only the most recalcitrant of determinists would deny this. It can, of course, be asserted that such reasoning is circular, because whether

human beings are free is precisely the point at issue; one cannot use the debated objects themselves as one's examples! But such an assertion has surreptitiously changed the ground of debate. Citation of persons as commonplace and apparent instances of agent causality prima facie, as in Campbell or Taylor, does not by itself prove that they are in fact free; what it does prove is that, if the existence of apparent commonplace instances of a model is sufficient to establish its meaning as intelligible, then agent causality has as much a claim to clarity of meaning (not to existence in fact) as does determinism. For even billiard balls, under modern-day physics, no longer act quite like the idealized "billiard-balls" of determinism; but this is not taken to reduce the meaning of determinism to nonsense. Neither, then, can attempts to prove persons unfree damage their validity as prima facie samples allowing us to comprehend an abstract pattern.

Indeed, if any causal model can claim to be basic or elementary, agent causality can make as good a claim; we have seen that many of its proponents consider it simple and unanalyzable, but directly known, and the primary or original notion of causation in general. Wartofsky takes note of this contention,²²⁵ and we have already seen it instantiated more than once. As Compton remarks, "one's ability to move his hand at will is much more directly and certainly known than are even the well-tested laws of

Newton"²²⁶--and even if this movement is later reduced to something else (such as Newton's laws), this does not prove that we never understood what we were saying at all, that it was nonsense, but only that what we thought was a clear instance of a pattern was not. The pattern remains. Many have held the opinion that causality in general (the notion common to all four models) comes to be known at first through the experience of action,²²⁷ and if this is so then agent causality is prior to determinist causality (or any other kind) in being understood or comprehended.

To maintain that any notion is basic or simple, and thus indefinable or incapable of analysis, is always dangerous, because open to abuse; yet it is not easy to see how it can be avoided without circularity or infinite regress. If anything is to be understood by reduction or analysis, something must be understood without further reduction or analysis, in order to serve as explanans for the rest of reality. Melden, for example, pours scorn on the claim of indefinability, which "purchases immunity from further attack only at the expense of unintelligibility."²²⁸ But the "intelligibility" Melden seems to require is a verbal explication in terms of something wholly unrelated to itself, some independent characterization; and this will be merely ignotum per ignotius unless that independent characterization is intelligible, which will require further definition . . . until some stopping point is

reached. Melden refers to the libertarians' claim as "a typical appeal to indefinables that makes a mystery of the most commonplace matter."²²⁹ But this is precisely what the libertarians' appeal does not do: it professes to make free action clear and familiar in this way, not mysterious and obscure. It is only "mysterious and obscure" on the assumption that anything not explicable in determinist terms must be "mysterious" (in effect, the determinist dilemma).

For the proponent of agent causality generally does not present the "indefinable" notion of agency as a mystery to be taken on faith. Instead, he presents it as so evident and familiar as to need no further interpretation. As Boyle et al observe, "there is a sense in which free choices are intelligible in themselves."²³⁰ Or, more specifically, the defender of free choice

admits, or better, insists, that free choice is unintelligible, if "intelligible" is taken to mean "picturable" or "reducible to a broader and more basic category." . . . [he may hold that] the explanatory process cannot go on ad infinitum. It must stop with something or many things which are intelligible yet inexplicable. Such boundaries of explanation can be called "intelligible in themselves."²³¹

Agent causality may be held to be not explicable in other terms than its own, but nonetheless understandable by itself, and perhaps (as Macmurray and Campbell hold) directly perceivable, and thus as clear or clearer than the notion of causal determinism or indeterminism. There need be no

reason to think the pattern of one-to-many agent causation any less comprehensible than that of standard determinism with its one-to-one relation.

Kant does not go quite this far; he does not hold freedom of Willkür to be directly perceivable. While he does speak of "a rational being conscious of his causality through reason and thus conscious of a will different from desires,"²³² we have seen that in fact he holds that the consciousness of moral obligation (and therefore of responsibility) is the primary given, the "fact of reason," and that freedom is known only through this. More often Kant stresses the incomprehensibility of that freedom in some sense; but it is important to see in what sense. "Since no example in accordance with any analogy can support it, it can never be comprehended or even imagined."²³³ Kant is saying that freedom cannot be understood by analogy, by comparison with any merely natural or phenomenal event. This point follows, as we have seen in various examples, from the fact that freedom is what it is; it could not be freedom and yet be "explainable" in that sense, reducible to the determinism of phenomena. Yet this does not render freedom unintelligible, or unexplainable in other senses; it is only this sense that Kant means to exclude.

Paton cautions:

More simply, to explain anything is to state its cause. Obviously we cannot explain free action by showing that it is caused by something other than

itself; and indeed the Idea of freedom is ex hypothesi not the concept of an object of possible experience, and so not the concept of any object in nature falling under causal law.²³⁴

Freedom for Kant is not directly perceived, nor analyzable in terms of natural causation; but this does not prevent it from being intelligible to a certain extent in itself, once its existence has been indicated by the experience of the moral law. This need for a limited comprehensibility of some sort can be traced back to the first Critique: "Morality does not, indeed, require that freedom should be understood, but only that it should not contradict itself, and so should at least allow of being thought . . ."²³⁵ Macmurray describes this complexity paradoxically: "Our belief in freedom is a necessary but incomprehensible belief, and we can comprehend its incomprehensibility."²³⁶ In the later Religion, however, holding that free acts in history can be "understood" as free but not as phenomenally caused, Kant states the point somewhat more clearly:

Hence we understand perfectly well what freedom is, practically (when it is a question of duty), whereas we cannot without contradiction even think of wishing to understand theoretically the causality of freedom (or its nature).²³⁷

This limited understanding of freedom--sufficient to show the abstract possibility, but not sufficient to give theoretical knowledge--appears throughout the moral writings, in forms that seem puzzling if the distinction is not made. In the second Critique, for example, he warns:

But the possibility of freedom of an efficient cause cannot be comprehended, especially in the world of sense; we are indeed fortunate if we can be sufficiently assured that no proof of its impossibility can be given and that we are compelled (and thus authorized) to assume it by the moral law, which postulates it.²³⁸

Freedom could not even be postulated, were it not thinkable; yet even as thinkable it remains in a certain way incomprehensible, because it cannot be explicated in terms of the world of sense. But for the determinist critic to demand the latter sort of explication would be begging the question; only the former sort, thinkability in itself, can legitimately be demanded, and this is what, I have argued, Kant must provide. But the partitioning of causal models into four sorts seems to throw into clear relief what is distinctive about the free will's causality, and the various aspects noted in theories of agent causality can lend to Kant's assertion of freedom for Willkür exactly the descriptive (not reductive) clarity required.

Freedom and Explanation

This duality of senses in which freedom can or cannot be said to be "explained" allows us to account for those passages in Kant where explanations are both affirmed and denied, for they are explanations in different senses. For instance, in the First Book of the Religion, Kant notes:

That the ultimate subjective ground of the adoption of moral maxims is inscrutable is indeed al-

ready evident from this, that since this adoption is free, its ground (why, for example, I have chosen an evil and not a good maxim) must not be sought in any natural impulse, but always again in a maxim. Now since this maxim also must have its ground, and since apart from maxims no determining ground of free choice [Willkür] can or ought to be adduced, we are referred back endlessly in the series of subjective determining grounds, without ever being able to reach the ultimate ground.²³⁹

If the adoption of a good or evil maxim had to be understood in terms of natural causes, or even in terms of other maxims, there would be no end, and the Third Antinomy would reappear, leaving as well no ground for responsibility. But in a theory of agent causality Willkür determines itself, exerting its own causal power over alternatives, and thus no further "ground" of choice need be adduced; to this extent the choice remains "inscrutable." But if the fourth model holds true, then Willkür already itself provides sufficient explanation for the choice, because it could have acted in either way, and "put forth its strength" in one direction rather than another. To try to overcome this "inscrutability" in terms of further maxims or phenomenal causes would merely ask for a type of intelligibility which is not here available because of the nature of agent causation.

Again, in speaking of the conversion of a bad man to a good, Kant notes that this involves a change in the adoption of all maxims at once, and thus cannot be explained in terms of further maxims, or of prior causes in

the phenomenal order.

Man cannot attain naturally to assurance concerning such a revolution, however, either by immediate consciousness or through the evidence furnished by the life which he has hitherto led; for the depths of the heart (the subjective first ground of his maxims) are inscrutable to him. Yet he must be able to hope through his own efforts to reach the road which leads thither, . . . because he ought to become a good man and is to be adjudged morally good only by virtue of that which can be imputed to him as performed by himself.²⁴⁰

This "subjective first ground" of all maxims is inscrutable in the sense that its action cannot be predicted with certainty either from external evidence or from "direct evidence." But the inscrutability does not arise from its being a matter of chance, but from its remaining up to him, to his own decision not yet made, which maxims will be adopted; if it depended on any other factors, it would not be moral at all. Thus he may "hope" to change his own life, because it is up to him to do so "through his own efforts," but because this is a free decision it is a matter outside the sphere of prediction altogether. One's own decision must in a way come as a surprise to oneself, in the sense that it could not have been predicted or had determining conditions or causes given; but on the other hand it is not surprising to oneself because the decision did not simply "happen to" that self, but was in fact accomplished and deliberately performed by the self. For the same reason, then, the decision lies outside the sphere of the sort of "scrutability" or explanation employed in mechanistic ex-

plication.

Freedom, then, is in one sense "incomprehensible" but in another eminently intelligible.²⁴¹ The point may be made in a somewhat different way by ascertaining in what sense free willing may be said to be "indeterminate" or "uncaused," because these issues are often invoked by determinists to explain their charge of unintelligibility; and, as Paton pointed out, it is often held that "to explain anything is to state its cause."²⁴²

The will, as a power of an entity, need not be said to be indeterminate; it is a quite definite power with definite characteristics. Its action, the exercise of its power, is indeterminate in one sense: nothing other than the will itself "determines" it, and since the will is not determined to act in any single way, the act cannot be predicted in advance. Nonetheless, once the act has been performed, it is perfectly determinate as it stands, a "finished part" of the universe; it remains that it could have been otherwise, but this is simply to deny necessary existence to the act, and this does not seem a problem.²⁴³

Further, as we have seen in the examples of agent causality, the will is not open to any logically possible act; it may well have only certain acts within its power at a given time, a "range" of possible choice like the range of alternatives available in indeterminism. Certainly Kant does not argue that all things are possible to a free

agent, only that more things than one are. Silber points out:

Kant does not deny that there are influences on the will and limitations on the expression of freedom. Moral instruction, temptation, disease, health, intelligence, and stupidity influence the will by increasing or decreasing or modifying its power of self-expression. Kant speaks, consequently, of the direct proportion between accountability and freedom . . . Kant does deny, however, that such factors can determine the will without destroying it. If a person is free and responsible, then his freedom is unqualified and absolute, although the possibilities for its expression may vary considerably.²⁴⁴

Alternatives are presented to the will in a highly structured context, and the will is responsible only for its choices within that context. Compare William James's statement in The Principles of Psychology: "The soul presents nothing herself; creates nothing; is at the mercy of the material forces for all possibilities; but amongst these possibilities she selects; . . ." ²⁴⁵ A limited indeterminacy of possibility is presented to the will, and the will exerts its power to choose among the alternatives. There may thus be many necessary conditions for a particular choice besides that of the will itself, but they will not collectively be sufficient; even the will provides the final necessary and sufficient condition only by choosing, not by its "prior state," which must remain open to alternatives. As long as one link in the web of causation is of the fourth type, the outcome will be called freely chosen, insofar as a divergence at that link would have made the

outcome different.

Similarly, willing freely may be called "uncaused" in some sense, but only in a strictly modified sense. Kant speaks of ultimate decisions for which "we can no more assign a further cause . . . although this is our own action, than we can assign a cause for any fundamental attribute belonging to our nature."²⁴⁶ But under the model of agent causality, the action (or choice of maxim) is not uncaused: it is caused by the will, by Willkür, which is why it "is our own action." The relation between Willkür and act is wholly determined; it is the relation of Willkür to all other reality that is unique, and which makes the will an agent cause, a spontaneous source of selection. The will, similarly, is an ultimate faculty of human nature for Kant, and its existence is not "uncaused;" to make it such would make every rational being a First Cause wholly uncaused, in the strong theological sense.²⁴⁷ But the same causes which brought the human person into being brought Willkür with it. The point is that the existence of the will, which is determinate and caused, and the action in the world, which is determinate and caused, are mediated by the exercise of causal power by the will, which (given its existence, and given a determinate spectrum of alternatives, as noted earlier) is not determined or caused by anything else. Kant holds that rational beings by nature have "a will, i.e., faculty of determining their causality through the concep-

tion of a rule,"²⁴⁸ and it is this power of "determining their causality" which is open to alternative exercises. While the quoted phrase may be clumsy, it brings out the fact that the lack of determinacy or "uncausedness" does not exist between two "states of the will," nor between the activity of the will and the action performed, but in the activity of the existing will, its going out of itself to realize one of several open possibilities.²⁴⁹

We may now also consider the relationship of agent causality to the general philosophical principles cited in the fourth chapter as reasons supporting determinism.²⁵⁰ In the formulation "nothing happens without a cause," agent causality seems to meet the requirement, for whatever action finally occurs has the freely acting will as its cause; the formula does not specify that the cause must be one which acts deterministically, and no further cause is required, because the will's causality is adequate to the act performed (as well as to other acts not performed).²⁵¹ The will has its cause, the cause that made it exist, and the act has its cause, the will; the point is that the latter link is of a unique kind of causality, one which did not have to produce the result it did. In Leibniz's formula, similarly, "no fact can be real or existing and no statement true unless it has a sufficient reason why it should be thus and not otherwise."²⁵² While the logical coloring here makes it more difficult to see what the onto-

logical requirement may be, it would seem that the fact that action A took place (rather than B), or the existence of action A rather than of action B (in whatever sense we can say that an action "exists"), does have a sufficient reason: the will which produced it, a power which by definition is able to accomplish A or B. Indeed, this qualification is necessary if the will is to be responsible at all, as the second of our two criteria indicates: the will must be the cause of the act. The statement affirming that action A took place is then true for the same reason.

