

Stephen L. Brock

## Causality and Necessity in Thomas Aquinas

### 0. Introduction

At the beginning of her brilliant paper *Causality and Determination*, G.E.M. Anscombe looks across the history of the philosophy of causality<sup>1</sup>. She is struck by a strong tendency among philosophers, ancient and modern, to associate or even identify causality with necessitation. Underlying many otherwise very different views on causality she finds this common position:

«If an effect occurs in one case and a similar effect does not occur in an apparently similar case, there must be a relevant further difference»<sup>2</sup>.

The formulation is persuasive. Yet clearly it does assert a necessary connection between any occurrence and its antecedents. In order for a different result to occur, there has to be a corresponding difference in the antecedents. This means that from any determinate set of antecedents, a single determinate result must follow. It is a formula for determinism. Anscombe wants to caution us not to take what it says for granted.

Further on in the paper she spells out how she conceives causal necessity:

«a cause *C* is a necessitating cause of an effect *E* when (I mean: on the occasions when) if *C* occurs it is certain to cause *E* unless something prevents it. *C* and *E* are to be understood as general expressions, not singular terms. If ‘certainty’ should seem too epistemological a notion: a necessitating cause *C* of a given kind of effect *E* is such that it is not possible (on the occasion) that *C* should occur and should not cause an *E*, given

<sup>1</sup> G.E.M. ANSCOMBE, *Causality and Determination*, Inaugural Lecture, Cambridge University 1971; published in *Metaphysics and the Philosophy of Mind. The Collected Philosophical Papers of G.E.M. Anscombe* (II), Basil Blackwell, Oxford 1981, 133-147.

<sup>2</sup> ANSCOMBE, *Causality*..., 113.

that there is nothing that prevents an *E* from occurring. A non-necessitating cause is then one that can fail of its effect without the intervention of anything to frustrate it»<sup>3</sup>.

In promoting this notion of non-necessitating causes, Anscombe thinks that the indeterminism of quantum physics ought to be of help. She describes what seems to be an example of such a cause: radioactive material placed in the vicinity of a Geiger counter in such a way that the counter may or may not register a certain reading<sup>4</sup>. The suggestion is that if the counter registers the designated reading, this would indeed have a cause, namely, the radioactive material; but if the reading is not registered, there would be no cause at all, nothing “preventing” it. And thus neither the material nor even the total situation would fully determine the result. It would just happen to turn out one way rather than the other.

Aptly enough, Anscombe terms non-necessitating causation of this sort «mere hap»<sup>5</sup>. She seems to regard it as the only alternative to causal determinism, at least in the physical domain. She also rejects determinism in human choice, but she is understandably reluctant to see free choice as «mere hap». Still, she appears to consider physical «hap» a necessary condition for the efficacy of choice in the physical world<sup>6</sup>.

Anscombe’s opening survey skips the medieval period. What I propose here is to peruse Thomas Aquinas’s thought on causality, with an eye to her concerns. How does Thomas stand with respect to causal determinism?

Most of the discussion will center on physical causes. However, the topic is metaphysical. It belongs to metaphysics to treat the nature of causality in general. I shall argue that on the whole, Thomas’s conception of causality is not deterministic. This is because his account of free choice is causal, and it is not deterministic. But I shall be more at pains to show two other points: that although he ascribes contingency to many physical causes, his account of them is nonetheless deterministic, in Anscombe’s sense; and that on his view, neither physical contingency nor freedom of choice involve non-necessitating causes of the precise type that Anscombe proposes.

Of late there has been little work on the question of causal determinism in Aquinas<sup>7</sup>. There was more in the mid-20<sup>th</sup> century, when a number of his stu-

<sup>3</sup> ANSCOMBE, *Causality...*, 144.

<sup>4</sup> ANSCOMBE, *Causality...*, 144-145.

<sup>5</sup> ANSCOMBE, *Causality...*, 145.

<sup>6</sup> ANSCOMBE, *Causality...*, 146.

