Necessary and Contingent Truths (c. 1686)

An affirmative truth is one whose predicate is in the subject; and so in every true affirmative proposition, necessary or contingent, universal or particular, the notion of the predicate is in some way contained in the notion of the subject, in such a way that if anyone were to understand perfectly each of the two notions just as God understands it, he would by that very fact perceive that the predicate is in the subject. From this it follows that all the knowledge of propositions which is in God, whether this is of the simple intelligence, concerning the essence of things, or of vision, concerning the existence of things, or mediate knowledge concerning conditioned existences, results immediately from the perfect understanding of each term which can be the subject or predicate of any proposition. That is, the a priori knowledge of complexes arises from the understanding of that which is not complex.a

An absolutely necessary proposition is one which can be resolved into identical propositions, or, whose opposite implies a contradiction. I will cite a numerical example. I shall call every number which can be exactly divided by two, 'binary', and every one which can be divided by three or four 'ternary' or 'quaternary', and so on. Further, we may understand that every number is resolved into those which divide it exactly. I say, therefore, that the proposition 'A duodenary' is a quarternary' is absolutely necessary, for it can be resolved into identical propositions in this way. A duodenary is a binary senary (by definition); a senary is a binary ternary (by definition). Therefore a duodenary is a quaternary (by definition); therefore a duodenary is a quaternary. Therefore

a duodenary is a quaternary; q.e.d. But even if other definitions were given, it could always be shown that the matter would come to this in the end. This type of necessity, therefore, I call metaphysical or geometrical. That which lacks such necessity I call contingent, but that which implies a contradiction, or whose opposite is necessary, is called *impossible*. The rest are called *possible*.

In the case of a contingent truth, e even though the predicate is really in the subject, yet one never arrives at a demonstration or an identity, even though the resolution of each term is continued indefinitely. In such cases it is only God, who comprehends the infinite at once, who can see how the one is in the other, and can understand a priori the perfect reason for contingency; in creatures this is supplied a posteriori, by experience. So the relation of contingent to necessary truths is somewhat like the relation of surd ratios (namely, the ratios of incommensurable numbers) to the expressible ratios of commensurable numbers. For just as it can be shown that a lesser number is in a larger, by resolving each of the two into its largest common measure, so also propositions or truths of essence are demonstrated by carrying out a resolution of terms until one arrives at terms which, as is established by the definitions, are common to each term. But just as a larger number contains another which is incommensurable with it. though even if one continues to infinity with a resolution one will never arrive at a common measure, so in the case of a contingent truth you will never arrive at a demonstration, no matter how far you resolve the notions. The sole difference is that in the case of surd relations we can, none the less, establish demonstrations, by showing that the error involved is less than any assignable error, but in the case of contingent truths not even this is conceded to a created mind. And so I think that I have disentangled a secret which had me perplexed for a long time; for I did not understand how a predicate could be in a subject, and yet the proposition would not be a necessary one. But the knowledge of geometry and the analysis of the infinite lit this light in me, so that I might understand that notions too can be resolved to infinity.

From this we learn that there are some propositions which

pertain to the essences, and others to the existences of things. Propositions of essence are those which can be demonstrated by the resolution of terms; these are necessary, or virtually identical, and so their opposite is impossible, or virtually contradictory. The truth of these is eternal; not only will they hold whilst the world remains, but they would have held even if God had created the world in another way. Existential or contingent propositions differ entirely from these. Their truth is understood a priori by the infinite mind alone, and cannot be demonstrated by any resolution. These propositions are such as are true at a certain time; they express, not only what pertains to the possibility of things, but also what actually exists, or would exist contingently if certain things were granted—for example, that I am now alive, or that the sun is shining. For even if I say that the sun is shining at this hour in our hemisphere because its previous motion was such that, granted its continuation, this event would certainly follow, yet (to say nothing of the fact that its obligation to continue is not necessary) the fact that its motion was previously such is similarly a contingent truth, for which again a reason must be sought. And this cannot be given in full except as a result of a perfect knowledge of all the parts of the universe—a task which surpasses all created powers. For there is no portion of matter which is not actually subdivided into others; so the parts of any body are actually infinite, and so neither the sun nor any other body can be known perfectly by a creature. Much less can we arrive at the end of our analysis if we seek the mover of each body which is moved. and again the mover of this; for we shall always arrive at smaller bodies without end. But God does not need this transition from one contingent to another contingent which is prior or more simple, a transition which can have no end. (Further, one contingent thing is not really the cause of another, even though it seems so to us.) Rather, in each individual substance, God perceives the truth of all its accidents from its very notion, without calling in anything extrinsic; for each one in its way involves all others, and the whole universe. So all propositions into which existence and time enter have as an ingredient the whole series of things,