This answer may seem to have a somewhat evasive flavor. Can the determinist reply by asking what the cause or sufficient reason was for the will's choice, which determined the action? Since the will was not bound to choose one way or the other, he might say, surely the real question is what the sufficient reason was for the choice it did make. And for this no such reason or cause can be given, without compromising freedom.

Of course, the answer can be repeated, perhaps with greater emphasis: the choice depends on the will itself, which produced this choice rather than another "choice." But here we seem to be on the brink of an infinite regress: the act depends on the choice depending on the will, and what made the will choose the way it did? The strategy into which the determinist's question seeks to force us also appears to raise a problem which such theorists as

Taylor, Melden, and Thalberg have much dwelt upon: the production of an endless series of shadowy "volitions," "acts of will," and so on, between the agent (or his "will") and the act. Is it possible that this temptation to "analyze" the relationship of activity further and further into a series of "acts" is what is at fault here? Unless an infinite regress of "volitions" is to occur (I will to will to will to . . .), there must be a stage at which such empty "analysis" must cease, most likely the first: the agent, exercising his power of "willing," simply acts, and no more can be said.²⁵³ But if this is so, then the proponent of agent causality can hold that the will itself (as a power of the agent) provides the sufficient reason for its action, and the cause of its action, and yet that it could have provided such cause or explanation for more than one possible action. That this action was chosen over others is accounted for by the choosing will, and there is no other intermediate "act of choice" through which the will exercises this power.

Undoubtedly this response leaves the principle of sufficient reason unsatisfied in some sense: no further reason can be cited why the will acted as it did, except that this was the action the will took.²⁵⁴ But this now seems to become only a restatement of the initial point of the first criterion of freedom: one initial state can produce more than one next state. That this is conceivable in

some way (although not in a determinist way) seems to be indicated by the examples and arguments cited; the burden of proof would then seem to lie with the determinist who claims that such one-to-many following is incomprehensible or irrational. If one sort of "explanation" for the act is possible, a reason must be given why the other sort must be present as well. It may also be noted that the second model, indeterminism, also violates the principle of sufficient reason in this sense: one state can be followed by more than one other state, and no explanation beyond randomness or probability (which does not "explain" individual cases in the sense in which the principle of sufficient reason wishes it) can be given. If indeterminism may be accepted for the sake of quantum mechanics, then agent causation may be accepted for the sake of morality, although modifications may be necessary in the principle of sufficient reason.

Boyle et al point out that many philosophers have rejected the principle of sufficient reason on theological and other grounds, and also that the defender of free choice

. . . can admit a restricted version of the principle of sufficient reason as a rule of thumb: There is a sufficient reason for everything except for those things in terms of which other things are finally explained. . . . If there are boundaries of explanation--a supposition which must be admitted by anyone who uses the principle of sufficient reason--then at these boundaries either everything

would be explained in terms of some one thing or there would remain an irreducible multiplicity of explanatory principles.²⁵⁵

Even under the principle of sufficient reason, some sort of principle must be admitted as self-explaining, as providing its own sufficient reason. We may recall the disjunction noted by Reid: if every being must have a cause (or reason), that cause must be either in the being itself or in some other being, and the first is as viable an option as the second.²⁵⁶ We have seen that the free will need not provide its own reason for existing in general, but only for making one choice among alternatives rather than another. A modified rule could then be accepted according to which the free will provided sufficient reason for choosing either A or B or C or . . . N. Beyond this the libertarian, it is true, cannot go; but it is not clear that it is necessary for him to go any farther. To demand more, as Boyle et al suggest, may be simply begging the question.²⁵⁷

This model of agent causation, then, seems to account for the pattern of action which a noumenal cause of moral action must follow if it is to be free in the sense required for Kantian morality. Its appropriateness may perhaps be exhibited by using it to analyze a passage quoted above²⁵⁸ from the Religion, where it was shown to be inconsistent with internal determinism.

But it is absolutely incomprehensible to our reason how beings can be created to a free use of their powers; for according to the principle of causality we can assign to a being, regarded as having been brought forth, no inner ground for his actions other than that which the producing cause has placed there, by which, then, (and so by an external cause) his every act would be determined, and such a being would therefore not be free.²⁵⁹

This "incomprehensibility" can now be seen to be of a piece with the unavoidable "inscrutability" involved in the ultimate springs of action, but not to eliminate the possibility of understanding of a sort. Using a notion of causality limited to the phenomenal realm, where all causes are deterministic, one cannot conceive any source of action within the person other than the fixed character or nature placed there in its creation or subsequent development, and thus from outside; and according to Kant only causality exemplified among phenomena can be "known" or explained in the strong sense. But this does not exclude the possibility of a limited understanding or comprehension of the possibility of other types of causation which might exist among noumena. If it is allowed that the creator could place within the being in question a power of acting under the model of agent causality, then it will follow that the created being will have received its power from outside, but with the exercise of that power not predetermined; the created being can exert its power to cause actions in various ways, and which ways are realized will depend fully only on the will of the created being itself in addition to

that of the creating being. The power over opposites given originally to the creature is a necessary condition for a given act, but not a sufficient one; the creature's own willing or use of that power is needed to complete the conditions for the action, and the creature will thus remain responsible for its occurrence. Since the how of this freedom remains incomprehensible in phenomenal terms, our understanding of it will be in a sense empty, limited to the realization that, as one of four possible schemes of action, it is at least not impossible; and thus how such a freedom can be created in a being will remain still more incomprehensible. But this will be only the incomprehensibility ingredient to any ultimate power or final ground of explanation. If we understand the noumenal self as operating under the model of agent causality, Kant's passage makes sense: it expresses the concept of a created yet free existent, a concept which remains to a certain extent obscure, but apparently thinkable.

The fourth model has proven to be adequate to solve the problem we have discovered in Kant. It now remains only to make some final remarks about the importance of this finding for Kant's system and in general.

VIII. CONCLUSION

In the second chapter we proposed a possible objection to Kant's solution of the problem of freedom. Even given his removal of the truly free cause to the noumenal realm, outside the scope of universal phenomenal determinism, and even assuming that the problems of interaction between the two could be solved, the determinist might charge that nothing has been said at all about the way in which the mysterious noumenal cause can operate. If it is not itself under a separate determinism, can any sense be made of its actions or influences? Would its undetectable behavior not then be perfectly random, removing responsibility altogether? Is removing the Willkür to noumena simply moving nonsensical language to a realm where it is immune from criticism?

Kant does not answer such a charge; but while he holds that noumenal causation cannot be completely explained, he holds also that free causality must at least be shown to be not impossible, and thus the charge must be admitted in principle. My task has been to show that, while Kant does not answer such an accusation explicitly, his writings contain the seeds of a possible reply, and that it can be unearthed through an examination of possible models of causation. Kant clearly rejects certain sorts of ex-

plications of free causation; by assembling and organizing these, as well as the passages where he attempts to describe free causation in some way, it is possible to see what sort of solution he would have to accept.

The two criteria required for Kantian moral freedom provided us with a way of partitioning possible causal models into four types. If a causal relation is to be "free," it must allow several possible alternative outcomes, and the selection of an outcome must depend on the choosing agent; determinism was found to fail both of these criteria, and indeterminism (or tychism) and internal determinism, each appearing as a plausible model for freedom by satisfying one criterion, were excluded by the other. The fourth model, that of agent causality, satisfied both criteria. The explication involved in demonstrating this and in drawing out its consequences in such matters as the relation of motives to action, moral effort, substantiality and "causal power" made clear, to some extent, what free causality must be and thus made it understandable. Further, this description made it possible to see in what way freedom is and in what way freedom is not "intelligible" or open to explanation. It escapes the determinist dilemma by showing how that dilemma demands a type of explication possible only for determinism, one which is not necessarily required for every causal model. Thus it fulfills the conditions for an answer to the determinist's question, and a

solution to Kant's problem.

The answer to the charge of unintelligibility, Kant may reply, is twofold. On the one hand freedom is comprehensible as the exercise of a causal potency which is adequate to more than one possible action; it is able to "go out" consciously and deliberately in any one of several directions, and in particular to adopt a maxim under either respect for law or natural inclinations, thus obeying or disobeying the categorical imperative. This pattern of activity, expounded in detail by the various agent causalists cited, can be taken as the mode of operation of the noumenal Willkür, accounting for moral obligation and responsibility. On the other hand, if to establish "comprehensibility" we demand an explanation in terms of other determining causes--the kind of explanation to which, as phenomenal beings, we are most accustomed--then freedom must remain forever incomprehensible. For to give this sort of explanation would remove the very thing being "explained," and would attempt to force noumenal reality into a phenomenal mold. Thus, Kant may conclude, we may accept freedom as a practical reality, and understand it quite fully enough for practical purposes; but we may not "know" it in the sense we apply to phenomenal "knowledge," nor claim comprehension of its nature or essence as we may claim to comprehend the workings of a machine in the phenomenal world.

Agent causality, then, expressed as one of four possible causal models, provides Kant with the required answer to the accusation of unintelligibility. But this sort of charge has been leveled against many libertarians other than Kant; if the argument of this paper is correct, then many others could take advantage of it to escape the determinist dilemma and to make clear the real ground of difference between determinists and non-determinists. We may conclude, then, that the typology of causal models developed here may be a useful tool in general for classifying theories of causation. From the exposition of the model of agent causality may be understood what is and is not involved in freedom of the sort most libertarians are concerned to defend; and the assumptions of the determinist dilemma may be uncovered so that its fallacy, its refusal to consider other possible alternatives, can be plainly seen. To apply this system of causal models in general, of course, must lie beyond the scope of this paper; but its solution of the problem raised in the context of Kant's critical philosophy may be taken as an indication of its fruitfulness in discussing other theories as well.

Further questions could also be raised concerning the relations of the four models to one another. We have seen that the third model, internal determinism, is distinguished from the first largely by the degree to which the individual existent can be considered "insulated" from the

causal influence of the outside world, and that at a limiting case (where the "individual" considered is the entire universe) they coincide. Some might also argue for a closer examination of the relationship between the second and fourth models, those in which openness to many alternatives plays a central role; we have already seen the relation of this factor to the notion of "causal power" or "adequacy," which is employed extensively by theorists not intending to produce a justification of libertarianism, such as Harré and Madden.¹ These further considerations, too, must remain beyond the scope of this paper. We may now only consider briefly what ramifications our researches may have for Kant's system.

One such consideration has been raised in the last chapter: an understanding of causality simply in terms of regularity or repeated conjunction seems insufficient for the model of agent causality. (It is arguable, of course, that it is insufficient for any causal model.) It is this Humean notion of causation that Kant adopted and modified for use as a category of the understanding among phenomena. If Taylor and Harré and Madden are correct, then no causal relation allowable only between event and event can be adequate for free agency. It would seem, then, that in this matter Kant's system has been led to go beyond itself in at least one respect. The phenomenal notion of causation, of course, cannot be applied to the relation of phenomena and

noumena; we have seen that some general category of causality, needing intuitive fulfillment to provide full "knowledge," must be postulated to understand the relation of the sensible and intelligible worlds. But then the additional understanding of causality provided by calling it a relation of power or efficacy, or determination of one thing by another, may simply serve to "fill out" the generalized category of cause to protect it, in turn, from accusations of emptiness or unintelligibility. Without intellectual intuition, the noumenal category of cause will remain closed to "knowledge" in the strong Kantian sense, but some meaning at least can be given it in the terms established by Campbell, Taylor, Harré and Madden, and others.

This may lead us to ask a further question: Can agent causality be interpreted so as to fit the phenomenal category of cause, and thus be applied in phenomena? The first Critique certainly demands that a law exist connecting cause to effect,² but the model of agent causality is not mere chaos, as we have seen, and thus could provide a "law" of some sort: can the rule of agent's choice-to-event be acceptable as was the rule of event-to-event under the terms of the antinomy?

