

Causality and Chance: Response to Michael J. Dodds

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Introduction

IT IS A GREAT HONOR to have the occasion to respond to the thought of Fr. Dodds, whose paper brings us back to propositions of decisive metaphysical centrality. I would like here both to appreciate those propositions and to offer a different exegesis of them, all in the hope of illuminating the question of the nature of chance and its relation to causality and to divine providence.

First, I am a captive audience for Fr. Dodds's insistence that divine and created causes are not competitive causes. It is simply not the case that *either* the creature *or* God causes, since as Thomas puts it, God is the first and principal cause of the application of every power to act.¹ The

¹ *Summa contra gentiles* (hereafter, *SCG*) III, ch. 67: "Sed omnis applicatio virtutis ad operationem est principaliter et primo a Deo [But every application of power to operation is principally and first from God]." Thus: "Similiter etiam omnis motus voluntatis quo applicantur aliquae virtutes ad operandum, reducitur in Deum sicut in primum appetibile et in primum volentem. Omnis igitur operatio debet attribui Deo sicut primo et principali agenti [Likewise, every motion of the will whereby powers are applied to operation, is reduced to God as the first appetible and the first willer. Thus every operation should be attributed to God as to the first and principle agent]." Thus, the motion of the will from potency to act with respect to its own self-motion is first and principally from God as first agent, as well as first object of appetite. Thus, the teaching of *Summa theologiae* (hereafter, *ST*) I-II, q. 109, a. 1, resp.: "Et ideo quantum cumque natura aliqua corporalis vel spiritualis ponatur perfecta, non potest in suum actum procedere nisi moveatur a Deo [And thus howsoever

following lines from Fr. Dodds² seem to me to delineate the boundaries of all sound thought on the matter:

Since God utterly transcends the realm of creaturely causality, God always acts as a primary or principal cause in relation to the secondary or instrumental causality of creatures. For this reason, the effects of creaturely causality—to the extent that they have being and actuality—must be wholly attributed to creatures and wholly to God. There can be no competition between divine action and creaturely action (or between divine action and the laws of science that describe creaturely action).³

As Fr. Dodds continues:

It is only when God and creatures are mistaken for univocal causes that any competition can be posited between them. Only then can their mutual causality be viewed as a kind of zero sum game in which the more the effect is attributed to God, the less it can be attributed to the creature.⁴

With Fr. Dodds, I would wish to concur that evil is a privation of perfection that cannot correctly be attributed to divine causality. Further, it is easy to assent to his view that there is indeterminacy in nature. The difficulties emerge as we try to find our way to understand what is meant by “chance.” Clearly chance is not merely the indeterminate. The man who digs the grave and unexpectedly finds the treasure quite determinately digs and finds. There is no proper created

perfect a corporeal or spiritual thing is taken to be, it is not able to proceed to its act unless it first be moved by God].” Both the rational agent who does not choose and the rational agent who does choose enjoy the natural motion of the will—aboriginally bestowed by God from creation—whereby the will is ordained to universal good and toward happiness. But no agent of whatsoever dignity can even *proceed to its act* unless it first be moved from God—i.e., the creature that is in potency with respect to its own free self-motion must be moved from potency to act with respect to this self-motion. The Latin text of Thomas’s texts comes from the Navarre site containing the *Opera omnia Corpus Thomisticum*, S. Thomae de Aquino opera omnia, made available online by the University of Navarre: <http://www.unav.es/filosofia/alarcon/amicis/ctopera.html#OM>.

² Michael J. Dodds, O.P., “Of All the Gin Joints . . .’: Causality, Science, Chance, and God,” *Nova et Vetera* (English) 14.2 (2016): 503–525.

³ Ibid., 521.