nor can 'now' or 'here' be understood except in relation to other things. Consequently, such propositions do not admit of demonstrations, i.e. of a terminable resolution by which their truth may appear. The same applies to all the accidents of individual created substances. Indeed, even if some one could know the whole series of the universe, even then he could not give a reason for it, unless he compared it with all other possibles. From this it is evident why no demonstration of a contingent proposition can be found, however far the resolution of notions is continued.

But it must not be thought that only particular propositions are contingent, for there are (and can be inferred by induction) certain propositions which are for the most part true; there are also propositions which are almost always true, in the course of nature at any rate, so that an exception would be ascribed to a miracle. Indeed, I think that in this series of things there are certain propositions which are true with absolute universality,d and which cannot be violated even by a miracle. This is not to say that they could not be violated by God, but rather that, when he chose this series of things, by that very act he decreed that he would observe them, as the specific properties of just this chosen series. And through these propositions, once they have been established by the force of the divine decree, a reason can be given for other universal propositions, or even of many of the contingent things which can be observed in this universe. For from the first essential laws of the series-true without exception, and containing the entire purpose of God in choosing the universe, and so including even miracles—there can be derived subordinate laws of nature, which have only physical necessity and which are not repealed except by a miracle, through consideration of some more powerful final cause. Finally, from these there are inferred others whose universality is still less; and God can reveal even to creatures the demonstrations of universal propositions of this kind, which are intermediate to one another, and of which a part constitutes physical science. But never, by any analysis, can one arrive at the absolutely universal laws nor at the perfect reasons for individual things; for that knowledge necessarily

belongs to God alone. It should not disturb anyone that I have just said that there are certain essential laws for this series of things, though I said above that these same laws are not necessary and essential, but are contingent and existential. For since the fact that the series itself exists is contingent and depends on the free decrees of God, its laws also will be contingent in the absolute sense; but they will be hypothetically necessary and will only be essential given the series.

This will now help us to distinguish free substances from others. The accidents of every individual substance, if predicated of it, make a contingent proposition, which does not have metaphysical necessity. That this stone tends downwards when its support has been removed is not a necessary but a contingent proposition, nor can such an event be demonstrated from the notion of this stone by the help of the universal notions which enter into it, and so God alone perceives this perfectly. For he alone knows whether he will suspend by a miracle that subordinate law of nature by which heavy things are driven downwards; for others neither understand the absolutely universal laws involved, nor can they perform the infinite analysis which is necessary to connect the notion of this stone with the notion of the whole universe, or with absolutely universal laws. But at any rate it can be known in advance from subordinate laws of nature that unless the law of gravity is suspended by a miracle, a descent follows. But free or intelligent substances possess something greater and more marvellous, in a kind of imitation of God. For they are not bound by any certain subordinate laws of the universe, but act as it were by a private miracle, on the sole initiative of their own power, and by looking towards a final cause they interrupt the connexion and the course of the efficient causes that act on their will. So it is true that there is no creature 'which knows the heart'e which could predict with certainty how some mind will choose in accordance with the laws of nature; as it could be predicted (at any rate by an angel) how some body will act, provided that the course of nature is not interrupted. For just as the course of the universe is changed by the free will of God, so the course of the mind's thoughts is changed by its free will; so that, in the