Such an extrapolation would be tempting, but it seems impossible within the constraints Kant has placed on himself; phenomena must be not only causally linked, but

deterministically bound. While Kant notes that "it is not, therefore, the existence of things (substances) that we can know to be necessary, but only the existence of their state,"³ thus recognizing that the substance need not act necessarily as we have seen, he continues: "this necessity of the existence of their state we can know only from other states, which are given in perception, in accordance with empirical laws of causality."⁴ For the phenomenal category of causation, the cause of an event must be another event, and the second must be necessarily knowable from the first. Thus agent causality cannot satisfy the Kantian relation of cause to effect within phenomena, although it can satisfy the less restricted relation of noumenal cause to phenomenal effect. Given the Kantian insistence on the determinism of phenomena, we must remain with the two-level structure he has bequeathed to us. As noted in the second chapter, interaction of phenomena and noumena remains a problem for Kant; but it is impossible here to consider what might be the result if the universal determinism of phenomena were to be breached, or if the division of noumena and phenomena, so central to the critical philosophy, were to be bridged.

Despite its complexities and its problems, Kant's theory of freedom remains a powerful attempt to do justice to all aspects of the problem: to acknowledge the extent of determinist causation in the natural world while retain-

ing the freedom of the will that makes human life what it is. The articulation of four models of causality shows that this freedom can be discriminated clearly from its rivals and rendered, at least to some extent, intelligible and open to understanding. This partial but adequate understanding may perhaps be summarized by Kant's own verdict on his theory of freedom:

The solution which is given here to the difficulty will be said to have so much difficulty in it, however, that it is hardly susceptible of a lucid presentation. But is any other solution, which anyone has attempted or may attempt, any easier or more comprehensible? . . . But, if a science is to be advanced, all difficulties must be exposed, and those which lie hidden in its way must even be sought out, for each of them calls forth a remedy without which means cannot be found to advance the science, whether in scope or in accuracy.⁵

NOTES

Introduction

1. For example, see A. I. Melden, Free Action, Studies in Philosophical Psychology (London: Routledge & Kegan Paul, 1961; New York: Humanities Press, 1961), especially pp. 200-224; Irving Thalberg, Enigmas of Agency, Muirhead Library of Philosophy (London: George Allen & Unwin Ltd., 1972; New York: Humanities Press, Inc., 1972), Essay I, especially p. 47. See also the discussion of "double-aspect theories" on pp. 60-62 below.

Chapter One

1. CPR, A 156/B 195-96.

2. CPR, A 192/B 237. See also MFNS, pp. 468-69.

3. CPR, A 200/B 246. See also, for example, A 533/B 561, A 536/B564; CPrR, p. 94; Prolegomena, pp. 345-46.

4. This argument obviously depends on Kant's view of the construction of "experience" from sensations; this cannot be further discussed here.

5. CPR, A 446/B 474.

6. CPR, A 451/B 479.

7. Prolegomena, pp. 274-76. See also William A. Wallace, Causality and Scientific Explanation, vol. 1: Medieval and Early Classical Science; vol. 2: Classical and Contemporary Science; 2 vols. (Ann Arbor: The University of Michigan Press, 1972-74), 2:70.

8. Wallace, 2:75.

9. See MFNS, p. 472.

10. See Wallace, 2:65, 70; Norman Kemp Smith, A Commentary to Kant's 'Critique of Pure Reason', 2nd ed., rev. and enl. (New York: Humanities Press, 1962), pp. lv-lvi; A. C. Ewing, Kant's Treatment of Causality (London: Kegan Paul, Trench, Trubner & Co., Ltd., 1924), pp. 196,

200, 220.

11. CPrR, p. 97; Ewing, pp. 200, 220.

12. See the Critique of the Teleological Judgment in CJ. Cf. also Ewing, pp. 229-34. A brief treatment of Kant's approach is given below, pp. 76-84.

13. CJ, pp. 258-64. The application of two incompatible principles to the same material (see esp. p. 258) is, of course, the usual procedure in Kant where phenomena and noumena are distinguished. The problem of teleology cannot be fully considered here; see Chapter Six below for some further remarks on teleology in general.

14. See H. J. Paton, The Categorical Imperative, 6th ed. (London: Hutchinson & Co., Ltd., 1967), pp. 209-10; Ewing, pp. 139-40, 197-98, 200. Note also MFNS, p. 467; the (empirical) soul is also part of "nature," and therefore causally determined.

15. CPR, A 550/B 578.

16. CPR, A 446/B 474.

17. Ibid.

18. Cf. CPrR, p. 3.

19. CPR, A 450/B 478; A 451/B 479.

20. CPR, B xxviii.

21. FMM, p. 411.

22. CPrR, p. 29; see also p. 28.

23. CPrR, p. 31; see also p. 30.

24. See CPrR, p. 4, text and footnote; p. 30. Cf. Paton, pp. 277-78. Cf. also Paton, pp. 224-25, where it seems to be contended that this argument is not made explicitly by Kant. While it is not made in so direct a form in the Foundations, it is clearly present in the second Critique, as Paton mentions (pp. 219-20); this is the more authoritative, "synthetic" development. Cf. also CJ, pp. 327-28.

25. The argument that the moral law or standard implies the possibility of compliance or noncompliance has been made elsewhere. William James, for instance, states

it colorfully: "What interest, zest, or excitement can there be in achieving the right way, unless we are enabled to feel that the wrong way is also a possible and a natural way,--nay, more, a menacing and an imminent way? And what sense can there be in condemning ourselves for taking the wrong way, unless we need have done nothing of the sort, unless the right way was open to us as well?" (William James, "The Dilemma of Determinism," in his The Will to Believe and Other Essays in Popular Philosophy (New York: Longmans, Green & Co., 1927), p. 175)

26. This content is "positive," that is, in the sense that it proves actual rather than only possible freedom. It remains "negative" in that no real characterization of freedom is given, only a denial of domination by natural causality. This point will be taken up again in Chapter Two (pp. 65-68).

27. CPR, p. 47. See also p. 31.

28. Again, many objections can be raised here. The position set out here, and its relation to morality, are noted in Max Black, "Making Something Happen," in Sidney Hook, ed., Determinism and Freedom in the Age of Modern Science (New York: Collier Books, 1961; London: Collier-Macmillan Limited, 1961), pp. 31-45; note esp. p. 42. The same point is made in Joseph M. Boyle, Jr., Germain Grisez, and Olaf Tollefsen, Free Choice: A Self-Referential Argument (Notre Dame: University of Notre Dame Press, 1976) (hereafter cited as Boyle et al), pp. 106-7. That this is Kant's position is shown in the following paragraphs.

29. CPR, A 448/B 476.

30. Religion, pp. 16-17. See also pp. 30, 33, 35, 36, 46. See also Lectures, pp. 57, 62-63. The point is stated clearly by John R. Silber in "The Ethical Significance of Kant's Religion" (hereafter cited as "Religion"), an introductory essay in the cited edition of Religion, pp. lxxix-cxxxiv; see esp. p. lxxxvii, and p. cxviii.

31. Cf. St. Augustine, On Free Choice of the Will, trans. Anna S. Benjamin and L. H. Hackstaff, with an introduction by L. H. Hackstaff, Library of Liberal Arts (Indianapolis: Bobbs-Merrill Co., Inc., 1964), Book 3, ch. 1, sec. 2, p. 85: "There is no blame to be found where nature and necessity rule." See also sec. 144-46, p. 121.

32. Religion, p. 40. See also p. 134.

33. Virtue, p. 226.

34. "For it is one thing to admit a tenet (of experience) and quite another to make it both the defining principle (of the concept of free choice) and the universal mark . . ." (Virtue, p. 226). Note also Kant's reaffirmation of the imputability argument later in the same work, p. 321, footnote. This point will be further discussed in the treatment of Wille and Willkür, pp. 20-39 below.

35. Virtue, p. 223. See also Silber, "Religion," p. lxxxvii, text and footnote.

36. Cf. H. L. A. Hart and A. M. Honoré, "Reasons and Causes in the Law," in Paul Edwards and Richard H. Popkin, gen. eds., Readings in the History of Philosophy, 8 vols. (New York: The Free Press, 1966; London: Collier-Macmillan Limited, 1966), vol. 8: Twentieth-Century Philosophy: The Analytic Tradition, ed. Morris Weitz, pp. 358, 360.

37. CPR, A 534/B 562. See also A 556-57/B 584-85.

38. See FMM, pp. 448, 452; CPrR, pp. 96-97; Virtue, p. 431.

39. Justice, pp. 213-14. Again, this "positive-negative" distinction is only one of several which are characterizable in that way. See Chapter Two below, and the discussion of Wille and Willkür in this chapter.

40. This point will be taken up at much greater length in Chapter Six, below.

41. Virtue, p. 477. See also p. 481; S. Körner, Kant (Harmondsworth, Middlesex, England: Penguin Books Ltd., 1955), p. 155.

42. Silber's analysis is found in his essay "Religion." A briefer discussion forms part of his article "The Importance of the Highest Good in Kant's Ethics," Ethics 73 (April 1963):179-97. Lewis White Beck notes the distinction in A Commentary on Kant's Critique of Practical Reason (Chicago: University of Chicago Press, Phoenix Books, 1963), chapter 11, and employs it in discussing Kant's political theory in "Kant's Two Conceptions of the Will in Their Political Context," chapter 13 of his Studies in the Philosophy of Kant, Essay and Monograph Series of the Liberal Arts Press (Indianapolis: Bobbs-Merrill Co., Inc., 1965). See also John Ladd, Translator's Introduction to Justice, pp. xxv-xxvii; James Ellington's footnote to the cited edition of Kant, Virtue, pp. 11-12 of that edition (Pr. Ak. p. 213).

43. Justice, p. 213. The translation given is Ellington's, from his edition of Virtue.

44. This is pointed out by Silber, "Religion," pp. lxxxiii-lxxxiv, footnote, and by Beck in his Commentary, pp. 176-77, and "Two Conceptions," pp. 215-16.

45. See Ellington, in his edition of Virtue, pp. 11-12 of that edition (Pr. Ak. p. 213), note 3.

46. Silber discovers a third faculty, Gesinnung or moral disposition; this last is not directly related to the topic here and will be discussed only briefly in Chapter Seven, below. See "Religion," pp. xciv, cxiv-cxxvii.

47. FMM, p. 446. See also Justice, p. 335.

48. FMM, p. 447. See also p. 448; CPrR, p. 92; Ewing, pp. 198, 208; cf. Brand Blanshard, "The Case for Determinism," in Hook, ed., p. 29.

49. Cf. especially Religion, p. 39 (Pr. Ak. p. 44), where Wille is at issue: " . . . der bei einem verderbten Herzen doch immer noch einen guten Willen hat, Hoffnung einer Wiederkehr zu dem Guten, von dem er abgewichen ist, übrig gelassen wird (For man, therefore, who despite a corrupted heart yet possesses a good will, there remains hope of a return to the good from which he has strayed)." Cf. also Virtue, p. 401.

50. See CPrR, pp. 28-29. See also Religion, p. 30; Beck, "Two Conceptions," pp. 216-21.

51. Silber, "Religion," p. civ. See also Beck, "Two Conceptions," p. 221.

52. CPrR, p. 97.

53. CPR, A 446/B 474. See also A 532-34/B 560-62; Prolegomena, pp. 344-45, footnote; Religion, pp. 36, 45 note; Beck, "Two Conceptions," p. 216.

54. CPR, A 446/B 474. This seems to be neglected by Ewing, p. 202; but cf. his p. 208. Cf. also Silber, "Religion," pp. lxxxii, lxxxv.

55. FMM, p. 412. Cf. Lectures, pp. 28-29.

56. FMM, p. 413: "Alle Imperativen werden durch ein Sollen ausgedrückt und zeigen dadurch das Verhältniss eines objectiven Gesetzes der Vernunft zu einem Willen an,

der seiner subjectiven Beschaffenheit nach dadurch nicht nothwendig bestimmt wird." Here we must conclude that Wille is being used in the broad sense, including Wille (in the narrow sense) and Willkür, since Wille in the narrow sense is so "necessarily determined" by the law, but Willkür is not, and so the will as a whole need not necessarily follow the law which it necessarily has before it. See also *ibid.*, two paragraphs above.

57. Silber, "Religion," pp. xci-xcii.

58. *Ibid.*, p. cv.

59. *Religion*, p. 19, italics Kant's: ". . . die Freiheit der Willkür ist von der ganz eigenthümlichen Beschaffenheit, dass sie durch keine Triebfeder zu einer Handlung bestimmt werden kann, als nur sofern der Mensch sie in seine Maxime aufgenommen hat . . .; so allein kann eine Triebfeder, welche sie auch sei, mit der absoluten Spontaneität der Willkür (der Freiheit) zusammen bestehen." (Pr. Ak. pp. 23-24) See also pp. 20, 31-32.

60. For example, *Religion*, p. 23.

61. *Religion*, p. 18: "Nun ist es aber in uns Triebfeder= a ; folglich ist der Mangel der Übereinstimmung der Willkür mit demselben ($=0$) nur als Folge von einer realiter entgegengesetzten Bestimmung der Willkür, d. i. einer Widerstreben derselben= $-a$, d. i. nur durch eine böse Willkür, möglich; und zwischen einer bösen und guten Gesinnung (innerem Princip der Maximen), nach welcher auch die Moralität der Handlung beurtheilt werden muss, giebt es also nichts Mittleres (In us, however, the law is a motivating force,= a ; hence the absence of agreement of the will with this law ($=0$) is possible only as a consequence of a real and contrary determination of the will, i.e., of an opposition to the law,= $-a$, i.e., of an evil will. Between a good and an evil disposition (inner principle of maxims), according to which the morality of an action must be judged, there is therefore no middle ground.)." (Pr. Ak. p. 23) This passage might also be taken, however, as related to the arrangement of incentives by Willkür in the empirical self; see pp. 34-38 below.