⁴ Ibid., 522.

cause: but there are two—that someone deliberately and determinately buried it there, and that someone determinately dug there and determinately found it. Furthermore, all these effects are conjoined within the likewise determinate causality of divine Providence, without which there is nothing to bury, no one to dig, and no motion from potency to act in those choosing to bury and dig. This does not sound like a hymn to indeterminacy, much less the kind of indeterminacy celebrated in the famed illustration of Schrödinger's cat, postulated by him as simultaneously alive and dead until an observer collapses the wave function. *But to the contrary*, there is no such real entity as a cat *simultaneously alive and dead*. It is true that physicists have been known to speak in this way (which means not *not* to speak in this way): Since before the days of Aristotle, physicists have had difficulty reconciling themselves with the principle of non-contradiction as a real principle of being.⁵ But there is reason to consider the words of Aristotle in *Metaphysics* 5.3–6 to be somewhat better founded than the musings of Schrödinger.⁶

What Is Chance?

What, then, is chance? It is not the purely indeterminate, because indeterminacy can be and be known only in relation to something actually determinate. There are indeterminacies, potencies, of things, but these potencies can only exist or be known in relation to deter-

⁵ Of course, there is no real relation of being to nonbeing, since nonbeing has no real relations. But being is real and, by its very character as being, is really distinct from its negation, just as it would be true of God that the divine nature really is not a created nature even if created beings *never existed*.

⁶ In this respect, I am myself persuaded that one of the reasons why Charles de Koninck did not refer his students to his early work *Cosmos* was precisely that, despite the sweeping power and beauty of this work, it was inordinately infatuated with contemporary hypothetico-deductive physics. This arrestation De Koninck's later work *The Hollow Universe* definitively surmounts in its criticism of the reductionist understanding of mathematics in physical science. It is a criticism far closer to Jacques Maritain's *The Philosophy of Nature* than one might find in De Koninck's earlier phase, for instance, in such a work as *The Philosophy of Sir Arthur Eddington*, where De Koninck criticized Maritain for refusing to cede that quantity means only what a hypothetico-deductive physicist could admit within the limits of contemporary physics. But the causality of form on prime matter (yielding, in ontological but not temporal sequence: *first*, indeterminate dimensions; *second*, determinate dimensions; and *third*—and consequent upon both—the reciprocal causality of matter on form) is neither univocally measured nor exclusively signified by what physical instruments measure (even though it is the reason why such measure is possible to begin with).

minate actual realities and subjects of being. It is not clear in what way a perfectly (and infinitely) *indeterminate* effect could differ from the *non-existence of an effect*. Chance is not, then, simple indeterminacy.

Nor is chance simply “contingency.” St. Thomas is very clear that contingent causes are distinguished not in relation to God, but in relation to the nature of the proximate cause. A proximate cause that does not tend with natural necessity to only one thing—that does not have an operative power prefixed to one—is “contingent.”⁷ Thus for Thomas, the will tends toward happiness with natural necessity, and just so far it is not contingent. But since the will is a rational power ordered to the universal good and no finite good as such is universally and in every respect good, the will in choice cannot be compelled by any finite good whatsoever⁸—not even compelled by grace if this

⁷ ST I, q. 22, a. 2, ad 4: “Ad quantum dicendum quod in hoc quod dicitur Deum hominem sibi reliquisse, non excluditur homo a divina providentia, sed ostenditur quod non praefigitur ei virtus operativa determinata ad unum, sicut rebus naturalibus; quae aguntur tantum, quasi ab altero directae in finem, non autem seipsa agunt, quasi se dirigentia in finem, ut creaturae rationales per liberum arbitrium, quo consiliantur et eligunt. Unde signanter dicit, *in manu consilii sui*. Sed quia ipse actus liberi arbitrii reducitur in Deum sicut in causam, necesse est ut ea quae ex libero arbitrio fiunt, divinae providentiae subdantur, providentia enim hominis continetur sub providentia Dei, sicut causa particularis sub causa universali [When it is said that God left man to himself, this does not mean that man is exempt from divine providence; but merely that he has not a prefixed operating force determined to only the one effect; as in the case of natural things, which are only acted upon as though directed by another towards an end; and do not act of themselves, as if they directed themselves towards an end, like rational creatures, through the possession of free will, by which these are able to take counsel and make a choice. Hence it is significantly said: ‘In the hand of his own counsel.’ But since the very act of free will is traced to God as to a cause, it necessarily follows that everything happening from the exercise of free will must be subject to divine providence. For human providence is included under the providence of God, as a particular under a universal cause].”