case of minds, no subordinate universal laws can be established (as is possible in the case of bodies) which are sufficient for predicting a mind's choice. But this does not prevent the fact that the future actions of the mind are evident to God. just as his own future actions are. For he knows perfectly the import of the series of things which he chooses, and so also of his own decree; and at the same time he also understands what is contained in the notion of this mind, which he himself has admitted into the number of things which are to exist, inasmuch as this notion involves the series of things itself and its absolutely universal laws. And although it is most true that the mind never chooses what at present appears the worse. yet it does not always choose what at present appears the better: for it can delay and suspend its judgement until a later deliberation, and turn the mind aside to think of other things. Which of the two it will do is not determined by any adequate sign or prescribed law. This at any rate holds in the case of minds which are not sufficiently confirmed in good or evil; the case of the blessed is different.

From this it can be understood what is that 'indifference' which accompanies freedom. Just as contingence is opposed to metaphysical necessity, so indifference excludes not only metaphysical but also physical necessity. It is in a way a matter of physical necessity that God should do everything in the best way possible, though it is not in the power of any creature to apply this universal law to individual things, and to draw from this any certain conclusions concerning free divine actions. It is also a matter of physical necessity that those who are confirmed in the good—the angels or the blessed-should act in accordance with virtue, so that in certain cases, indeed, it could even be predicted with certainty by a creature what they will do. Again, it is a matter of physical necessity that something heavy tends downwards, and that the angles of incidence and reflection are equal, and other things of this sort. But it is not a matter of physical necessity that men should choose something in this life, however specious and apparent a particular good may be; though there is sometimes a very strong presumption to that effect. It may indeed never be possible for there to be an

absolute metaphysical indifference, such that the mind is in exactly the same state with respect to each contradictory, and that anything should be in a state of equilibrium with, so to speak, its whole nature. For we have already noted that a predicate, even if future, is already truly in the notion of the subject, and that the mind is not, therefore, metaphysically speaking indifferent; for God already perceives all its future accidents from the perfect notion he has of it, and the mind is not at present indifferent with respect to its own eternal notion. Yet the mind has this much physical indifference, that it is not even subject to physical necessity, far less metaphysical: that is, no universal reason or law of nature is assignable from which any creature, no matter how perfect and well-informed about the state of this mind, can infer with certainty what the mind will choose—at any rate naturally, without the extraordinary concourse of God.

So far we have expounded, as far as our purpose went, the nature of truth, of contingence, of indifference, and (above all) the freedom of the human mind. Now, however, we must examine in what way contingent things, and especially free substances, depend in their choice and operation on the divine will and predetermination. My opinion is that it must be taken as certain that there is as much dependence of things on God as is possible without infringing divine justice. In the first place, I assert that whatever perfection or reality things have is continually produced by God, but that their limitation or imperfection belongs to them as creatures, just as the force impressed on any body by an agent receives some limitation from the body's matter or mass and from the natural slowness of bodies, and the greater the body the less (other things being equal) is the motion which arises. So also that which is real in some ultimate determination of a free substance is necessarily produced by God, and I think that this fact covers what can reasonably be said about physical predetermination. I understand a 'determination' to be produced when a thing comes into that state in which what it is about to do follows with physical necessity. For there is never any metaphysical necessity in mutable things, since it is not even a matter of metaphysical necessity that a body should continue in motion if no other body impedes it; just as some contingent thing is not determined with metaphysical necessity until it actually exists. That determination is sufficient, therefore, by which some act becomes physically necessary. I understand that determination which is opposed to indifference, namely a determination to some metaphysical or physical necessity, or, a consequence demonstrable from the resolution of terms or from the laws of nature. For a determination which does not impose necessity on contingent things, but affords certainty and infallibility, in the sense in which it is said that the truth of future contingents is determined—such a determination never begins, but always was, is since it is contained from eternity in the very notion of the subject, perfectly understood, and is the object of a kind of divine knowledge, whether of vision, or mediate knowledge.