62. FMM, p. 447. Cf. also p. 450.

63. E.g., *Lectures*, pp. 29-31.

64. This appears to be the case, for example, in Beck's Introduction to the cited edition of CPpR, p. xviii; Theodore H. Greene, "The Historical Context and Religious

Significance of Kant's Religion," introductory essay to the cited edition of Religion, p. lv; John Ladd, pp. xi, xxvi; and Ewing, pp. 207-13 (note again the discrepancy between pp. 199, 202).

65. Religion, pp. 31-32.

66. Cf. CPrR, p. 33, and Religion, p. 36. Besides Silber and Beck, as noted above, several others have discussed this issue: Paton (pp. 213-14, 276), Ladd (pp. xxv-xxvii), and Sir David Ross, Kant's Ethical Theory (Oxford: At the Clarendon Press, 1954) (hereafter cited as Ross, KET), pp. 83-84.

67. For Wille, see esp. CPrR, p. 28: ". . . the conception of this form [of a law] as the determining ground of the will [des Willens] is distinct from all determining grounds of events in nature according to the law of causality, . . ." For Willkür, see esp. Religion, p. 36: "For whatever his previous deportment may have been, whatever natural causes may have been influencing him, and whether these causes were to be found within him or outside him, his action is yet free and determined by none of these causes; hence it can and must always be judged as an original use of his will [seiner Willkür]." (Pr. Ak. p. 41) See also CPrR, p. 29, and cf. Justice, pp. 213-14.

68. Henry Sidgwick, Outlines of the History of Ethics for English Readers, 6th ed., enl., with an additional chapter by Alban G. Widgery (Boston: Beacon Press, 1960), p. 274.

69. Henry Sidgwick, "The Kantian Conception of Free Will," Mind 13 (1888):405-12. This article was reprinted, slightly abridged, as an appendix to his The Methods of Ethics, 7th ed., reissued (Chicago: The University of Chicago Press, 1962), beginning with the sixth edition in 1901.

70. Sidgwick, "The Kantian Conception of Free Will," p. 405.

71. Ibid., pp. 409-11.

72. Ibid., p. 407. For a fuller description of the two, see also pp. 406, 408-9; Methods of Ethics, pp. 58-59.

73. Ibid., p. 407; cf. Outlines, p. 261.

74. Ibid., p. 408.

75. Ibid., p. 405; Methods of Ethics, pp. 57-58.

76. Ibid., p. 405.

77. Ibid., pp. 411-12. On this topic, see Chapter Two, below.

78. Methods of Ethics, p. 58; see also "The Kantian Conception of Free Will," p. 412.

79. See CPrR, Part I, Chapter III, The Incentives of Pure Practical Reason. This matter cannot be fully treated here.

80. Cf. Silber, "Religion," pp. xc, xci, xcv. Other moralists have emphasized the role of attention in the exercise of freedom of choice. Cf., for instance, St. Thomas Aquinas, Summa Theologica, trans. by Fathers of the English Dominican Province, First Complete American Edition, 3 vols. (New York: Benziger Bros., 1947-48), I-II, 13, 6, and I-II, 6, 2; Paul Ricoeur, Freedom and Nature: The Voluntary and the Involuntary, trans. with an introduction by Erazim V. Kohák, Northwestern Studies in Phenomenology and Existential Philosophy (n.p.: Northwestern University Press, 1966), pp. 150, 184-85; William James, The Principles of Psychology, authorized ed. in 2 vol. (New York: Dover Publications, Inc., 1950), 2:561-62; cf. Robert Young, Freedom, Responsibility and God, Library of Philosophy and Religion (New York: Harper & Row, Publishers, Inc., Barnes & Noble Books, 1975), pp. 131-32. See also Chapter Seven below.

81. Silber points this out, in "Religion," pp. xc-xciii. See also Ewing, p. 208; Paton, p. 215 note, p. 275.

82. See Sidgwick, "The Kantian Conception of Free Will," p. 412.

83. See note 15 above.

84. CPR, A 550/B 578.

85. CPrR, p. 94. See also pp. 29-30, 96-97; CPR, A 553/B 581; FMM, pp. 448, 452; Religion, pp. 30, 45 note. See also Ewing, pp. 139-40, 197-98, 200; Körner, p. 155; Paton, p. 207. For a more recent statement of the problem, see Ernest Nagel, The Structure of Science (New York: Harcourt, Brace & World, Inc., 1961) (hereafter cited as SS), pp. 599-600.

It is, of course, held by many determinists that no real conflict exists. This contention cannot be answered

in full here, except insofar as Kant's arguments as here developed are convincing. Such "compatibilist" positions will be mentioned again briefly in Chapters Two and Four below (pp. 60-61, 109-10); for a general summary, see Boyle et al, pp. 104-21.

86. FMM, p. 456. See also CPR, B xxix; Ewing, p. 200.

87. Similar formulations of these two requirements are given by Young, p. 134, and by Nani L. Ranken, "The 'Unmoved' Agent and the Ground of Responsibility," The Journal of Philosophy 64 (July 1967):403, as well as by some of the philosophers cited in Chapter Seven below.

88. Cf. Ewing, p. 200. This position is, however, maintained by many recent thinkers, such as G. E. Moore in Ethics (London: Oxford University Press, 1965); see ch. 6, especially p. 93. This topic will be discussed again in Chapter Four below (pp. 109-10).

89. See p. 17 above.

Chapter Two

1. CPR, A 536/B 564.

2. CPR, Transcendental Logic, Book II, Chapter III, "The Ground of the Distinction of all Objects in general into Phenomena and Noumena," esp. A 238-39/B 297-98, A 248-49, B 306.

3. CPR, A 536/B 564; CPrR, p. 94; Prolegomena, pp. 343-44.

4. FMM, p. 457. See also CPR, B xxvii-xxviii; Virtue, p. 418; Paton, pp. 231-32, 266-67.

5. See CPR, B 289, A 533/B 561. It is debated whether in fact we can even rely on the "existence" of noumena; but this cannot be discussed here.

6. See CPR, B xxiv-xxvi, xxx. But cf. A 494/B 522-23.

7. Pages 11-15 above.

8. CPrR, p. 47. See also pp. 3, 6; Körner, p. 154; Ross, KET, p. 87.

9. See CPR, A 327/B 383-84; FMM, p. 458; Justice, p. 221; CJ, p. 332; Paton, pp. 99-100, 210-11. Cf. CPrR, p. 11, note.

10. Objections along these lines to Kant's solution are developed by Ross, KET, pp. 81-82; and by John Macmurray, The Self As Agent (London: Faber & Faber Limited, 1957), pp. 65-66. Such objections will be left aside here.

11. CPR, A 494/B 522-23.

12. Pages 34-38 above.

13. Cf. Justice, p. 218; Virtue, pp. 399-400; Paton, ch. 5 (pp. 63-68). See also Ross, KET, pp. 88-89, and Silber, "Religion," pp. cviii-cix.

14. Religion, p. 158, note.

15. See CPR, A 550/B 578. Cf. "Perpetual Peace," pp. 361-62, note.

16. Virtue, p. 400.

17. See CPR, B 308.

18. CPrR, pp. 97-98.

19. CPrR, p. 98.

20. CPrR, p. 97. Cf. Prolegomena, pp. 346-47; Religion, pp. 16-17, 20, 45 note, 111-12 note.

21. Paton (p. 274) seems to regard timeless action as itself inconceivable, but gives no very clear reasons for doing so.

22. CPrR, p. 100.

23. CPrR, p. 99.

24. Paton, p. 277. Cf. John Stuart Mill, selection from An Examination of Sir William Hamilton's Philosophy, in Sidney Morgenbesser and James Walsh, eds., Free Will (Englewood Cliffs, N.J.: Prentice-Hall, Inc., Spectrum Books, 1962), pp. 66-67; and Silber, "Religion," p. xcvi.

25. Beck, Commentary, p. 192. Beck offers as a possible solution that Kant intended not a "two-worlds" theory but a "two-aspects" theory; see Commentary, pp.

192-93, and "Kant's Theoretical and Practical Philosophy," in his Studies, pp. 38, 40. On this alternative, see below.

26. Pages 47-52 above.

27. Such double-aspect theories are common among modern attempts to resolve the free-will problem without trespassing on the sacred ground of science. A. I. Melden (op. cit.) denies the applicability of the "causal model" to action and employs a dichotomy of reasons and causes to similar effect; see esp. pages 90, 182, 184-86, 200-2, 211-14. (Note that if "reasons" signifies the determinism of Wille and "causes" the determinism of the empirical self, then neither is an explication of Willkür.) Cf. Ricoeur, p. 68; Gilbert Ryle, The Concept of Mind (New York: Harper & Row, Publishers, Barnes & Noble Books, 1949), p. 78 ff.; Ernst Cassirer, Determinism and Indeterminism in Modern Physics, trans. by O. Theodor Benfey with a preface by Henry Margenau (New Haven: Yale University Press, 1956), p. 205; Thalberg, pp. 73-75, 77, 80. An extended discussion of this issue would be out of place here. Boyle et al give a general statement and criticism of double-aspect theories, using Kant as an example, pp. 110-21; see also Young, p. 77; Donald Davidson, "Actions, Reasons, and Causes," in Bernard Berofsky, ed., Free Will and Determinism, Sources in Contemporary Philosophy (New York: Harper & Row, Publishers, 1966), pp. 221-40; Norman Malcolm, "The Conceivability of Mechanism," The Philosophical Review 72 (January 1968):45-72.

28. Religion, p. 48. See also FMM, p. 460.

29. CPR, p. 29.

30. Virtue, p. 439, note.

31. See CPR, A 251-52. See also Ewing, pp. 202-3; Frederick Copleston, A History of Philosophy, New Revised Edition, 9 vols. (Garden City, N.Y.: Doubleday & Co., Inc., Image Books, 1962-77), vol. 6, part 2, p. 65.

32. See Ewing, p. 214. See also pages 51-52 above.

33. Prolegomena, pp. 347-48. See also CPR, A 171/B 213, A 288/B 344, A 537/B 565.

34. CPR, A 532/B 560.

35. CPR, p. 6. See also pp. 15, 16, 47, 49, 94; CPR, A 92/B 125, A 547/B 575; FMM, pp. 445-46; Religion,

pp. 7 note, 135.

36. CPrR, p. 49.

37. CPrR, pp. 54-55.

38. CPrR, p. 55.

39. The argument is recapitulated in CPrR, pp. 103-5. See also Paton, p. 270; Ewing, p. 170; Körner, p. 153; Copleston, vol. 6, part 2, p. 133. A similar move, assimilating the noumenon "standing under" its appearance to the category of substance, seems to be suggested in CPR, A 253, B 309.

40. CPR, A 557/B 585. See also A 558/B 586, A 448/B 476; FMM, pp. 458-59.

41. CPR, B xxix.

42. CPR, A 536/B 564, italics added.

43. Paton, p. 222. See also Smith, pp. 20-21.

44. C. J. Ducasse, Nature, Mind, and Death (La Salle, Ill.: The Open Court Publishing Co., 1951), pp. 192-93. This particular type of argument, arranging determinism and fortuity as an exhaustive dilemma, will be considered further in Chapter Five, pp. 153-62, below. Challenges of this sort are discussed in general by Boyle et al, pp. 51-57, 77-90, especially the latter. See also C. A. Campbell, In Defence of Free Will, with Other Philosophical Essays, Muirhead Library of Philosophy (London: George Allen & Unwin Ltd., 1967; New York: Humanities Press, Inc., 1967), pp. 47-48. (Hereafter cited as DFW)

45. Boyle et al, p. 79.

Chapter Three

1. For a historical survey of ideas of causality in science, see Wallace, op. cit. For a briefer conceptual discussion, see Marx W. Wartofsky, Conceptual Foundations of Scientific Thought (New York: The Macmillan Company, 1968; London: Collier-Macmillan Limited, 1968), Chapter Eleven.

