

Necessity and Contingency

INTRODUCTION

THE basic meaning of the words *necessity* and *contingency* is made known to us by the fact that we can substitute for them the familiar words *must* and *may*. "Is there any being which *must* exist?" asks the same question as, "Does anything exist of *necessity*?" "Are all things of the sort which *may* or *may not* exist, or are they divided into those which *must* exist and those which *may* or *may not* exist?" means the same as, "Is everything *contingent* in being or do some things exist *necessarily* and some *contingently*?"

The great issues which involve the opposition between necessity and contingency are concerned with more than questions about being or existence. They also deal with cause and effect, judgment and reasoning, happenings or events, the actions and decisions of men, human history and social institutions. In each case, the problem is formulated by such questions as: Does everything which happens in nature or history happen necessarily? Is everything contingent? Or are some events necessary and others contingent? Is the relation between cause and effect a necessary connection, or do some causes produce their effects contingently?

Are there some propositions which the mind *must* affirm because their truth is necessary? Or are all propositions such that they *may* or *may not* be true, our affirmation or denial of them being contingent upon factors which lie outside the propositions themselves? In reasoning, does the conclusion always follow by necessity from the premises if it follows at all? And are all conclusions which follow necessarily from their premises necessarily true, or may some be necessary truths and some contingent?

Are men necessitated in all their acts, or are certain actions contingent upon the exercise of their will and in this sense free? Does human liberty consist merely in the freedom of a man's action from the external necessity of coercion or constraint; or does it consist in a man's being able to choose whatever he chooses, freely rather than necessarily? Is every act of the will necessarily determined, or are some acts of the will acts of free choice?

Are certain human institutions, such as the family and the state, necessary? Are men compelled to live socially or can they choose the solitary life? If domestic and political society are necessary, are the ways in which they are organized also necessary, or are such things as monogamy in the family and monarchy in the state contingent? Are such things as war, slavery, poverty, and crime necessary features of human society, or are they the result of circumstances which are contingent and which can therefore be remedied?

These questions indicate the range of subject matters in which issues are raised concerning the necessary and the contingent. They also indicate that the other ideas to which necessity and contingency have relevance are too manifold to permit an enumeration of all the other chapters in which some aspect of necessity and contingency is discussed. This chapter stands to the others as a kind of summary of the theme of necessity and contingency. It assembles in one place the various topics, problems, or subject matters which traditionally engage the human mind with that theme.

Two chapters alone demand specific mention as, in a sense, being concerned with ideas that seem to be inseparable from the notions

of necessity and contingency. They are FATE and CHANCE. Though they stand opposed to one another as the necessary to the contingent, they do not cover every application of this opposition. They are largely concerned with necessity and contingency in the realm of change, in the causation of the events of nature or the happenings of history. They do not deal, at least not directly, with necessity and contingency in being or existence, in thought or knowledge, in human acts and social institutions.

THE NECESSARY AND the contingent do not seem to be opposed in exactly the same way in each of the four areas—namely, being, change, thought, and action—in which they raise basic issues.

In the sphere of human action, for example, writers like Hobbes, Locke, and Hume substitute the notion of liberty for contingency as the opposite of necessity. The meaning of necessity alters in consequence. Liberty, according to these authors, implies the absence not of all necessity, but only of external necessity in the form of compulsion. An internal necessity, they think, is quite compatible with complete freedom.

Hume therefore dismisses the supposed conflict between liberty and necessity as groundless. "By liberty," he writes, "we can only mean a *power of acting or not acting, according to the determinations of the will*; that is, if we choose to remain at rest, we may; if we choose to move, we also may. Now this hypothetical liberty is universally allowed to belong to everyone who is not a prisoner and in chains . . . Liberty, when opposed to necessity, not to constraint, is the same thing with chance; which is universally allowed to have no existence."

Similarly, Locke defines liberty as a man's power "to do or forbear doing any particular action, according as its doing or forbearance has the actual preference in the mind, which is the same thing as to say, according as he himself wills it." Liberty in this sense, he adds, belongs not to the will, the acts of which are necessitated by their causes, but to the man who is under no external necessity, in the form

of compulsion, to do what is contrary to his will or to refrain from doing what he wills.

Hobbes seems to go even further along the same line of thought. Holding that liberty is destroyed only by external impediments to action, he uses "necessity" in a sense which makes it consistent with liberty, or inseparable from it. "The actions which men voluntarily do," he says, "because they proceed from their will, proceed from *liberty*; and yet, because every act of man's will, and every desire, and inclination, proceeds from some cause, and that from another cause, in a continual chain (whose first link is in the hand of God, the first of all causes), they proceed from *necessity*."