⁸ Of course, choice is free because of the nature of the proximate cause in relation to its connatural objects—as the will, ordained to universal good, cannot be fully actuated by any finite object and thus may bring forth a wide variety of effects, none of which can compel the will (ST I, q. 82, a. 2, ad 2). It is free owing to its very nature as proximate cause in relation to its connatural objects—contingency and necessity are discriminated by reference to the proximate cause, and not in relation to the First Cause. See, e.g., *De malo*, q. 16, a. 7, ad 15: “Et ideo necessitas et contingentia in rebus distinguuntur non per habitudinem ad voluntatem divinam, quae est causa communis, sed per comparisonem ad causas creatas, quas proportionaliter divina voluntas ad effectus ordinavit; ut scilicet necessariorum effectuum sint causae intrans-

is taken as an *object of choice*, as for example when we realize that “it would be a grace to attend the conference here this evening” or “it would be a grace to attend Mass,” and so on. And so *the will in choice is a contingent cause*, although Thomas is also clear that, because God causes necessary things necessarily and contingent things contingently, being the first and principal cause of the application of every power to act,⁹ *every free contingent choice lies within the universal divine motion*. Thus Thomas does not blush from saying that God is the cause of the free act, a formulation he repeats in many different places and contexts.¹⁰

Chance, then, is not simply identical with contingent causality—I have freely chosen to offer these remarks, but all appearances notwithstanding, their composition is not by chance. What, then, is chance? Here is a place where I may read Thomas differently than does Fr.

mutabiles, contingentium autem transmutabiles [And therefore necessity and contingency in things are distinguished not in relation to the divine will, which is a universal cause, but in relation to created causes which the divine will has ordered proportionately to the effects, namely, in such a way that the causes of necessary effects are unchangeable, and of contingent effects changeable].” Every choice is objectively free, while nonetheless, every choice lies wholly within and not without the divine providential causality.

⁹ See note 1 above.

¹⁰ See note 1 above and *De malo*, q. 3, a. 2, ad 4: “Similiter cum aliquid movet se ipsum, non excluditur quin ab alio moveatur a quo habet hoc ipsum quo se ipsum movet. Et sic non repugnat libertati quod Deus est causa actus liberi arbitrii [When anything moves itself, this does not exclude its being moved by another, from which it has even this that it moves itself. Thus it is not repugnant to liberty that God is the cause of the free act of the will].” Thus the truth Thomas asserts in *ST I-II*, q. 6, a. 1, ad 3, is vindicated, that “omnis motus tam voluntatis quam naturae, ab eo procedit sicut a primo movente [every motion whether of the will or of nature proceeds from God as the first mover];”—*every motion*. And again, from *ST I-II*, q. 109, a. 1, resp.: “Non solum autem a Deo est omnis motio sicut a primo movente; sed etiam ab ipso est omnis formalis perfectio sicut a primo actu. Sic igitur actio intellectus, et cuiuscumque entis creati, dependet a Deo quantum ad duo, uno modo, inquantum ab ipso habet formam per quam agit; alio modo, inquantum ab ipso movetur ad agendum [But not only does every motion depend on God as first mover; but all formal perfection is from Him as the first act. Thus the act of the intellect and of any created being whatsoever, depend on God in two respects, in one way, inasmuch as from Him it has the form through which it acts; in another way, inasmuch as it is moved by Him to act]” (emphasis added). *Every created being whatsoever is moved to its act by God*. And again, from the same q. 109, a. 1, resp.: “Sic igitur dicendum est quod ad cognitionem cuiuscumque veri, homo indiget auxilio divino ut intellectus a Deo moveatur ad suum actum [Thus it should be said that for the knowledge of any truth whatsoever, man needs divine aid that the intellect may be moved to its act].”