2. CPR, A 193/B 238. Kant's conception of causality is treated at length by Ewing (op. cit.).

3. CPR, A 200/B 245.

4. CPR, A 532/B 560.

5. See David Hume, A Treatise of Human Nature, ed. with an introduction by Ernest C. Mossner (Baltimore: Penguin Books, 1969), Book 1, Part 3, sections 2-6 (pp. 121-42) and 14 (pp. 205-23); An Enquiry Concerning Human Understanding, in The Empiricists (Garden City, N.Y.: Doubleday & Co., Inc., Dolphin Books, n.d.), section 7 (pp. 349-64). For a modern version of this "regularity theory," see A. J. Ayer, "Freedom and Necessity," in his Philosophical Essays (London: Macmillan, 1969; New York: St. Martin's Press, 1969), pp. 281-83. This definition has received much criticism; for instance, Sir W. David Ross, in Foundations of Ethics (Oxford: At the Clarendon Press, 1939) (hereafter cited as FOE), notes that "to reduce causation to mere necessary sequence is to eviscerate it of a good deal of its natural meaning, and no cogent reason has ever been given for this evisceration." (p. 232) See also Richard Taylor, Action and Purpose (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1966) (hereafter cited as AP), Part 1, esp. pp. 16, 22-26; R. Harré and E. H. Madden, Causal Powers: A Theory of Natural Necessity (Totowa, N.J.: Rowman and Littlefield, 1975), *passim*; Sterling P. Lamprecht, The Metaphysics of Naturalism, Century Philosophy Series (New York: Meredith Publishing Co., Appleton-Century-Crofts, 1967) (hereafter cited as MN), pp. 138-39. However, for our purposes Kant's limited alteration of Hume's definition is sufficient, at least temporarily; see Chapter Seven, pp. 234-36, below.

6. Cf. William James, Some Problems of Philosophy (New York: Greenwood Press, Publishers, 1968), pp. 190-91. Some further remarks on this subject can be found in Chapter Seven, below, pp. 234-36.

7. Ewing, p. 172.

8. Cf., e.g., A. J. Ayer, "Fatalism," in his The Concept of a Person and Other Essays (New York: St. Martin's Press, Inc., 1963), pp. 238-39.

9. Cf. Nagel, SS, pp. 149, 412. Note the greater or lesser dependence of these formulations on time.

10. Cf. Nagel, SS, p. 323 and p. 327. For a specific application of the view that the complexity of "causal chains" may lead to theoretical complications, see Samuel Gorovitz and Alasdair MacIntyre, "Toward a Theory of Medical Fallibility," The Journal of Medicine and Philosophy 1 (March 1976):51-71.

11. Blanshard, p. 19.

12. This distinction is made often in various terms, usually without reference to applications of causal possibility or necessity "in general" or "in particular." See, for instance, John Hospers, An Introduction to Philosophical Analysis, Prentice-Hall Philosophy Series (New York: Prentice-Hall, Inc., 1953), pp. 94-97 ("logical and empirical possibility"); Harré and Madden, pp. 130-35 ("logical and natural necessity"); Taylor, pp. 28, 44 ("logical and causal possibility"); Ducasse, Nature, Mind, and Death, pp. 113-18 ("logical and etiologial necessity"); Roderick M. Chisholm, in "Responsibility and Avoidability," in Hook, ed., p. 157, and in "Freedom and Action," in Keith Lehrer, ed., Freedom and Determinism, Studies in Philosophy (New York: Random House, 1966), pp. 25-26 ("logical and causal possibility"). This topic cannot be further treated here.

13. See page 9 above.

14. CJ, p. 219.

15. Ibid. Cf. Ewing, pp. 165, 222-34; Greene, pp. xliv-xlvi.

16. See, for example, Aristotle, Physics, trans. by R. P. Hardie and R. K. Gaye, in The Basic Works of Aristotle, ed. with an introduction by Richard McKeon (New York: Random House, 1941), Book 2, ch. 3, 7; Metaphysics, trans. by W. D. Ross, in the same volume, Book 5, ch. 2.

17. CJ, p. 219. Aristotle, of course, recognizes "material" and "formal" causes as well; but these further possibilities, which do not seem central to the problem of freedom and determinism, must be left aside here.

18. CJ, p. 217.

19. CJ, p. 220.

20. CJ, p. 219. Cf. p. 222. Cf. also Wartofsky, p. 306.

21. CJ, p. 252.

22. CJ, p. 206. Cf. p. 274.

23. CJ, p. 258.

24. CJ, p. 205; see also p. 206.

25. CJ, p. 242.
26. CJ, p. 224. See also pp. 219, 229, 332.
27. CJ, pp. 223, 220.
28. CJ, p. 258; see also pp. 220, 223, 226. Cf. G. W. F. von Leibniz, Discourse on Metaphysics, trans. by George Montgomery, with revisions by Albert R. Chandler, in The Rationalists (Garden City, N.Y.: Doubleday & Co., Inc., Dolphin Books, 1960), sections 21, 22.
29. CJ, pp. 271, 279.
30. CJ, p. 255.
31. CJ, p. 264.
32. CJ, p. 206.
33. CJ, p. 259. See also pp. 220, 231, 245, 246-47.
34. CJ, p. 254.
35. CJ, pp. 252-53. See also pp. 207, 226.
36. CJ, pp. 206, 315-16.
37. See pages 57-61 above.
38. Some comments on the causation of a whole on its parts will also be made in the discussion of probability in Chapter Five, below, pp. 139-41.
39. Such paradoxes are described in many science fiction stories, and also in a few articles. See Martin Gardner, "Can Time Go Backward?", Scientific American, January 1967, pp. 98-108; Larry Niven, "The Theory and Practice of Time Travel," in his All the Myriad Ways (New York: Ballantine Books, 1971), pp. 110-23.
40. John Austin, "A Plea for Excuses," in Weitz, ed., op. cit., p. 350.
41. Nagel, SS, p. 107.
42. Nagel, SS, p. 110.
43. Ibid.

44. Wallace, 1:5. Cf. Wartofsky, pp. 308-10.

45. See Nagel, SS, pp. 96-97, 114-17; Austin, "A Plea for Excuses," p. 350. Cf. also the discussion in Pierre Duhem, The Aim and Structure of Physical Theory, trans. by Philip P. Wiener with a Foreword by Prince Louis de Broglie (Princeton, N.J.: Princeton University Press, 1954), pp. 69-104.

46. Compare the notion of "logical form" in Ludwig Wittgenstein, Tractatus Logico-Philosophicus, trans. by D. F. Pears and B. F. McGuinness, with the introduction by Bertrand Russell (London: Routledge & Kegan Paul, 1974), especially proposition 2.18.

47. This notion is close to that of a "paradigm" as developed by Thomas S. Kuhn, The Structure of Scientific Revolutions, 2nd ed., enl., International Encyclopedia of Unified Science, Foundations of the Unity of Science, vol. 2, no. 2 (Chicago: University of Chicago Press, 1970); see esp. p. 10. The more general word "model" is used in this paper in order to avoid the rather technical sense now attached to "paradigm."

48. Cf. Thalberg, p. 73: "The generic notion is that you explain a particular occurrence when you make it seem more intelligible and less surprising to your listeners than it was before they heard your explanation. How does your account render the occurrence less puzzling? It reveals how the event conforms to a pattern which is familiar to your audience."

49. Pages 41-42 above.

Chapter Four

1. Parmenides, DK 2, 8, trans. in Philip Wheelwright, ed., The Presocratics (New York: The Odyssey Press, Inc., 1966), pp. 96, 97, 98. Parmenides might better, perhaps, be described as a sort of internal determinist; see p. 172, below.

2. Leucippus, DK 2, in Wheelwright, ed., p. 178.

3. Diogenes Laertius, in Wheelwright, ed., p. 196. Cf. also Aristotle, Physics, Book 2, ch. 4.

4. Plato, Laws, 888e, in The Collected Dialogues of Plato, ed. by Edith Hamilton and Huntington Cairns, Bollingen Series LXXI (Princeton: Princeton University

Press, 1961).

5. Cf. Plato, Timaeus, 46d, in Hamilton and Cairns, eds.; also Copleston, vol. 1, part 1, p. 274. This relationship will be discussed again in Chapter Five below, pp. 111-13.

6. Plato, Timaeus, 46d-e.

7. Aristotle, Physics, 196b10.

8. See Aristotle, On Generation and Corruption, trans. by Harold H. Joachim, in McKeon, ed., Book 2, ch. 11; The Parts of Animals, trans. by William Ogle, in McKeon, ed., 641b18-24.

9. Aristotle, Metaphysics, 1015a34.

10. Ibid., 1015a28-32.

11. Ibid., Book 6, ch. 3, 1027a29-1027b17.

12. See pp. 117-19 below.

13. Epicurus, Letter to Herodotus, 61; in his Letters, Principal Doctrines, and Vatican Sayings, trans. by Russel M. Geer, Library of Liberal Arts (Indianapolis: Bobbs-Merrill Co., Inc., 1964), p. 22.

14. Cf. Lucretius, On the Nature of Things, Book 2, 80-85; in Gordon H. Clark, ed., Selections from Hellenistic Philosophy (New York: Meredith Publishing Co., Appleton-Century-Crofts, 1940), p. 14.

15. Cf. Clark, pp. 59, 87, 95, 99-103.

16. See John Calvin, "Articles Concerning Predestination," in The Problem of Free Will, ed. by Willard F. Enteman (New York: Charles Scribner's Sons, 1967), p. 87; and "Man Has Now Been Deprived of Freedom and Bound Over to Miserable Servitude," in Enteman, ed., p. 89.

17. See Calvin, "Articles," pp. 86-87, and "Servitude," pp. 88-89. Calvin discusses philosophical theories of free will on pp. 90-99.

18. See the observations on "favored elements" below, pp. 104-7, 171-72.

19. René Descartes, Discourse on Method, in his Discourse on Method and Meditations, trans. by Laurence J.

Lafleur, Library of Liberal Arts (Indianapolis: Bobbs-Merrill Co., Inc., 1960), p. 32.

20. Cf. *ibid.*, p. 41; Meditations, in Discourse on Method and Meditations, pp. 72, 138.

21. See Thomas S. Hall, History of General Physiology, 600 B.C. to A.D. 1900, 2 vols. (Chicago: University of Chicago Press, 1969), 2:47, 50.

22. Pierre Laplace, quoted in Ernest Nagel, SS, p. 281, note. The quotation is from Laplace's Théorie analytique des probabilités (Paris, 1820), Preface.

23. See pp. 121-25 below for a discussion of more recent scientific developments.

24. B. F. Skinner, Science and Human Behavior (New York: The Free Press, 1965; London: Collier-Macmillan Limited, 1965), p. 6. See also pp. 228 ff., 230-31, 240-41, 283; B. F. Skinner, Beyond Freedom and Dignity (Toronto: Bantam Books, 1972; New York: Vintage Books, 1972), pp. 28-29, 39.

25. A brief historical survey of ideas of universal determinism is given by C. S. Peirce, in "The Doctrine of Necessity Examined," in Enteman, ed., pp. 264-65.

26. Plutarch, in Clark, ed., p. 95; cf. p. 59.

27. Lucretius, op. cit., Book 1, 146-73, in Clark, ed., p. 9. Cf. James, Some Problems of Philosophy, p. 191.

28. G. W. F. von Leibniz, Monadology, trans. by George Montgomery, with revisions by Albert R. Chandler, in The Rationalists, op. cit., section 32, p. 460.

29. *Ibid.*, section 36, p. 460; Discourse on Metaphysics, section 2, p. 410; Monadology, section 53, p. 463.

30. See Discourse on Metaphysics, section 8 (p. 417), section 14 (p. 425).

31. See *ibid.*, section 13 (pp. 421-24), section 30 (p. 443).

32. See pp. 252-58 below for discussion of this argument. Boyle et al discuss arguments based on the principle of sufficient reason, pp. 85-87.

33. Nagel, SS, p. 292.

34. Pages 73-74 above.

35. Cf. James, Some Problems of Philosophy, p. 192.
But cf. Lamprecht, MN, pp. 142-44.

36. A model in which certain elements of the causing state are especially "favored" will be discussed in Chapter Six below.

37. See pages 4-9 above.

38. See CPR, A 201/B 246.

39. See pages 23-24 above.

40. See pages 39-40 above.

41. CPR, A 446/B 474. Cf. also CPrR, p. 94.

42. Virtue, p. 378.

43. See pages 9-20 above.

44. Chapter One, note 88. Cf. also Ross, FOE, pp. 240-41; R. E. Hobart, "Free Will as Involving Determination and Inconceivable Without It," in Berofsky, ed., p. 72 ff.; P. H. Nowell-Smith, Ethics (Harmondsworth: Penguin Books Ltd., 1954), pp. 273-78, and "Ifs and Cans," in Berofsky, ed., pp. 322-39. Criticisms of such "soft determinist" positions, and developments of universal determinism to its logical consequences, can be found in Paul Edwards, "Hard and Soft Determinism," in Hook, ed., pp. 117-25; John Hospers, "What Means This Freedom?", in Hook, ed., pp. 126-42, and "Free-Will and Psychoanalysis," in Wilfrid Sellars and John Hospers, eds., Readings in Ethical Theory, 2nd ed., Century Philosophy Series (New York: Meredith Corporation, Appleton-Century-Crofts, 1970), pp. 633-45. For discussions of Moore's and similar approaches, see also J. N. Findlay, Values and Intentions, Muirhead Library of Philosophy (London: George Allen & Unwin Ltd., 1961; New York: Humanities Press, Inc., 1961), pp. 193-94; A. C. MacIntyre, "Determinism," in Berofsky, ed., pp. 245-46; J. L. Austin, "Ifs and Cans," in Berofsky, ed., pp. 296-309, 321; Roderick M. Chisholm, "'He Could Have Done Otherwise,'" The Journal of Philosophy 64 (July 1967), p. 411.