Yet if what Hobbes means by "external impediments" represents the same nullification of liberty which others call "compulsion" or "restraint," then there is at least one meaning of "necessity" which stands opposed to liberty. Enumerating the meanings of "necessary," Aristotle lists as one sense "the compulsory or compulsion, *i.e.*, that which impedes or tends to hinder, that which is contrary to impulse or purpose . . . or to the movement which accords with purpose and with reasoning." It is in a related sense that Plato opposes necessity to intelligence. Necessity represents for him those resistant factors in nature which the mind of man or God must overcome, or persuade to give way, if reason or purpose is to prevail in the coming to be of anything. In this sense, necessity like chance is opposed to purpose. Blind necessity and blind chance both exclude the operation of final causes; both exclude the possibility that the events of nature are directed toward an end.

WE SEEM TO HAVE found almost universal agreement on the point that there is one sense in which necessity conflicts with liberty. But this agreement does not affect the issue whether liberty is more than freedom from external coercion. There are those, like Aquinas, who think that man's will is free in its acts of choice with regard to "particular contingent means." Aquinas agrees that what is called "necessity of coercion" is "altogether repugnant to the will." The same act cannot be absolutely coerced and voluntary. But the

question is whether the will's acts are necessarily determined by causes operating within the sphere of the will itself.

Aquinas names two modes of necessity which operate *within* the sphere of the will and restrict its freedom. One is the natural necessity that the will should desire an ultimate end, such as the complete good or happiness. If a man wills any object at all as the ultimate goal of his life, he cannot will anything other or less than that which can satisfy all his natural desires. The other necessity is that which concerns the use of those means which are absolutely indispensable conditions for reaching the end being sought. This may be an absolute or a conditional necessity. When the end is itself necessary (*e.g.*, happiness), whatever means are necessary thereto necessitate the will absolutely. When a certain end is not necessary, but has been freely adopted (*e.g.*, a certain destination), and when *only one* means is available (*e.g.*, one mode of transportation), then it becomes necessary to choose that means. But this necessity is conditional since it remains in force only on the condition that we continue to have a certain end in view—an end we can relinquish at any time as freely as we adopted it.

According to Aquinas, this leaves a great many acts of the will which are in no way necessitated: those in which there is no necessary connection between the means and a given end, and those in which a given means is necessary only on the condition that a certain end is sought. If the end need not be sought, then the will is free not to choose the means of achieving it; and if, when the end is necessarily sought, alternative means are available, then the will is free to choose one rather than another.

According to this theory, liberty consists in the absence of internal as well as external necessity. Furthermore, liberty seems to be related positively to contingency; insofar as freedom of choice depends on a contingent connection between means and ends, or upon the contingent, *i.e.*, the conditional, character of the end. On the other hand, those who hold that the will is never free from internal necessity insist that the act of choice, even

with respect to contingent means, is always caused. If being caused is equivalent to being determined—which seems to be the view of Hobbes, Locke, and Hume—then whether or not we know what causes a particular choice, our wills are so determined that we could not have chosen otherwise.

THE PROBLEM OF the freedom of the will in relation to the causes which determine its acts is considered in the chapter on WILL. The foregoing discussion suffices here for the purpose of throwing light on the meaning of necessity. If now we shift from human action to the realm of becoming, change, or motion, we face the question of the relation between necessity and causation in its most general form.

In the realm of nature the alternatives to necessity are referred to as "chance" and as "contingency." The significance of these alternatives depends on the theory of causation. According to one opinion, every effect is necessarily determined by its causes, and every cause necessarily produces certain effects. Given the causal chain of past events leading up to the present, every future event is necessarily determined. Nothing that ever happens could happen otherwise. Nothing happens contingently or by chance. This theory of causation is accordingly a doctrine of universal necessity or absolute determinism in the realm of change.

Calvin follows the teaching of Augustine on this point. Augustine, he says, "everywhere teaches, that if anything is left to fortune, the world moves at random . . . he also excludes the contingency which depends on human will, maintaining . . . that no cause must be sought for but the will of God."