Dodds. Since I take it as *per se nota* that it is better to listen to St. Thomas than to Long, it is perhaps fitting at long-length to quote St. Thomas. In chapter 92 of the third part of the *Summa contra gentiles* (SCG), St. Thomas writes the following, addressing the question “How a Person is Favored by Fortune and How Man is Assisted by Higher Causes”:

In fact, we say that some good fortune has befallen a man “when something good happens to him, without his having intended it.” For example, a man digging in a field may find a treasure for which he was not looking. Now, something may happen to a certain agent which is not intended by him as he is doing his job, but which is not unintended by the superior under whom he is working. Suppose, for instance, a master orders a servant to go to a certain place to which the master has already sent another servant, unknown to the first one; the encounter with his fellow servant is not intended by the servant who has been sent, but it is not unintended by the master who sent him. And so, though the meeting is fortuitous and a matter of chance to this servant, it is not so to the master, but has been a planned event. So, since man is ordered in regard to his body under the celestial bodies, in regard to his intellect under the angels, and in regard to his will under God—it is quite possible for something apart from man’s intention to happen, which is, however, in accord with the ordering of the celestial bodies, or with the control of the angels, or even of God. For, though God alone directly works on the choice made by man, the action of an angel does have some effect on man’s choice by way of persuasion, and the action of a celestial body by way of disposition, in the sense that the corporeal impressions of celestial bodies on our bodies give a disposition to certain choices. So, when as a result of the influence of higher causes in the foregoing way a man is inclined toward certain choices that are beneficial to him, but whose benefit he does not know by his own reasoning, and when besides this his intellect is illuminated by the light of intellectual substances so that he may do these things, and when his will is inclined by divine working to choose something beneficial to him while he is ignorant of its nature, he is said to be favored by fortune. And, on the contrary, he is said to be subject to misfortune when his choice is inclined to contrary results by higher

causes, as is said of a certain man: “Write this man barren, a man that shall not prosper in his days” (Jer. 22:30).

Thomas here identifies chance as *both* ontological (there are real causes) *and* as something existing in relation to our knowledge (“though the meeting is fortuitous and a matter of chance to this servant, it is not so to the master, but has been a planned event”). In other words, chance pertains to real events that are “unplanned” only *in relation to our limited knowledge*. The servant does not know what the master has ordained, and for this reason, views it to be chance. This does not deny accidental causality—discriminated in terms of what is not essential to the end or natural terminus of the agency—nor does it mean that there are no contingent causes. But accidental causality is, nonetheless, *causality*, and it also lies within the universal providential causality of God. As Thomas says, in the chapter 39 of the second book of the *Summa contra gentiles*, “it is things outside the scope of the agent’s intention that we say are fortuitous.” But as Thomas instructs us:

We must say, however, that all things are subject to divine providence, not only in general, but even in their own individual selves. This is made evident thus. For since every agent acts for an end, the ordering of effects towards that end extends as far as the causality of the first agent extends. Whence it happens that in the effects of an agent something takes place which has no reference towards the end, because the effect comes from a cause other than, and outside the intention of the agent. But the causality of God, Who is the first agent, extends to all being, not only as to constituent principles of species, but also as to the individualizing principles; not only of things incorruptible, but also of things corruptible. Hence all things that exist in whatsoever manner are necessarily directed by God towards some end.¹¹

¹¹ ST I, q. 22, a. 2: “Sed necesse est dicere omnia divinae providentiae subiacerere, non in universali tantum, sed etiam in singulari. Quod sic patet. Cum enim omne agens agat propter finem, tantum se extendit ordinatio effectuum in finem, quantum se extendit causalitas primi agentis. Ex hoc enim contingit in operibus alicuius agentis aliquid provenire non ad finem ordinatum, quia effectus ille consequitur ex aliqua alia causa, praeter intentionem agentis. Causalitas autem Dei, qui est primum agens, se extendit usque ad omnia entia, non solum quantum ad principia speciei, sed etiam quantum ad individualia principia, non solum incorruptibilium, sed etiam corruptibilium. Unde

Thus, St. Thomas writes in the chapter 92 of the third book of the *Summa contra gentiles*:

Again: the power of the human soul, or also of an angel, is particularized in comparison with divine power which, in fact, is universal in regard to all beings. Thus, then, some good thing may happen to a man which is apart from his own intention, and apart from the inclination given by celestial bodies, and apart from the enlightenment coming from the angels—but not apart from divine providence, which is regulative, just as it is productive, of being as such, and, consequently, which must include all things under it. Thus, some good or evil may happen to man that is fortuitous in relation to himself, and in relation to the celestial bodies, and in relation to the angels, but not in relation to God. Indeed, in relation to Him, nothing can be a matter of chance and unforeseen, either in the sphere of human affairs or in any matter.¹²