45. See pages 57-61 above.

Chapter Five

1. It is this ambiguity that leads so readily to the fallacy of the "determinist dilemma" (see pp. 153-62 below).

2. Nagel, SS, pp. 324-35.

3. Aristotle, Physics, 196b33-38, 197a2-3. The example of one sense of "accident" in the Metaphysics is equivalent: ". . . if someone in digging a hole for a plant has found treasure." (1025a14) Nagel cites similar examples (SS, p. 325).

4. Plato, Timaeus, 46e. Cf. Copleston, vol. 1, part 1, p. 274.

5. Nagel, SS, p. 325.

6. Nagel gives the case of such "intersections of two independent causal series" in historical and sociological usage as a separate sense of "chance" (SS, pp. 326-29); but for our purposes there is no difference.

7. Cf. Aristotle's example in Metaphysics Book 6, ch. 3, 1027a29-1027b18.

8. Nagel, SS, p. 325. See also pp. 325-26.

9. A fourth sense discussed on pp. 329-30, having to do with boundary conditions of a physical theory, need not concern us here.

10. Nagel, SS, p. 331. See also pp. 331-35.

11. This is the term used by C. S. Peirce, Chance, Love and Logic: Philosophical Essays, ed. with an introduction by Morris R. Cohen, International Library of Psychology, Philosophy, and Scientific Method (New York: Harcourt, Brace & Co., Inc., 1923; London: Kegan Paul Trench, Trubner & Co., Ltd., 1923), p. 202.

12. Aristotle, Physics, 106b10, 13. See also 199a33-199b7.

13. Robert E. Wood, "Philosophy in the New Encyclopaedia Britannica," Review of Metaphysics 30 (June 1977): 739. See also Sister M. Julianne Junkersfeld, S.S.N.D., "The Aristotelian-Thomistic Concept of Chance" (Ph.D. Dissertation, University of Notre Dame, 1945), pp. 1, 22-23, 52, 56, 74, 79. But cf. Peirce, "Necessity," pp. 264-65.

14. Aquinas, S.T., I, 57, 3 (p. 285). See also I, 115, 6 (p. 565). Again, see Junkersfeld, pp. 58-59, where the interpretation consistent with determinism is argued for.

15. See Russel M. Geer, Translator's Introduction to Epicurus, op. cit., p. xxxiii; and see p. 12, note 17, of that volume.

16. Geer, p. xxxii. See also Hall, 1:124.

17. Geer, p. xxxii.

18. Lucretius, op. cit., Book 2, 216-60, 284-93 (pp. 15, 17). See also Norman Wentworth DeWitt, Epicurus and his Philosophy (Minneapolis: University of Minnesota Press, 1954), pp. 165-66, 169, 171-72, 175.

19. Cf. Clark, p. 6; Hall, 1:133-34; DeWitt, pp. 169-70.

20. Xavier Bichat, General Anatomy Applied to Physiology and Medicine, trans. George Hayward (Boston, 1822), vol. 1, preface by the author; quoted in Hall, 2:127.

21. Op. cit.

22. Peirce, "Necessity," p. 264; Chance, Love and Logic, pp. 162-63, 202. See also Nagel, SS, pp. 331-32.

23. Peirce, "Necessity," pp. 277-78; Chance, Love and Logic, pp. 230-31, 261-63. See also the discussion of "loophole" theories later in this chapter (pp. 146-53).

24. A simplified general background to the problem is given by Willard F. Enteman in "Microphysics and Free Will," Appendix A to Enteman, ed., pp. 281-99. See also Ross, FOE, pp. 214-21, representing a position taken presumably in 1935; and Arthur H. Compton, The Freedom of Man (New Haven: Yale University Press, 1935; London: Humphrey Milford, Oxford University Press, 1935), a physicist's views from about the same period. More contemporary discussions are to be found in Nagel, SS, and Wartofsky.

25. A popular account of this episode can be found in George Gamow, Thirty Years that Shook Physics, Science Study Series (Garden City, N.Y.: Doubleday & Co., Inc., Anchor Books, 1966).

26. Cf. Ross, FOE, pp. 216-17.

27. H. Van Rensselaar Wilson, "On Causation," in Hook, ed., p. 237. Cf. p. 240; Compton, The Freedom of Man, pp. 34-36; Nagel, SS, p. 295; Wartofsky, p. 340; and William H. Davis, The Freewill Question (The Hague: Martinus Nijhoff, 1971), pp. 20-21. See also Hume, Treatise, Book 2, part 3, section 1, p. 451.

28. See Enteman, "Microphysics," pp. 294-95.

29. Cf. Ross, FOE, p. 213.

30. Ross, FOE, p. 216. Cf. Ducasse, Nature, Mind, and Death, p. 181; A. S. Eddington, The Nature of the Physical World (New York: The Macmillan Company, 1929; Cambridge, England: At the University Press, 1929), p. 307.

31. Ross, FOE, pp. 216-17.

32. Davis, p. 21.

33. Nagel, SS, pp. 49, 309; Wartofsky, pp. 304-5, 340-41.

34. Cf. Wartofsky, pp. 340-41; Nagel, SS, pp. 296-97, 115; Ross, FOE, pp. 216-17.

35. Ross, FOE, p. 217. See also Arthur H. Compton, "Do We Live in a World of Chance?", Yale Review 21 (1931): 87.

36. Ross, FOE, p. 213. See also Compton, "Chance," p. 95.

37. Nagel mentions such definitions (SS, p. 334, note). Cf. his Principles of the Theory of Probability, International Encyclopedia of Unified Science, Foundations of the Unity of Science, vol. 1, no. 6 (Chicago: University of Chicago Press, 1939), pp. 18-19, 44-51. This matter cannot be fully discussed here.

38. See Nagel, SS, p. 326; Principles, pp. 44-48.

39. Nagel, SS, p. 334. See pp. 333-34; also pp. 326, 344; Schrödinger, cited in Compton, The Freedom of Man, p. 25; Percy W. Bridgman, "Determinism in Modern Science," in Hook, ed., p. 65; Alfred Landé, "The Case for Indeterminism," in Hook, ed., p. 84; Findlay, p. 129.

40. Cf. Ross, FOE, pp. 222-23; see Nagel's discussion, SS, pp. 332-33.

41. Cf. Peirce, "Necessity," pp. 274-75, 278-79; Nagel, SS, p. 332.

42. This point will be considered again in Chapter Seven below (p. 252 ff.).

43. This interpretation is mentioned by Wartofsky, p. 306.

44. Pages 83-84 above; see also Chapter Six below.

45. CPR, A 228/B 280.

46. CPrR, p. 95; cf. Beck, "Introduction," p. xviii.

47. Religion, p. 30.

48. FMM, p. 446.

49. Körner, p. 155. Cf. Compton, The Freedom of Man, pp. 51-53.

50. "Universal History," p. 17.

51. "Universal History," p. 25; "Perpetual Peace," pp. 361-62; "Old Question," pp. 88-89. These doctrines cannot be dealt with in detail here.

52. "Universal History," p. 19. See also "Old Question," p. 83, and cf. pp. 79-80.

53. "Universal History," p. 20.

54. Ross, FOE, p. 223.

55. Peirce, "Necessity," p. 278. Cf. Nagel, SS, pp. 331-32.

56. Compton, The Freedom of Man, p. 58. See also pp. 62-65, 68; "Chance," pp. 97-99; Eddington, Nature of the Physical World, pp. 311-15.

57. Compton, The Freedom of Man, pp. 132-33. Cf. also David L. Miller, Modern Science and Human Freedom (New York: Greenwood Press, Publishers, 1959), p. 259.

58. Ewing, p. 200.

59. See Boyle et al, pp. 60-61, especially the quotation from Felix Mainx.

60. Erwin Schrödinger, Science and Humanism (Cambridge, 1951), pp. 60-61, quoted in Boyle et al, p. 61. Cf. Cassirer, pp. 203-4, 209-11.

61. Compton, The Freedom of Man, pp. 62-63.

62. Cf. Cassirer, p. 198: "For this act of self-realization the merely negative concept of indeterminacy or indeterminability is inadequate; other positive forces, characteristic principles and grounds of determination, are required."

63. Cf. Taylor, AP, pp. 49-50, 65-74, 90-91, 93-94, 263, where he argues that making the "cause" a non-material or "mental" event alone is not sufficient to show in what its freedom consists.

64. Boyle et al, p. 62.

65. This argument may be found, for instance, in Sidgwick, Methods of Ethics, pp. 62-63. Cf. also Skinner, Science and Human Behavior, p. 283.

66. Cf. Enteman, "Microphysics and Free Will," pp. 298-99; Campbell, DFW, p. 45; A. S. Eddington, article in a symposium on "Indeterminacy and Indeterminism" in Indeterminism, Formalism, and Value, Proceedings of the Aristotelian Society, suppl. vol. 10 (1931) (London: Harrison & Sons, Ltd., 1931), p. 163; C. D. Broad, article in the same symposium.

67. James, "The Dilemma of Determinism," op. cit.; James N. Jordan, "Determinism's Dilemma," Review of Metaphysics 23 (1969):48-66.

68. This point is noted by non-determinists such as Davis, p. 17; C. A. Campbell, "Is 'Freewill' A Pseudo-Problem?", Mind 60 (Oct. 1951):460, 462 (hereafter cited as FPP); Richard Taylor, "Determinism and the Theory of Agency," in Hook, ed., p. 227; Philippa Foot, "Free Will as Involving Determinism," in Berofsky, ed., p. 100; Chisholm, "Freedom and Action," p. 11.

69. CPrR, p. 95.

70. CPR, A 446/B 474.

71. Ewing, p. 166. See also p. 202; but cf. p. 199.

72. Hume, Treatise, Book 2, part 3, section 2, p.

458. See pp. 451-55, 458-60; Enquiry, section 8, part 2, pp. 378-79.

73. Mill, p. 64; see also Copleston, vol. 8, part 1, pp. 63-67.

74. Paton, p. 211.

75. MacIntyre, p. 243; M. C. Bradley, "A Note on Mr. MacIntyre's Determinism," in Berofsky, ed., pp. 257-58.

76. Hobart, p. 71. See also pp. 65, 70, 77, 88, 90.

77. Moritz Schlick, "When is a Man Responsible?", trans. by David Rynin, in Enteman, ed., p. 193.

78. Ibid., p. 194.

79. For instance, Ross, FOE, p. 230; Chisholm, "Responsibility and Avoidability," p. 158; William James, Pragmatism (Cleveland: The World Publishing Co., Meridian Books, 1955), p. 83; Ayer, "Freedom and Necessity," p. 275, and "Fatalism," pp. 254-56; Miller, p. 260; Richard B. Brandt, Ethical Theory, Prentice-Hall Philosophy Series (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1959), p. 511; Franz Brentano, The Foundation and Construction of Ethics, English edition ed. and trans. by Elizabeth Hughes Schneewind, International Library of Philosophy and Scientific Method (New York: Humanities Press, 1973), pp. 258-60; F. H. Bradley, "The Vulgar Notion of Responsibility in Connection with the Theories of Free-Will and Necessity," in his Ethical Studies (New York: G. E. Stechert & Co., 1911), pp. 10-11; Cassirer, pp. 203-4; Ducasse, Nature, Mind, and Death, pp. 181, 184, 191-92, 211, 213; John Dewey, "Philosophies of Freedom," in his On Experience, Nature and Freedom, ed. with an introduction by Richard J. Bernstein, Library of Liberal Arts (Indianapolis: Bobbs-Merrill Co., Inc., 1960), p. 264; Nowell-Smith, Ethics, pp. 281-83; Thalberg, pp. 146-47; see also C. D. Broad, "Determinism, Indeterminism, and Libertarianism," in Morgenbesser and Walsh, eds., p. 128.

80. See, for example, Ducasse, Nature, Mind, and Death, p. 184.

81. Cf., for example, Hannah Arendt, The Human Condition (Chicago: University of Chicago Press, 1958), pp. 190-92, 243-47.

82. See, for example, Ayer, "Freedom and Necess-

ity," pp. 276-77; Brandt, p. 512; F. H. Bradley, pp. 13-14; Ducasse, Nature, Mind, and Death, p. 203; Cassirer, p. 204; Sidgwick, Methods of Ethics, pp. 63-64.

83. Page 109 above.

84. Hobart, p. 79. See also pp. 67-68, 77-78, 80, 83-84; Ross, FOE, pp. 248, 250-51.

85. This problem cannot be discussed at length here. Cf. the Kantian proofs of freedom and questions of "psychological determinism," pages 9-20 above.

86. Hume, Treatise, Book 2, part 3, section 2, p. 458. This argument is often combined with a basically utilitarian interpretation of praise and blame as tools for "behavior modification;" cf. Nowell-Smith, Ethics, pp. 294-95, 196, 303-4; Ducasse, Nature, Mind, and Death, p. 194; Sidgwick, Methods of Ethics, pp. 71-72.

87. Cf. Ross, FOE, p. 245; Hobart, p. 70. See also pp. 228-31 below.

88. Boyle et al, p. 80. See also p. 81. Cf. Taylor, "Determinism," pp. 227-29, and AP, pp. 47, 53. This distinction is in fact made even by Thomas Hobbes, in a selection from The Questions Concerning Liberty, Necessity, and Chance, in Morgenbesser and Walsh, eds., p. 41.