"In nature," writes Spinoza, "there is nothing contingent, but all things are determined from the necessity of the divine nature to exist and act in a certain manner." Though nothing which exists or happens is contingent, "God alone exists from the necessity of His own nature and acts alone from the necessity of His own nature." The divine necessity is therefore different from the necessity of everything else which follows from the divine nature. One is the necessity of freedom or self-determination,

the other the necessity of compulsion, or determination by another. "That thing is called free," says Spinoza, "which exists from the necessity of its own nature alone, and is determined to action by itself alone. That thing, on the other hand, is called necessary, or rather compelled, which by another is determined to existence and action in a fixed and prescribed manner."

Hume's statement that there is "no such thing as *Chance* in the world," would appear to agree with Spinoza's denial of contingency. But Hume also seems to deny the perception of any necessary connection between cause and effect. This is not to say that events happen without cause, but only that "our ignorance of the real cause of any event has the same influence on the understanding" as if nothing were necessarily determined by its causes.

"We are never able," Hume thinks, "to discover any power or necessary connexion, any quality, which binds the effect to the cause, and renders the one an infallible consequence of the other . . . One event follows another; but we never can observe any tie between them. They seem *conjoined*, but never *connected* . . . Our idea, therefore, of necessity and causation arises entirely from the uniformity observable in the operations of nature, where similar objects are constantly conjoined together, and the mind is determined by custom to infer the one from the appearance of the other. These two circumstances form the whole of that necessity, which we ascribe to matter. Beyond the constant *conjunction* of similar objects, and the consequent *inference* from one to the other, we have no notion of any necessity or connexion."

But the question remains whether in the order of nature itself particular events are necessarily determined or happen contingently. The fact that we may be ignorant of real necessities does not, as Hume seems to admit, imply their nonexistence. Our saying it is only probable that the sun will rise tomorrow may reflect our inadequate knowledge of causes rather than a real indeterminacy in the order of nature. On the other hand, to say as Hume does that chance has no place in nature, may mean only

that "nothing exists without a cause of its existence," rather than that whatever happens is necessarily determined by its causes.

AS INDICATED IN the chapter on CHANCE, two things must be distinguished here: the absolutely uncaused—the spontaneous or fortuitous—and the contingently caused, or that which depends upon the coincidence of a number of independent causes. A given condition may be necessary to produce a certain result, as, for example, oxygen may be necessary for combustion. But by itself it may not be sufficient for the production of that effect. If the maxim, "nothing exists without a cause of its existence," requires a cause or causes adequate to produce the effect, then the maxim is equivalent to the principle of sufficient reason. Whenever two or more causes, each of which may be necessary, are not sufficient in separation, the existence of the effect depends upon their combination; and the effect is contingent if the required combination of causes is itself not necessarily caused.

The issue concerning contingency in nature thus seems to be more sharply stated when there is no reference to our knowledge or ignorance of causes. On this issue, Aristotle and Spinoza appear to be more clearly opposed to one another than Hume is to either.

If things do not take place of necessity, "an event," according to Aristotle, "might just as easily not happen as happen; for the meaning of the word 'fortuitous' with regard to present or future events is that reality is so constituted that it may issue in either of two opposite directions." For example, "a sea-fight must either take place tomorrow or not, but it is not necessary that it should take place tomorrow, neither is it necessary that it should not take place, yet it is necessary that it either should or should not take place tomorrow." Though Aristotle holds that "one of the two propositions in such instances must be true and the other false," he also insists that "we cannot say determinately that this or that is false, but must leave the alternative undecided."

Aristotle's view with regard to propositions about future particular events is that our judgments cannot be either true or false, not be-

cause of insufficient knowledge on our part, but because future particulars are in themselves always contingent. Nothing in the nature of things or causes—existent in the past or present—necessarily determines them to happen. They will occur only if independent causes happen to coincide. Since these causes are independent—not determined to combination by their natures—the coincidence will be a matter of chance, not of necessity.

This theory of contingency in the realm of change—involving an affirmation of the real existence of contingent events—raises problems for the theologian concerning God's knowledge and will. Does the fact that nothing happens contrary to God's will imply that whatever happens happens necessarily? Aquinas answers that "God wills some things to be done necessarily, some contingently . . . Therefore, to some effects, He has attached necessary causes that cannot fail; but to others defectible and contingent causes, from which arise contingent effects . . . it being His will that they should happen contingently."

Similarly, the fact that God knows all things infallibly does not seem to Aquinas to be inconsistent with the real contingency of some things. He explains that "whoever knows a contingent effect in its causes only, has merely a conjectural knowledge of it." But "God knows all contingent things not only as they are in their causes, but also as each one of them is actually in itself . . . Hence it is manifest that contingent things are infallibly known by God, inasmuch as they are subject to the divine sight in their presentiality; yet they are future contingent things in relation to their own causes."