<sup>7</sup> There is some recent literature in which Thomas has been judged a determinist, but on grounds other than his general doctrine of causality. The grounds vary: his modal logic (said to lack a notion of “synchronic contingency”); his theology (the certainty of God’s eternal knowledge, or the irresistibility of His will, about all things); or his “intellectualist” psychology of the will (and if the will is deterministic, what

dents greeted the rise of indeterministic physics with enthusiasm. They saw the occasion for a return to the true Thomas – a Thomas freed of deterministic, “suarezian” distortions. On their reading, Thomas would provide the basis for an indeterminism quite like Anscombe’s «mere hap»<sup>8</sup>.

If interest in the question has since waned, perhaps it is in part because of the lack of consensus about the significance of quantum indeterminacy itself. My aim here is not to decide the question of the relation between contemporary physics and Thomas’s philosophy. But if any progress is to be made in that area, I do think that the earlier interpretation needs some correcting.

Thomas’s writings contain a great multitude of texts on necessity and contingency in causality. A full study of them would need a book. My selection of texts and order of exposition are designed to bring out the points most pertinent to the Anscombe issues. Nearly all of my chief texts are from his more mature writings<sup>9</sup>. Among these I am not aware of any significant reversal on the major points. There may be developments, but I believe that I may indulge in a certain amount of to and fro with little risk.

is not?). The allegations of determinism on logical and theological grounds are explained, and I would say effectively refuted, in H.J.M.J. GORIS, *Free Creatures of an Eternal God. Thomas Aquinas on God’s Infallible Foreknowledge and Irresistible Will*, Stichting Thomasfonds, Nijmegen 1996 (Publications of the Thomas Instituut te Utrecht, New Series, vol. IV), 257-275 (on the modal logic issue), 213-254 (on God’s knowledge), 276-304 (on God’s will). For deterministic interpretations of Thomas’s doctrine of the will, see W. INNIS, *Spontaneity in the Summa: St Thomas on Free Choice*, «Aquinas», 38/3 (1995), 575-592 (esp. 583-584, 591); T. WILLIAMS, *The Libertarian Foundations of Scotus’s Moral Philosophy*, «The Thomist», 62/2 (1998), 193-215 (esp. 200-209). For a superb account of Thomas’s “intellectualism” as the very basis of an indeterministic conception of choice, see F. BERGAMINO, *La razionalità e la libertà della scelta*, Apollinari Studi, Roma 2002.

<sup>8</sup> Two of the best defenses of this reading are I. D’ARENZANO, *Necessità e contingenza nell’agire della natura secondo S. Tommaso*, «Divus Thomas», 64 (1961), 27-69; F. SELVAGGI, *Causalità e indeterminismo*, Università Gregoriana, Roma 1964. A summary of Selvaggi’s position on determinism is found in F. SELVAGGI, *Filosofia del mondo. Cosmologia filosofica*, Università Gregoriana, Roma 1985, 401-433. An important previous effort along similar lines is CH. DE KONINCK, *Réflexions sur le problème de l’indéterminisme*, «Revue Thomiste», 45 (1937), 227-252, 393-409. On the prevalence of deterministic, “suarezian” views among early 20<sup>th</sup>-century scholastics, including thomists, see DE KONINCK, *Réflexions...*, 227-228; F. SELVAGGI, *Causalità e indeterminismo nella recente letteratura*, «Gregorianum», 38 (1957), 756-758; also SELVAGGI, *Causalità...* (1964), 141-145; SELVAGGI, *Filosofia...*, 417-419.

<sup>9</sup> Except for the commentary on Aristotle’s *Metaphysics*, they have all appeared in the critical Leonine edition, which is the one that I shall cite: *Sancti Thomae Aquinatis doctoris angelici Opera omnia iussu Leonis XIII P.M. edita*, cura et studio fratrum praedicatorum, ex typographia polyglotta et al., Romae 1882ss. For the dating of Thomas’s works see the catalog in J.-P. TORRELL, *Initiation à saint Thomas d’Aquin*, Editions Universitaires Cerf, Fribourg (Suisse)-Paris 1993, 483-525.