If we say that chance involves *per accidens* causality functioning within divine providence and yielding effects novel to us (owing to our ignorance), this seems a more adequate way of referring to chance than as a mystery of indeterminacy conjuring up determinate effects without any determinate causes. What we call chance seems principally to concern accidental causes that presuppose the prior divine motion for their being and agency, causes of which we are ignorant and that, so, strike us as remarkable (after all, if the man digging had *known* that there had been treasure buried there, he would *expect* to find it). That is to say, it is one thing to say that there is no proximate, singular, and proper cause for some effect, and quite a different thing to suppose this

necesse est omnia quae habent quocumque modo esse, ordinata esse a Deo in finem.”

¹² SCG III, ch. 92: “Rursumque, virtus humanae animae, vel etiam Angeli, est particularis in comparatione ad virtutem divinam, quae quidem est universalis respectu omnium entium. Sic igitur aliquod bonum accidere potest homini et praeter propriam intentionem; et praeter inclinationem caelestium corporum; et praeter Angelorum illuminationem; non autem praeter divinam providentiam, quae est gubernativa sicut et factiva entis in quantum est ens, unde oportet quod omnia sub se contineat. Sic ergo aliquid fortuitum bonum vel malum potest contingere homini et per comparationem ad ipsum; et per comparationem ad caelestia corpora; et per comparationem ad Angelos; non autem per comparationem ad Deum. Nam per comparationem ad ipsum, non solum in rebus humanis, sed nec in aliqua re potest esse aliquid casuale et improvisum.”

implies that there are not fully determinate accidental causes that are determinately knitted together by the divine causal providence.

For example, who will win the lottery certainly is a chance event. Yet, whatever the determinate procedure for determining the winning number may be, that procedure, together with the ensemble of possible winning numbers, does effectuate one winning number or set of numbers. If a number is pulled out of a container, the hand must have been inserted in just such a way as to grab the requisite numbered item, and the item grabbed must have been there and not in another place.

Thus, the surprising novelty of chance exists in relation to the creature's limited knowledge and is not to be found in God. Speaking of chance advantage and disadvantage, Thomas states: "Now, this advantage, or disadvantage, is fortuitous in regard to man's choice; in regard to God, it loses the character of the fortuitous."¹³ And he states this again expressly: "So, in this way, fortuitous events of this kind, when referred to their divine cause, lose their fortuitous character." *But Thomas does not say that things that are three-sided are, to God, not three-sided; or that fire is not, to God, fire; or that things that are blue are not, to God, blue.*¹⁴ God knows these things and causes them as such. *But while God is the cause of the fortuitous in its being, it is not fortuitous to him because, while he is the cause of its being, it is our ignorance that is the cause of fortuity as fortuity—whereas God is not ignorant, and so nothing is fortuitous to him.* Thus allow me to turn once more to a significant passage of St. Thomas:

We must therefore say that what happens here by accident, both in natural things and in human affairs, is reduced to a preordaining cause, which is Divine Providence. For nothing hinders that which happens by accident being considered as one by an intellect: otherwise the intellect could not form this proposition: "The digger of a grave found a treasure." And just as an intellect can apprehend this so can it effect it; for instance, someone who knows a place where a treasure is hidden, might instigate a rustic, ignorant of this, to dig a grave there. Consequently, nothing hinders what happens here by accident, by luck or by

¹³ Ibid. III: "Sic ergo huiusmodi fortuiti eventus, reducti in causam divinam, amittunt rationem fortuiti."

¹⁴ I offer no apology here whatsoever for simply rejecting the groundless Enlightenment assertion of the unreality of "secondary characteristics" such as qualities.

chance, being reduced to some ordering cause which acts by the intellect, especially the Divine intellect. For God alone can change the will, as shown above (q. 105, a. 4). Consequently the ordering of human actions, the principle of which is the will, must be ascribed to God alone.