This has a bearing on the difference between human and divine apprehension of future contingent things. "Things reduced to actuality in time," Aquinas declares, "are known by us successively in time, but by God they are known in eternity, which is above time. Whence to us they cannot be certain, since we know future contingent things only as contingent futures; but they are certain to God alone, Whose understanding is in eternity above time. Just as he who goes along the road does not see those who come after him;

whereas he who sees the whole road from a height sees at once all those travelling on it. Hence," Aquinas continues, "what is known by us must be necessary, even as it is in itself; for what is in itself a future contingent cannot be known by us. But what is known by God must be necessary according to the mode in which it is subject to the divine knowledge . . . but not absolutely as considered in its proper causes." It does not follow, therefore, that *everything known by God must necessarily be*; for that statement, according to Aquinas, "may refer to the thing or to the saying. If it refers to the thing, it is divided and false; for the sense is, *Everything which God knows is necessary*. If understood of the saying, it is composite and true, for the sense is, *This proposition, 'that which is known by God is,' is necessary*."

With regard to human knowledge, Aquinas makes another distinction in answering the question whether man can have scientific or certain knowledge of contingent things. If, as Aristotle seems to hold, the objects of knowledge are necessary, not contingent things, then the realm of contingency belongs to opinion, conjecture, or probability. Insofar as the particular events of nature are contingent, they cannot be objects of scientific knowledge. But, according to Aquinas, "contingent things can be considered in two ways: either as contingent or as containing some element of necessity, since every contingent thing has in it something necessary; for example, that Socrates runs is in itself contingent; but the relation of running to motion is necessary, for it is necessary that Socrates moves if he runs."

The contingency that Socrates *may or may not* run does not alter the hypothetical necessity that *if* he runs, he *must* move. In its concern with contingent things, natural science is concerned only with such hypothetical necessities. Unlike physics, other sciences may deal with absolutely necessary things. That the objects of mathematics are of this sort seems to be an opinion shared by William James and Kant, Hume and Descartes, Plato and Aristotle. But they do not agree on whether the necessities of mathematics belong to reality or have only ideal existence, *i.e.*, whether they ex-

ist apart from or only in the human mind. This issue is connected with another major issue concerning necessity and contingency, namely, whether any reality has necessary existence.

AS WE HAVE SEEN, those who discuss necessity and contingency in the domain of human acts and natural events seem to construe these alternatives differently, according as they conceive liberty and chance in terms of different theories of causation. With regard to being or real existence, however, there seems to be a common understanding of the alternatives, even among those who do not agree that God alone is a necessary being because they think that this world is also determined to exist as a necessary consequence of God's existence.

In the preceding discussions, one meaning of contingency has repeatedly appeared. The contingent is that which can be otherwise. "That which cannot be otherwise is necessarily as it is," writes Aristotle, "and from this sense of 'necessary' all its other meanings are somehow derived." This insight is sometimes expressed by the statement that the opposite of the necessary is the impossible, whereas the contingent—which is neither necessary nor impossible—includes contrary possibilities.

In logical analysis what is called the "modality of necessity" is attributed to judgments the contradictories of which are self-contradictory; e.g., if the proposition 'the whole is *not* greater than any of its parts' represents an impossible judgment, then the contradictory proposition 'the whole *is* greater than any of its parts' represents a necessary judgment. In contrast, as Hume points out, "*that the sun will not rise tomorrow* is no less intelligible a proposition, and implies no more contradiction than the affirmation *that it will rise*." These two propositions represent contrary possibilities. No matter which turns out to be true, the event could have been otherwise.

In logical analysis some complication seems to arise from the fact that the necessary has two opposites: the impossible on the one hand, and the possible or contingent on the other. This is usually clarified by the recognition that the possible is the opposite of the

impossible as well as of the necessary. In that sense of "possible" which excludes only the impossible, the necessary is, of course, possible, for what is necessary cannot be impossible. But in that sense of "possible" which implies contrary possibilities, the possible excludes the necessary as well as the impossible.