Chapter Six

1. FMM, pp. 445-46.

2. Pages 158-59 above.

3. Aristotle, Physics, Book 2, ch. 8.

4. Metaphysics, 1014b16-17.

5. Aristotle, On the Soul, trans. by J. A. Smith, in McKeon, ed., 413a26; see also Metaphysics, Book 5, ch. 4.

6. On the Soul, Book 2, ch. 2-4.

7. Physics, Book 2, ch. 8. Cf. Hall, 1:107-16.

8. On the Soul, 415b15.

9. Cf. pages 76-84 above.

10. Aristotle, Ethica Eudemia, trans. by J. Solomon, in The Works of Aristotle, ed. by W. D. Ross (London: Oxford University Press, 1915), vol. 9: 1224b14-15.

11. Clark, p. 57.

12. Clark, p. 96. See also p. 103.

13. See, for example, St. Bonaventure, "Theory of Seminal Reasons," in Edwards and Popkin, gen. eds., op. cit., vol. 3: Medieval Philosophy: From St. Augustine to Nicholas of Cusa, ed. by John F. Wippel and Allan B. Wolter, O.F.M. (New York: The Free Press, 1969; London: Collier-Macmillan Limited, 1969), pp. 318-27.

14. Aquinas, S.T., I, 115, 2.

15. Ibid., I, 78, 1.

16. Cf. ibid., I-II, 6, 1,4.

17. Leibniz, Discourse on Metaphysics, section 28, p. 441.

18. Ibid., section 8, p. 417.

19. Leibniz, Monadology, section 22, p. 458. See also sections 7, 11 (pp. 455-56), 51 (p. 463); and Discourse on Metaphysics, section 15 (pp. 426-27), sections 26 (pp. 439-40) and 28-29 (pp. 441-42).

20. See Hall, chapters 25, 33-34, 43-45.

21. Cf. Thomas Hill Green, Prolegomena to Ethics, ed. by A. C. Bradley, 3rd ed. (Oxford: At the Clarendon Press, 1890), pp. 7-9, 80-81, 100, 107-13, and Copleston, vol. 8, part 1, p. 199; Josiah Royce, The World and the Individual, with an introduction by John E. Smith, 2 vols. (New York: Dover Publications, Inc., 1959), 1:433-34, 467-69, 2:293, and Copleston, vol. 8, part 2, pp. 34-35.

22. See pages 158-59 above. Defining the will as a sort of desire, "moving" automatically toward some end, also tends to suggest the internal determinist model. Cf. the discussion of Aquinas' approach in Chapter Seven below, pp. 186-92.

23. Miller, p. 261. Cf. Ewing, p. 166.

24. Cf. page 78 above.

25. See pages 104-7 above.

26. See Clark, pp. 59, 66, 70, 97.

27. See, for example, Pierre Teilhard de Chardin, The Phenomenon of Man, with an introduction by Sir Julian Huxley, 2nd Harper Torchbooks ed. (New York: Harper & Row Publishers, Harper Torchbooks, The Cathedral Library, 1965), especially pp. 307-8. Leibniz, because of the doctrine of pre-established harmony among monads, may also fit into this category, although theological determinism might be a better description; cf. Discourse on Metaphysics, section 15, pp. 426-27; Monadology, sections 51-52, p. 463.

28. A contemporary outline of this theory is given in Jacques Monod, Chance and Necessity: An Essay on the Natural Philosophy of Modern Biology, trans. by Austryn Wainhouse (New York: Alfred A. Knopf, 1971); see especially pp. 23-24, 85-86, 98, 112-20. Cf. also Peirce, Chance, Love and Logic, pp. 163-64.

29. Aristotle, Physics, Book 2, ch. 8; on Kant see Greene, pp. xlv-xlvi, and cf. CJ, section 81, p. 274.

30. MFNS, p. 543.

31. Religion, p. 133. See also CPrR, pp. 95-96.

32. Körner, p. 155. See also Ewing, p. 209.

33. See John Hospers, "Free-Will and Psychoanalysis" and "What Means This Freedom?"

34. CPrR, p. 96. See also p. 97.

35. CPrR, p. 97. See also Prolegomena, pp. 344-45, note; Paton, p. 210; Ross, KET, p. 71; Ewing, pp. 199-200.

36. Silber, "Religion," p. lxxxviii.

Chapter Seven

1. CPR, A 534/B 562.

2. Aristotle, Ethica Eudemia, 1222b18-20.

3. Ibid., 1223a10-12.

4. Metaphysics, 1046b4-5.

5. Aristotle, Nicomachean Ethics, trans. by W. D. Ross, in McKeon, ed., 1110b1-2.

6. Ibid., 1111a23-24.

7. Ibid., 1111b29.

8. Ibid., 1135b9-10.

9. On the Soul, 433b14-30.

10. Metaphysics, 1048a10-15.

11. Augustine, op. cit., Book 3, ch. 3, section 33 (p. 93); see also section 27 (p. 92).

12. Ibid., Book 3, ch. 1, sections 8-10 (p. 87).

13. Ibid., Book 3, ch. 17, section 168 (p. 126); see also section 164 (p. 125).

14. The problems involved in reconciling this freedom with the creative and conservative power of God cannot be dealt with in this paper.

15. Aquinas, S.T., I-II, 20, 1, 3.

16. Ibid., I, 83, 2.

17. Ibid., I, 115, 4; see also I, 54, 5.

18. Ibid., I, 41, 2; see also I, 115, 4, and I-II, 21, 2, ad 1.

19. Ibid., I, 59, 3.

20. Ibid., I, 83, 3. See also I, 42, 2; I, 57, 4, ad 3; I, 115, 4.

21. Ibid., I-II, 13, 6.

22. Ibid., I, 75, 1, ad 1.

23. Ibid., I, 82, 4, ad 3.

24. Ibid., I-II, 1, 2.

25. Ibid., I-II, 6, 1.

26. Ibid., I-II, 9, 3, contra.

27. Ibid.

28. Katherine Rose Hanley, "Freedom and Fault," The New Scholasticism 51 (Autumn 1977):511. See also p. 505.

29. Aquinas, S.T., I, 83, 1.

30. Ibid., I-II, 13, 6.

31. Hanley, p. 506.

32. Hanley, p. 504. See also p. 508.

33. See pages 34-38 above. Aquinas' theory, of course, differs importantly from Kant's on this point; but the issue cannot be explored further here.

34. For example, again, the problem of God's universal creation and conservation; cf. Aquinas, S.T., I, 57, 4; I, 103, 8; I, 105, 4; I-II, 10, 4.

35. Ibid., I, 82, 1.

36. Ibid., I, 82, 2. See also I, 83, 2; I, 83, 4; I-II, 10, 1.

37. Ibid., I-II, 9, 6, ad 3. See also I-II, 10, 2.

38. Cf. I-II, 6, 2, where two sorts of "voluntary" action are discriminated according to the presence of reason's "power of opposites."

39. Ibid., I, 105, 4, ad 2. See also I-II, 9, 4, ad 1.

40. See I-II, 9, 4.

41. See Boyle et al, pp. 38-40.

42. Ricoeur, pp. 193-94.

43. On this point, see Hanley, p. 511.

44. Thomas Reid, Essays on the Active Powers of the Human Mind, with an introduction by Baruch A. Brody (Cambridge: The M.I.T. Press, 1969), p. 269.

45. Ibid., pp. 37-38, 48.

46. Ibid., pp. 18-19, 292-93. Such an argument is related to Kant's argument from the notion of moral obliga-

tion.

47. Ibid., p. 1.
48. Ibid., p. 58.
49. Ibid., pp. 2, 289-90.
50. Ibid., p. 37; see also pp. 11-12, 94, 268.
51. Ibid., p. 35; see also pp. 268, 280.
52. Ibid., p. 57.
53. Ibid., pp. 259, 261.
54. Ibid., pp. 263; 261.
55. Ibid., pp. 19, 262.
56. Ibid., pp. 283, 292.
57. Ibid., pp. 263-66; cf. Baruch A. Brody, Introduction to Reid, op. cit., pp. xv-xvii.
58. Cf. Reid, p. 267.
59. Ibid., p. 265. See also p. 268; and cf. Brody, pp. xvii-xix.
60. Ibid., p. 9; see also p. 57.
61. Ibid., pp. 36, 40, 269.
62. Ibid., pp. 6-7.
63. Ibid., p. 59; see also pp. 4-5, 11, 28, 267.
64. Ibid., p. 4.
65. Ibid., pp. 263, 266.
66. Ibid., pp. 50, 52, 55-56.
67. Ibid., pp. 31, 271, 278.
68. Ibid., pp. 58, 61.
69. Ibid., pp. 283-84; 288.
70. Ibid., pp. 63-64, 285-86; p. 291; cf. pp. 70,

73-74.

71. Ibid., p. 286.

72. Ibid., pp. 289, 286.

73. Cf. *ibid.*, pp. 284-85.

74. See especially pp. 129-30; see also Young, ch. 9 and 10, especially pp. 121, 125. Cf. Dewey, p. 263; F. H. Bradley, pp. 9-10. Even A. I. Melden seems to present a view somewhat like that of agent causality at one point; see *Free Action*, p. 130. Thalberg's book criticizes the concept in general.

75. Jean-Paul Sartre, *Being and Nothingness*, trans. with an introduction by Hazel E. Barnes (New York: Washington Square Press, 1966), p. 533.

76. Ibid., pp. 530, 532.

77. Ibid., pp. 535, 537.

78. Ibid., p. 534. See also pp. 535, 545, 548. Cf. Ricoeur, pp. 66-68, 124-25, 150, 184-85. A complete discussion of Sartre's views cannot be undertaken here.

79. Macmurray, pp. 88-89. See also pp. 33 and 146-64, especially p. 147.

80. Ibid., p. 134.

81. Ibid., p. 166.

82. Ibid., p. 134.

83. Findlay, especially ch. 4-5.

84. Ibid., p. 141. See also pp. 285, 318.

85. Ibid., p. 199.

86. Ibid., p. 200. See also pp. 318, 372-74.

87. Ibid., pp. 192-93.

88. Ibid., pp. 149-50, 372-74.

89. Ibid., p. 379; see pp. 197, 377-79. Cf. Kant, *Virtue*, p. 380, note.

90. Chisholm, "'He Could Have Done Otherwise,'" op. cit. See also his "Freedom and Action," pp. 12, 15-16. Ranken, op. cit., is a criticism of Chisholm's views.

91. "'He Could Have Done Otherwise,'" p. 413.

92. Ibid., p. 417; "Freedom and Action," pp. 28-29.

93. "Freedom and Action," pp. 13-14.

94. Ibid., p. 17.

95. Ibid., p. 23.

96. Ibid., p. 22.

97. Ibid.

98. Davis, p. 42.

99. Ibid., p. 46.

100. Ibid., pp. 18-19.

101. Frederick Ferré, "Self-Determinism," American Philosophical Quarterly 10 (July 1973):165-66.

102. Ibid., pp. 166, 173.

103. Ibid., p. 169.

104. Ibid., p. 170.

105. Ibid., p. 169.

106. Ibid.

107. Boyle et al, p. 11.

108. Ibid., p. 12.

109. Ibid., pp. 80-81.

110. Ibid., p. 82.

111. James A. Fulton, "Persons as Causes," International Philosophical Quarterly 17 (June 1977):179-80.

112. Ibid., pp. 181-82, 184.

113. Ibid., pp. 197-98, 190-91.

114. Ibid., pp. 180, 187.

115. Ibid., pp. 181, 194.

116. Ibid., pp. 191-92.

117. Ibid., p. 194.

118. See C. A. Campbell, "Is 'Freewill' a Pseudo-Problem?", op. cit. (here cited as FPP); In Defence of Free Will, op. cit. (here cited as DFW); and On Selfhood and Godhood, Muirhead Library of Philosophy (London: George Allen & Unwin Ltd., 1957; New York: The Macmillan Company, 1957) (hereafter cited as SG). Campbell's approach has been criticized by Nowell-Smith, in Ethics, pp. 278-90; Campbell's reply can be found in SG, Appendix B, pp. 214-28.