So therefore inasmuch as all that happens here below is subject to Divine Providence, as being pre-ordained, and as it were “fore-spoken,” we can admit the existence of fate: although the holy doctors avoided the use of this word, on account of those who twisted its application to a certain force in the position of the stars.¹⁵

The very datum that nothing is fortuitous to God indicates that fortuity exists only *relative* to the knowledge of creatures, and not *absolutely* as a pure function of being. Let us put the matter another way. We may say that we do not know what is in a Christmas package, but that God does know. But we can only say this inasmuch as something is truly in the package. We may hold that we do not know, and that God does know, what is in an as yet unwrapped Christmas gift, but it makes no sense to say that *there is nothing in the package but that God nonetheless mysteriously knows that something is in it*, for this would be simply to predicate falsity of the divine knowledge, which is absurd. Thus, it is not sufficient to say that there is pure indeterminacy in being but, by a mysterious supernatural property, God knows such indeterminate things *as determinate* anyway. Of course, God can know

¹⁵ ST I, q. 116, a. 1, resp.: “Et ideo dicendum est quod ea quae hic per accidens aguntur, sive in rebus naturalibus sive in rebus humanis, reducuntur in aliquam causam praeordinantem, quae est providentia divina. Quia nihil prohibet id quod est per accidens, accipi ut unum ab aliquo intellectu, alioquin intellectus formare non posset hanc propositionem, fodiens sepulcrum invenit thesaurum. Et sicut hoc potest intellectus apprehendere, ita potest efficere, sicut si aliquis sciens in quo loco sit thesaurus absconditus, instiget aliquem rusticum hoc ignorantem, ut ibi fodiat sepulcrum. Et sic nihil prohibet ea quae hic per accidens aguntur, ut fortuita vel casualia, reduci in aliquam causam ordinantem, quae per intellectum agat; et praecipue intellectum divinum. Nam solus Deus potest voluntatem immutare, ut supra habitum est. Et per consequens ordinatio humanorum actuum, quorum principium est voluntas, soli Deo attribui debet. Sic igitur inquantum omnia quae hic aguntur, divinae providentiae subduntur, tanquam per eam praeordinata et quasi praelocuta, fatum ponere possumus, licet hoc nomine sancti doctores uti recusaverint, propter eos qui ad vim positionis siderum hoc nomen retorquebant.”

indeterminate things as determinate *in the sense* in which God knows that there *will* be brought forth from some limited potency (pertaining to a determinate being) a determinate act (but an act to which the being has not yet been actually determined *in act*). However, we are referring to the divine knowledge of something in itself as actually existing, and in this way, indeterminacy always presupposes determinacy. While it may be tempting to think that we could say that such events are in their being “naturally” indeterminate but that by divine mystery God knows them, it must be observed first that the conclusion that God does know them as determinate is a proposition of natural theology and metaphysics (such things only *are* because they are first determinately caused). *But secondly (and crucially), just as, by divine mystery, God cannot know “2” to be “3,” so by divine mystery, God cannot know the indeterminate as such to be determinate as such.* To the contrary, the effects of chance determinately exist and are determinately caused to exist, even if by natural agents that do not essentially or naturally tend toward these effects, but only accidentally or by concatenation. That which is the effect of a *per accidens* conjunction of causes is only such an effect inasmuch as the divine providence determinately ordains that conjunction. And did we know such a conjunction and understand what it implied, the effect in question would not be *to us* fortuitous. But such effects are fortuitous because our knowledge and understanding do not extend so far.

Problems Attending the Love Affair with Chance

There are thus both theological and metaphysical problems with the love affair of contemporary science and contemporary philosophers of science with chance. St. Thomas instructs us in the first part of the *Summa theologiae* (q. 28, a. 2, ad 1) that “nothing that exists in God can have any relation to that wherein it exists or of whom it is spoken, except the relation of identity; and this by reason of God’s supreme simplicity.” This is one of those keystone premises about which I am sure I concur with Fr. Dodds. Creation is *ad extra*, as God naturally and directly wills His own eternal perfection, and undergoes no process, nor is subject to any mutation, in willing the created effect. The only difference between God willing X and God not willing X is the being of X. Nor can God bring about something purely indeterminate, inasmuch as this is not distinct from God bringing about nothing whatsoever—that is to say, all indeterminacy can only exist or be known relative to actual determinate realities.