"From the proposition 'it may be' it follows," according to Aristotle, "that it is not impossible, and from that it follows that it is not necessary; it comes about therefore that the thing which must necessarily be need not be; which is absurd. But again, the proposition 'it is necessary that it should be' does not follow from the proposition 'it may be,' nor does the proposition 'it is necessary that it should not be.' For the proposition 'it may be' implies a twofold possibility, while, if either of the two former propositions is true, the twofold possibility vanishes. For if a thing may be, it may also not be, but if it is necessary that it should be or that it should not be, one of the two alternatives will be excluded. It remains, therefore, that the proposition 'it is not necessary that it should not be' follows from the proposition 'it may be.' For this is true also of that which must necessarily be."

Of the same thing we can say that it *may* be and that it *may not* be; but we cannot say of the same thing both that it *may* be and that it *must* be, or that it *may not* be and that it *cannot* be. As Aristotle traces the implications of these modes of 'to be,' we see that *may-be* implies *may-not-be*, which contradicts *must-be*; and similarly that *may-not-be* implies *may-be*, which contradicts *cannot-be*.

When we pass from the analysis of propositions or judgments to the consideration of being or existence, the situation is simpler. Since the impossible is that which cannot exist, whatever does exist must either be necessary or possible. Here the necessary and the possible are generally understood to exclude one another. The necessary is that which *cannot* not be, the possible that which *can* not be.

IN SPITE OF THIS common understanding of the alternatives, there are basic differences among the authors of the great books in regard to the analysis or demonstration of necessary being.

Aristotle, for example, tends to identify the possible with the perishable—with that which both comes into being and passes away. Those substances are necessary, in contrast, which are not subject to generation and corruption. Holding that the matter of the celestial bodies differs from that of terrestrial bodies with respect to the potentiality for substantial change, Aristotle seems to regard the heavenly bodies as necessary beings, eternal in the sense of always existing, even though changeable in regard to place, *i.e.*, subject to local motion. The changing things of this earth are all contingent in being, for the mutability to which their matter inclines them includes coming to be and passing away.

This analysis of necessity and contingency in terms of matter's potentialities leads to another conception of necessary being—that of a totally immutable being which has necessary existence because it lacks matter entirely and, since it consists of form alone, is purely actual. Whether or not there are for Aristotle substances other than the prime mover which are necessary because they are immaterial beings, he attributes pure actuality only to that one necessary being which is an *unmoved* mover.

Aquinas seems to adopt both of Aristotle's senses of "necessary being." He treats the celestial bodies and the angels as having necessity to the extent that they are immutable. But their immutability is limited in his opinion to the fact that they are by nature imperishable—the celestial bodies because of their matter; the angels because they are simple substances, not composed of matter and form. Since they are creatures they cannot be altogether immutable. "All creatures," Aquinas writes, "before they existed, were possible"—and in this sense contingent as regards their being, not necessary. "As it was in the Creator's power to produce them before they existed in themselves," he continues, "so likewise is it in the Creator's power when they exist in themselves to bring them to nothing." Furthermore, at every moment of their existence, their contingent being depends upon God's power. God preserves them in being, Aquinas says, "by ever giving them existence," for "if

He took away His action from them, all things would be reduced to nothing."

In the strict sense then of "necessary being," no creature, but only God, the uncreated being, is truly a necessary being—because in God alone existence is identical with essence. Only a being whose very essence it is to exist is incapable of not existing; only such a being is necessary in the sense of being purely actual. All created things must be contingent, for if in their case to exist belonged to their very natures, God could not have created them by causing their natures to exist, nor when they did exist would His power be necessary to sustain them in being.

Where Aquinas defines God's necessity in terms of the *identity* of essence and existence, Descartes and Spinoza tend to conceive God as necessary because his essence is such that his existence *follows from* it. The difference may affect the meaning with which it is said that God is uncaused or that God is self-caused. "If its existence is caused," Aquinas writes, "nothing can be the sufficient cause of its own existence." According to Descartes, to say that God is "cause of His own existence . . . merely means that the inexhaustible power of God is the cause or reason why he needs no cause."

Descartes's position seems to be that that which is self-caused in the sense of having its existence determined by its own nature or essence, is also uncaused in the sense that its existence is not caused by anything outside itself. "Existence," he writes, "is involved in the essence of an infinite being, no less than the equality of its angles to two right angles is involved in that of a triangle." But though this suggests the notion of God's existence following from His essence, Descartes also says that "in God existence is not distinguished from essence."

For Descartes as for Aquinas the basic point remains that that which does not depend for its being upon any external cause, exists necessarily. Descartes, furthermore, associates the necessary existence of an independent being with that being's infinity or perfection of nature. That which is conceived as infinite or perfect cannot be conceived as lacking exist-

tence. "The notion of possible or contingent existence," he says, "belongs only to the concept of a limited thing."