119. DFW, p. 37; see also SG, p. 178.

120. DFW, pp. 36-37, 43; SG, p. 160.

121. SG, p. 164; see also DFW, p. 37.

122. SG, p. 177; see also pp. 175, 178.

123. DFW, p. 37; SG, pp. 161-62.

124. DFW, p. 71. See also SG, pp. 149, 167.

125. SG, p. 178. See also pp. 153, 156, 225.

126. SG, pp. 144-45, 223.

127. SG, p. 147.

128. SG, p. 177; see also pp. 149-50, 154-56; DFW, pp. 43, 48, 74; FPP, p. 462. Cf. SG, p. 219, and DFW, p. 53.

129. Cf. SG, lecture 5.

130. SG, pp. 150-51, 162, 173.

131. DFW, p. 46; see also SG, pp. 173-74.

132. SG, p. 147.

133. SG, p. 165.

134. SG, p. 132; see also DFW, pp. 50-51.

135. SG, pp. 153, 175; FPP, p. 462.
136. SG, p. 174. See also pp. 224-25; DFW, p. 49.
137. DFW, p. 51. See also SG, pp. 133, 157, 176.
138. SG, p. 216; FPP, p. 463.
139. DFW, p. 69; see also p. 70.
140. SG, pp. 142-43, 152.
141. DFW, p. 42. See also p. 43; SG, pp. 153-54.
142. SG, p. 168.
143. SG, pp. 152, 154; DFW, p. 41.
144. SG, pp. 146-47.
145. Op. cit. (here cited as AP). Taylor's theory is criticized in Thalberg, Essay 1.
146. AP, p. 130. See also pp. 59, 86, 89, 132, 134; cf. his "Determinism," p. 228.
147. AP, p. 112.
148. AP, p. 154.
149. AP, p. 262.
150. AP, pp. 20-21, 55, 120-21, 155, 215, 226.
151. AP, p. 262. Cf. Hume, Treatise, p. 451.
152. AP, p. 63. See also "Determinism," p. 228.
153. AP, p. 89.
154. AP, p. 13. See also pp. 14, 59, 111, 154.
155. "Determinism," p. 228.
156. AP, pp. 31-37. This argument is in fact applied to causation in general, not only causation by agents.
157. AP, pp. 9-10.

- 158. AP, p. 158.
- 159. AP, pp. 26-28, 30-31.
- 160. AP, p. 39. See also pp. 8, 16, 99.
- 161. AP, pp. 153-54.
- 162. AP, p. 262. See also pp. 55, 258. Cf. "Determinism," p. 228.
- 163. AP, pp. 95-96, 122-23.
- 164. See especially AP, p. 10.
- 165. AP, pp. 47, 53.
- 166. AP, p. 64.
- 167. See AP, ch. 15, especially pp. 234-35.
- 168. AP, p. 14.
- 169. AP, p. 53.
- 170. AP, p. 55. See also p. 183.
- 171. AP, pp. 104-5.
- 172. AP, p. 140. See also pp. 114-15, 200.
- 173. AP, pp. 198, 263.
- 174. AP, pp. 115, 120-21, 127; 176-84.
- 175. Cf. AP, pp. 135-38, 154.
- 176. Cf. AP, pp. 142, 204-5, 208, 215-16, 246, 260.
- 177. See especially AP, pp. 139, 141, 146-47, 152.
- 178. See above, pp. 82-84, 178-79.
- 179. AP, p. 145.
- 180. Cf. AP, p. 141.
- 181. Cf. George Berkeley, De Motu, trans. with an introduction by A. A. Luce, in The Works of George Berkeley, Bishop of Cloyne, ed. by A. A. Luce and T. E. Jessop, Bibliotheca Britannica Philosophica (London: Thomas

Nelson and Sons Ltd., 1951), vol. 4 (ed. by A. A. Luce), pp. 37, 39-40; Berkeley holds that unless control over future states is present, the transmission of force is mere passivity, not action; see also Reid, pp. 35, 280.

182. AP, p. 10.

183. AP, pp. 108-9.

184. "Determinism," p. 228.

185. Paton, p. 209. Cf. the characterization of soft determinism in Edwards, p. 118.

186. Ross, KET, p. 88.

187. Ross, FOE, pp. 222-23.

188. Ross, KET, p. 88.

189. Silber, "Religion," p. cxvii.

190. CPR, A 533/B 561. Cf. A 556/B 584. Cf. also Religion, p. 45 note, where "predetermination" refers not to a prior determination of Willkür but to the determinism of phenomena, already discussed.

191. Findlay, pp. 194-95.

192. Findlay, p. 196.

193. Cf. James, Principles of Psychology, pp. 548-49; Augustine, Book 1, ch. 10, section 71, p. 20.

194. Virtue, p. 213. See Paton, p. 67, and cf. Lectures, pp. 28-29; Ross, KET, pp. 83-84; Ewing, p. 202.

195. Ricoeur, p. 71.

196. Ricoeur, p. 185. See also pp. 66-68, 124-25, 150; Davis, p. 77; Boyle et al, p. 88; Taylor, "Determinism," p. 229. Here Taylor's emphasis on purpose becomes important, not in explaining the nature of free causality, but in explaining what it is exercised for.

197. See Paton, p. 67.

198. See above, pages 20-30, 34-38.

199. Cf. Campbell, SG, p. 162; Findlay, pp. 370-71, 386; Macmurray, p. 198.

200. Silber discusses "disposition" as a third aspect or function of the will, parallel to Wille and Willkür; "Religion," pp. xciv, cxiv-cxxvii, and "Highest Good," p. 182. The relation of character to freedom, an extremely important topic, cannot be covered here beyond showing that the two are consistent when freedom is interpreted as agent causality.

201. Religion, p. 20. See also pp. 16, 26, 32, 36, 64 (note), 65.

202. See Silber, "Religion," p. cxvii.

203. Religion, p. 42.

204. Religion, p. 43. Cf. Virtue, p. 407.

205. Boyle et al, p. 81. Cf. Taylor, "Determinism," p. 228. Young notes and criticizes this feature of agent causality theories; see pp. 135-37.

206. Continuity of responsibility is often ascribed to character or disposition, which may persist; Silber ("Religion," pp. cxvii-cxviii) attributes this view to Kant. However, in an atomistic metaphysics without substrates, "character" is merely reproduced each instant, independent of the last, and thus seems immune to attribution of past acts; its "permanence" on this view represents only the fact that it can be expected to act again in the same way. To carry forward responsibility, character too must be founded in a persisting substrate. (Cf. F. H. Bradley, pp. 5, 33.)

207. The more logically-oriented definition in terms of "dependence of determinations" given in Chapter Three in fact may involve such a notion of "power" (see below); it does not seem that causality in general can be effectively analyzed in terms of regularity alone. This is the general argument made by Harré and Madden.

208. Harré and Madden, op. cit. They summarize their approach briefly on pp. 140-42. See also Lamprecht, MN, ch. 10 and 11, especially p. 131.

209. Harré and Madden, chapters 5-6, and especially pp. 5-6, 13, 86, 92; cf. p. 130. Cf. also Lamprecht, MN, pp. 144-45.

210. Harré and Madden, pp. 114, 134.

211. Ibid., pp. 11, 57-58, 154-55; cf. p. 177; pp.

91, 96, 104-5, 162.

212. Cf. Lamprecht, MN, pp. 132-33. See the following section below for further discussion of this point.

213. Harré and Madden, pp. 91, 102.

214. Ibid., pp. 15, 19-21, 79-80. Cf. Ducasse, Nature, Mind, and Death, pp. 113-18.

215. Ibid., pp. 59-60, 62, 112, 115, 140. Cf. Lamprecht, MN, pp. 134, 136-37.

216. Ibid., p. 84. See also Lamprecht, MN, pp. 131-32.

217. Ibid., pp. 59, 86-87.

218. Ibid., p. 153. Cf. p. 7, where examples of causation are given drawn (prima facie) from all four of our models. Harré and Madden commend Kant's scientific theory of causation among others (pp. 166, 170-72). See also Lamprecht, MN, pp. 149-50, 155.

219. It may be noted that aspects of Harré and Madden's theory also duplicate characteristics we have found important for agent causality. They speak, for instance, of the concept of a "threshold of action" (pp. 9-10) which would seem closely related to the phenomenon of moral effort; they allow a removal of constraint, such as that of Willkür in allowing an incentive to operate, to be a "cause" (p. 12); and their notion of a "particular" (see esp. pp. 14, 131, 141) would seem to fulfill the function of a "substance" as discussed above, although they are unwilling to call the theory a substance/quality metaphysics (pp. 111, 155, 161, 166). Sterling P. Lamprecht, propounding a similar theory of causation in "Of a Curious Reluctance to Recognize Causal Efficacy," The Philosophical Review 39 (July 1930):409, also emphasizes that the activity of a thing is not another thing, thus pointing out the problem of infinite regress mentioned briefly above. This question will be taken up again briefly in the following section below.

220. It should be noted that my use of the term "agent causality" in this paper to denote the fourth model specifically would not be agreed to by all of those I have given as examples; Taylor, as we have seen, maintains that his theory leaves the question of freedom and determinism open, and thus employs the term in a somewhat broader sense. As stated above, however, it seems difficult to

hold a clear difference between agent and non-agent causality without assuming exactly the requirements which constitute the fourth model.

221. Pages 65-68 above.

222. Hospers, "What Means This Freedom?", p. 141.

223. Wartofsky, p. 310.

224. Cf. Nagel, SS, pp. 115, 144; Ryle, pp. 81-82.

225. Wartofsky, p. 308. See also Hume, Treatise, p. 211; Ducasse, Nature, Mind, and Death, pp. 142-43; James, Some Problems of Philosophy, pp. 210-18, and his Essays in Radical Empiricism, in Essays in Radical Empiricism and A Pluralistic Universe (Gloucester, Mass.: Peter Smith, 1967), pp. 163, 166, 168, 181-86.

226. Compton, The Freedom of Man, p. 26.

227. See, for instance, Macmurray, p. 151; Austin, "A Plea for Excuses," p. 350; Black, p. 37.

228. Melden, p. 47. Cf. Körner, p. 156; C. J. Ducasse, "Determinism, Freedom, and Responsibility," in Hook, ed., p. 167.

229. Melden, p. 182.

230. Boyle et al, p. 85.

231. Boyle et al, pp. 84-85.

232. FMM, p. 461.

233. FMM, p. 459. See also pp. 461-62; Religion, p. 179.

234. Paton, p. 273. See also p. 269; Justice, p. 321, note.

235. CPR, B xxix.

236. Macmurray, p. 69.

237. Religion, p. 135, second note. This curious partial comprehensibility of freedom has been noted, of course, by many others than Kant. Cf., besides those cited as examples, Silber, "Religion," p. cxi, note; Davis, pp.

44, 86; Boyle et al, p. 90.

238. CPrR, p. 94. See also pp. 7, 99, 133; CPR, A 557/B 585.

239. Religion, pp. 17-18, note. Cf. pp. 20-21, and p. 45, note.

240. Religion, p. 46.

241. See Boyle et al, p. 90.

242. Paton, p. 273.

243. Cf. Macmurray, p. 166.

244. Silber, "Religion," p. lxxxix, note 28.

245. James, Principles of Psychology, p. 584.

246. Religion, p. 27.

247. Cf. Copleston, vol. 6, part 2, p. 177.

248. CPrR, p. 32. The distinction between Wille and Willkür allows us to note that this does not mean that choice is necessarily made according to the conception of a rule provided by Wille, but that Willkür is able (is a faculty which possesses the capacity) to so determine the action if it so chooses. Cf. also Paton, p. 210; MacIntyre, p. 250.

249. The distinction here seems both profound and basic: the act is produced and determined by the existent entity, but not by its "nature" or "state." It is possible that the Thomistic distinction of essence, what a thing is, from esse, the act of existence which answers the question whether it is, may be applicable here: the action is produced by the agent not as an entity of a particular type, but as this particular entity, a rational existent or "suppositum." This possibility cannot, however, be investigated here. It may also be noted that a distinction appears to be necessary between the entity and its activity, which is not merely a state and yet not another entity on its own; this is the Aristotelian notion of energeia, the full actuality or activity of a thing. On this topic, see, e.g., Metaphysics, 1047a30; Nicomachean Ethics, 1152b29-1153a17, 1173a13-1174b7; and George A. Blair, "The Meaning of 'Energeia' and 'Entelechia' in Aristotle," International Philosophical Quarterly 7 (1967):101-17. This, too, cannot be treated here. Reid's distinction be-

tween a power and its "exertion" appears to parallel the distinction of entity and activity; see pages 195-96 above.

250. Pages 100-102 above.

251. Cf. pp. 138-39 above.

252. Leibniz, Monadology, section 32, p. 460.

253. This would be the function of the notion of energeia in a complete metaphysical scheme. See note 249 above.

254. This does not exclude the request for motives or reasons for which the will decided to act, as long as these are not conceived of as determinant.

255. Boyle et al, p. 87.

256. See p. 195 above.

257. Boyle et al, p. 87; see also p. 90. An exhaustive discussion of the relation of agent causality to the principle of sufficient reason is impossible here; the treatment given is sufficient to establish the plausibility of agent causality for Kant's purposes.

258. Pages 176-77 above.

259. Religion, p. 133.

Chapter Eight

1. Findlay, for example, suggests that the randomness of the second model may in fact represent the action of the fourth, agent causality, in a case where no rational considerations are available by which the choosing entity may guide its choice; an indeterminist electron, for instance, might be exercising the same sort of causation as a human being's, but "blindly," without motives or reasons even as possible guides for choice. Its situation would then correspond to possessing Willkür without Wille, so to speak; it would lack responsibility not through non-imputability but rather through ignorance. (Cf. Reid, pp. 259-60.) This issue, however, cannot be dealt with here.

2. Cf. CPR, A 227/B 280: "It therefore follows that the criterion of necessity lies solely in the law of possible experience, the law that everything which happens

is determined a priori through its cause in the [field of] appearance."

3. CPR, A 227/B 279.

4. CPR, A 227/B 279-80. Cf. B xxvii-xxviii.

5. CPrR, p. 103.

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