Because there is no change in God, divine “causing” designates

only the bringing about of *something* which thus is *not nothing*—and so, divine causality implies determinate effect.¹⁶ *To be something, to have some nature*, is just so far to be *actually determinate*. Thus, the indeterminate and potential in creation can exist only in relation to the actually determinate. God Himself can cause indeterminacy *only in relation to the actually determinate*. Because causing does not signify a change in God, but only the being of the effect, the postulation of a wholly indeterminate effect is not essentially different from the postulation of no effect whatsoever, rendering any reference to divine causality nugatory. Potency is an indeterminacy only in a specific respect, inasmuch as it exists only relative to prior act and as specified by its proper act. Thus potency can neither exist nor be known save in relation to act: it is capacity for act.¹⁷ In sum, there is indeterminacy in nature, but only in relation to actual determinacy.

When the indeterminate is taken as an infinite divisible or as awaiting further actuation—taken as a function of potency as such—*then* the determinate and the indeterminate are opposed. The unlimited perfection of God is not “indeterminate” like a potency awaiting division or further actuation, but as unlimited perfection is “indeterminate” in extension, which is a function of the formal determinacy of the divine perfection in *intension*. God is “indeterminate” only in the sense that there is no potency in God, and so, no finite limitation on the actually determinate divine perfection. Determinacy refers to actual nature and only accidentally refers to limit of perfection owing to potency. This is why perfections (including *essence*, which signifies limit in creatures,

¹⁶ All causes distinct from God, whether necessary or contingent, receive being, form, natural motion and powers, and the application of their natural motion and powers to act first and principally from God. The conditions for God to cause can be present with no divine causation whatsoever because God is not essentially ordered to an end outside Himself as a finality, whereas created causes, ordained to ends other than themselves, are such as to be susceptible of motion from potency to act. It is interesting that persons who are persuaded that cats *can simultaneously exist and not exist* would themselves not accept a description of an experiment in which the experimental conditions both *did* and *did not* obtain, nor accept as an experiment something that both *was* and *was not* performed. I should not ask, “why *and* why not?” but only “why not?”

¹⁷ Whether we speak of subjective potency (the potency of a thing that already exists) or we speak of objective potency (the pure possibility of something in relation to the divine power) this is true. The first type of potency presupposes its actual subject, while the second, as a real possibility, exists only relative to the actual divine omnipotence and, further, is conceivable only in relation to the proportionate act whose possibility is alleged.

but whose *ratio* is the determinate mode and degree of actuality—in God this determinate degree of actuality is the ordinal supreme perfection, *ipsum esse subsistens per se*) may be properly said of God (while yet all perfections are predicated of God as not comprehending God and as exceeded in perfection by God¹⁸). Whereas, when and as said of creatures, transcendental and pure perfections imply limitation of potency. The infinite God is not vague or inchoate or awaiting further perfection.

Further, any claim that the universe is fundamentally indeterminate would be contrary to the requirements of agency as such. With St. Thomas Aquinas of the *Summa contra gentiles*, one may judge it to be true that, without an end, action would either never begin (because there would be nothing for the sake of which it could occur), or else never come to any fulfillment or termination (because no such fulfillment or termination would exist), and thus action would need to pass through an actual infinitude, which is impossible.¹⁹

As Thomas notes, were an agent not more ordered to one thing than to another, action would simply be impossible.²⁰ But even for an inveterate procrastinator like myself, the world does not seem like this. It is only because quantum indeterminacy is not the metaphysical key to the universe that there actually can *be* physicists of the Copenhagen school, who must exist if it is to be true for anyone to observe

¹⁸ See *ST I*, q. 13, a. 5.

¹⁹ *SCG III*, ch. 2: “Sed in actione cuiuslibet agentis est invenire aliquid ultra quod agens non quaerit aliquid: alias enim actiones in infinitum tenderent; quod quidem est impossibile, quia, cum infinita non sit pertransire, agens agere non inciperet; nihil enim movetur ad id ad quod impossibile est pervenire. Omne igitur agens agit propter finem [But, in the action of all agents, one may find something beyond which the agent seeks nothing further. Otherwise, actions would tend to infinity, which is impossible: since it is impossible to proceed to infinity, the agent could not begin to act, because nothing is moved toward what cannot be reached. Therefore every agent acts for an end].”