Like Descartes, Spinoza conceives God as the only infinite and immutable being which exists necessarily in the sense of being "that whose essence involves existence." But unlike him Spinoza also attributes necessity in another sense to every finite and mutable thing which God causes to exist; for in his view, God not only exists necessarily but, acting from the necessity of His own nature, God also necessitates whatever follows as a consequence of His action. No other world than this is possible. "Things could be produced by God," Spinoza writes, "in no other manner and in no other order than that in which they have been produced." Furthermore, since whatever is in God's power "necessarily follows from it, and consequently exists necessarily," it is impossible for this world not to have existed. The existence of this particular world is as inseparable from God's existence as God's own existence is inseparable from His essence or nature.

In the tradition of western thought, there is, perhaps, no deeper theological issue than that which opposes the freedom of God's will to the necessity of God's acting according to His nature; and which, in consequence, sets the possibility of other worlds (or even of no world at all) against the necessity that, if God exists, this particular world inevitably follows.

Taking the other side on both points, Aquinas, for example, argues that "since the goodness of God is perfect, and can exist without other things inasmuch as no perfection can accrue to Him from them, it follows that His willing things apart from Himself is not absolutely necessary." As for the particular features of this world, Aquinas says that "since God does not act from natural necessity" nor from a will that is "naturally or from necessity determined" to the things which exist, it follows that "in no way at all is the present course of events produced by God from any necessity, so that other things could not happen . . . Wherefore, we must simply say that God can do other things than those He has done." Other, and even better, worlds than

this are possible, for "God could make other things, or add something to the present creation; and then there would be another and a better universe."

Nor does the Christian theologian admit that the divine nature is subject to any necessity. "We do not put the life of God or the fore-knowledge of God under necessity," writes Augustine, "if we should say that it is necessary that God should live forever, and foreknow all things; as neither is His power diminished when we say that He cannot die or fall into error—for this is in such a way impossible to Him, that if it were possible for Him, He would be of less power. But assuredly He is rightly called omnipotent, though He can neither die nor fall into error. For He is called omnipotent on account of His doing what He wills, not on account of His suffering what He wills not; for if that should befall him, He would by no means be omnipotent. Wherefore, He cannot do some things for the very reason that He is omnipotent."

ONE OTHER TRADITIONAL issue is raised by the conception of God as a necessary being; or, more strictly, as the only necessary being in the sense of having a nature which involves existence. It is formed by opposite views of the validity of the so-called "ontological" or *a priori* argument for God's existence.

Both Descartes and Spinoza argue, like Anselm and others before them, that since God cannot be conceived as not existing, it is impossible in fact for God not to exist. Those who reject such reasoning do not deny that it is unintelligible or self-contradictory to think of God as merely possible rather than necessary, *i.e.*, as requiring a cause outside Himself in order to exist. Kant, for example, admits that existence must be included in the conception of God as *ens realissimum*—the most real and perfect being. But he denies that the real existence of the object so conceived is implied by the logical necessity of the conception itself.

This amounts to saying that it is possible for a being we cannot conceive except as existing, not to exist. Aquinas seems to make the same critical point when he says that even

if everyone understood by the word "God" something than which nothing greater can be conceived, and therefore a being necessarily existing, still it would not follow that "he understands that what the word signifies actually exists, but only mentally."

Stated in its most general form, the problem is whether that which is inconceivable by the human mind is impossible in reality; or whether that which is logically necessary, or necessary in thought, is also necessary in fact or existence. However that issue is resolved, it must be noted that among the so-called *a posteriori* demonstrations of God's existence, or arguments from the existence of certain effects to the existence of their cause, one mode of reasoning turns upon the distinction between contingent and necessary being.

If contingent beings exist (as it is evident they do, from the mutability and perishabil-

ity of physical things), *and if* each contingent being is by definition incapable of causing its own existence, *and if* one contingent being cannot cause the existence of another, *and if* everything which exists must have a cause for its existence, either in itself or in another; *then* from all these premises it would seem to follow that a necessary being exists.

Here the conclusion may follow with logical necessity from the premises, but whether it is necessarily true depends upon the truth of the premises. That in turn seems to depend upon the understanding of what it means for anything to be contingent or necessary in being. It may also depend on whether or not the reasoning escapes Kant's criticism of all *a posteriori* arguments for the existence of a necessary being, namely, that such reasoning always implicitly contains the ontological argument, and is thereby invalidated.