From this it is now apparent that it is possible to reconcile with the divine predetermination the actual conditioned decree of God (or at any rate that decree which depends on certain foreseen factors) by which God decides to bestow his predetermination. For God understands perfectly the notion of this free individual substance, considered as possible, and from this very notion he foresees what its choice will be, and therefore he decides to accommodate to it his predetermination in time, it being granted that he decides to admit it among existing things. But if one examines the innermost reasons a new difficulty arises. For the choice of a creature is an act which essentially involves divine predetermination, without which it is impossible for that choice to be exercised; further, we cannot accept the placing of an impossible condition on the divine decree. From this it follows that God, whilst he foresees the future choice of the creature, by that very act foresees his own predetermination also, and so his own future predetermination; therefore he foresees his own decree, in so far as all contingent things essentially involve the divine decrees. Therefore he would decree something because he sees that he has already decreed it, which is absurd.

This difficulty, which indeed is very great in this argument, can, I think, be met in this way. I grant that when God decides to predetermine the mind to a certain choice because he

has foreseen that it would choose in this way if it were admitted to existence, he foresees also his own predetermination and his own decree of predetermination—but only as possible; he does not decree because he has decreed. The reason is that God first considers a mind as possible before he decrees that it should actually exist. For the possibility or notion of a created mind does not involve existence. But while God considers it as possible, and knows perfectly in it all its future events as possible but as connected with it (connected contingently, yet infallibly), at that very moment he understands, that is he knows perfectly, all that which will follow its existence. Further, whilst he understands perfectly the notion of this individual substance, still considered as possible, by that very fact he also understands his own decrees, similarly considered as possible; for just as necessary truths involve only the divine intellect, so contingent truths involve the decrees of the will. God sees that he can create things in infinite ways, and that a different series of things will come into existence if he chooses different laws of the series, i.e. other primitive decrees. And so, whilst he considers this mind, which involves in itself this series of things, by that very act he also considers the decree which this mind and this series involve. But he considers each of them as possible, for he has not yet decided to make a decree; or, he has not yet decreed what special decrees of the series, both general decrees and the special decrees connected with them, he is to choose. But when God chooses one of the series, and this particular mind (to be endowed in future with these events) which is involved in it, by that very fact he also decrees concerning his other decrees or the laws of things which are involved in the notions of the things to be chosen. And because God, whilst he decides to choose this series, by that very fact also makes an infinite number of decrees concerning all that is involved in it, and so concerning his possible decrees or laws which are to be transferred from possibility to actuality-from this it is apparent that there is one decree which God has regard to in deciding, but another by which God decides to render this decree actual: namely, that by which he chooses for existence this series of things, this mind which is in the series, and that

decree which is in it. That is to say, the possible decree which is involved in the notion of the series and the things which enter into the series, and which God decides to render actual. is one thing; but the decree by which he decides to render actual that possible decree is another. We should the less wonder at this reflection of one decree by another, since it may also be objected against the divine intellect that the free decrees of the divine will are understood before they are made. For God does not do what he does not know that he does. From this we now understand how the physical necessity of divine predetermination can be consistent with the decree of predetermination from foreseen acts. We understand that God is far from decreeing absolutely that Judas must become a traitor; rather, he sees from the notion of Judas, independently of his actual decree, that he will be a traitor. God, therefore, does not decree that Judas must be a traitor. All that he decrees is that Judas, whom he foresees will be a traitor, must nevertheless exist, since with his infinite wisdom he sees that this evil will be counterbalanced by an immense gain in greater goods, nor can things be better in any way. The act of betrayal itself God does not will, but he allows it in his decree that Judas the sinner shall now exist, and in consequence he also makes a decree that when the time of betraval arrives the concourse of his actual predetermination is to be accommodated to this. But this decree is limited to what there is of perfection in this evil act; it is the very notion of the creature, in so far as it involves limitation (which is the one thing that it does not have from God) that drags the act towards badness. And so I believe that if we hold to these two points—that all perfection in creatures is from God, and all imperfection from their own limitation—all other opinions can, after being carefully considered, be reconciled in the last analysis.