²⁰ *SCG III*, ch. 2: “Item. Si agens non tenderet ad aliquem effectum determinatum, omnes effectus essent ei indifferentes. Quod autem indifferenter se habet ad multa, non magis unum eorum operatur quam aliud: unde a contingente ad utrumque non sequitur aliquis effectus nisi per aliquid determinetur ad unum. Impossibile igitur esset quod ageret [Besides, if an agent did not incline toward some definite effect, all results would be a matter of indifference for him. Now, he who looks upon a manifold number of things with indifference no more succeeds in doing one of them than another. Hence, from an agent contingently indifferent to alternatives no effect follows, unless he be determined to one effect by something].”

that they exist. Nor is there any moment when a Copenhagen theorist both is and is not a Copenhagen theorist, awaiting determination solely through *being observed by another* (arguably it is because they are Copenhagen theorists—and not because somehow simultaneously they are and are not Copenhagen theorists—that they *are* confused). What is wrong with this theory at the “meta” level is, in this case, proportionately wrong with it at every level. Which is to say, it is a bad and untrue theory.

Conclusion

Allow me to close by pointing out that St. Thomas strongly propounded not precisely a universal doctrine of causality—because God has no cause—but a universal doctrine of *analogical reason for being* according to which God is His own reason for being, and created things are not. Such an account may be denominated as a principle of *sufficient reason* (as Pius XII did in *Humani Generis*²¹), if we understand this to be an analogical and metaphysical doctrine, rather than a purely analytic and logical doctrine as in the teaching of Leibnitz. Such is the teaching of Aquinas, for whom causal analysis is part of an *analogical* doctrine of reason for being, affirming the causal intelligibility of being as such and the causal dependence of all finite beings on one uncaused being *that is, by reason of its supreme perfection, its own reason for being*: “Everything which is in any way at all must then derive its being from that whose being has no cause. But we have already shown that God is this being whose existence has no cause. Everything which is in any mode whatever, therefore, is from Him.”²² That the principal name

²¹ *Humani Generis* (1950) §29: “But reason can perform these functions safely and well only when properly trained, that is, when imbued with that sound philosophy which has long been, as it were, a patrimony handed down by earlier Christian ages, and which moreover possesses an authority of an even higher order, since the Teaching Authority of the Church, in the light of divine revelation itself, has weighed its fundamental tenets, which have been elaborated and defined little by little by men of great genius. For this philosophy, acknowledged and accepted by the Church, safeguards the genuine validity of human knowledge, the unshakable metaphysical principles of sufficient reason, causality, and finality, and finally the mind’s ability to attain certain and unchangeable truth.”

²² SCG II, ch. 15: “Oportet igitur quod ab illo cui nihil est causa essendi, sit omne illud quod quocumque modo est. Deum autem supra ostendimus huiusmodi ens esse cui nihil sit causa essendi. Ab eo igitur est omne quod quocumque modo est.”

of all names applied to God is “*qui est sit*”²³ is not accidental to the conclusion that that alone that contains all perfection contains its own reason for being. This view is far better grounded in evidence and reason than, for example, the famed assertion of Stephen Hawking, in his book comically titled *The Grand Design*, that “spontaneous creation is the reason there is something rather than nothing, why the universe exists, why we exist. It is not necessary to invoke God to light the blue touch paper and set the universe going.”²⁴

The world in which things change or come into being *without causes*—whether these are *per se* or *per accidens* causes—or in which accidental causes are not reduced to one preordaining cause, seems to me to be a purely imaginary world. While I believe Einstein was wrong in his rationalism, I do not believe he was wrong to think that absolutely speaking—in relation to God, although for Einstein this was perhaps only a figure—no change or motion lies simply outside causal order. And in this, again, it is a pleasure to agree with Fr. Dodds. Because, no matter what chance is, it is impossible that chance constitute a cause outside of the divine causal governance. N&V

²³ *ST I*, q. 13, a. 11.

²⁴ Stephen Hawking and Leonard Mlodinow, *The Grand Design* (New York: Bantam Books, Random House Publishing Group, 2010), 180.