## 1. Causal necessity and «ut in pluribus» causes

It cannot be denied that St Thomas does associate causality with necessity<sup>10</sup>. In his commentary on Aristotle's philosophical lexicon in Book V of the *Metaphysics*, he says flatly: «causa est ad quam de necessitate sequitur aliud»<sup>11</sup>. We find nearly the same assertion in the more or less contemporary *De malo*, q. 3: «proprie causa dicitur ad quam ex necessitate sequitur aliquid»<sup>12</sup>.

A related point appears a little later in the *Metaphysics* commentary, in Book VI. Thomas is considering the extreme opposite of a necessitating cause, viz., that which is equally *ad utrumlibet*, simply indifferent as between diverse effects. This, Thomas says, is not as such a cause of anything.

«Contingens autem ad utrumlibet, non potest esse causa alicuius in quantum huiusmodi. Secundum enim quod est ad utrumlibet, habet dispositionem materiae, quae est in potentia ad duo opposita: nihil enim agit secundum quod est in potentia. Unde oportet quod causa, quae est ad utrumlibet, ut voluntas, ad hoc quod agat, inclinetur magis ad unam partem, per hoc quod movetur ab appetibili, et sic sit causa ut in pluribus»<sup>13</sup>.

He elaborates the point when he comes to Aristotle's account of rational powers in *Metaphysics* IX.5:

«cum potentia rationalis se habeat communiter ad duo contraria, et ita cum a causa communi non procedat effectus determinatus, nisi sit aliquid proprium quod causam communem ad hunc effectum magis determinet quam ad illum, sequitur quod necesse est, praeter potentiam rationalem, quae est communis ad duo contraria, poni aliquid, quod appropriet eam ad alterum faciendum ad hoc quod exeat in actum»<sup>14</sup>.

<sup>10</sup> Throughout this paper, unless otherwise indicated, the causality under discussion is agent or efficient causality.

<sup>11</sup> THOMAS DE AQUINO, *In XII libros Metaphysicorum expositio*, ed. R.-M. Spiazzi, Marietti, Taurini 1964, Lib. V, lect. 1, §749, and lect. 6, §827. In both places he is explaining the order in which Aristotle's analyzes certain terms. First, he says, come terms that refer directly to causes, whether in general ('principle', 'cause', 'element') or of a special kind ('nature'); then comes a term associated with causality, 'necessary'.

<sup>12</sup> THOMAS DE AQUINO, *Quaestiones disputatae de malo*, ed. Leonine, t. 23, q. 3, a. 3, ad 3. In the corpus of the article he enumerates several types of moving cause: *disponens*, *consilians*, *precipiens*, and *perficiens*; the last, he says, «proprie et uere causa dicitur, quia causa est ad quam sequitur effectus». One might suspect that it is something of a stock phrase. The Leonine editor of the *De malo* connects both passages with a line from Peter of Spain: «Causa est ad cuius esse sequitur aliud secundum naturam»: PETRUS ISPANUS, *Tractatus called afterwards Summule logicales*, ed. L.M. de Rijk, Van Gorcum, Assen 1972, tr. 5, n. 19, 67, 6. Peter does not mention necessity. If anything, this only adds significance to the fact that Thomas sometimes does.

<sup>13</sup> *In VI Metaph.*, lect. 2, §1183.

<sup>14</sup> *In IX Metaph.*, lect. 4, §1820. See also THOMAS DE AQUINO, *Sententia super Physicam*, ed. Leonine,

This in effect is Thomas's doctrine that «every agent acts for an end»<sup>15</sup>. In order for something to be a genuine agent of a given result, it must be ordered toward that result and away from its opposite. Otherwise, we may say, it does nothing to explain why one occurred rather than the other. Nothing acts unless it is aimed at some definite result. Its functioning as an agent depends upon its having an end. The end, the final cause, is cause of the agent's causality<sup>16</sup>.

Now, in the *In VI Metaph.* passage, Thomas says that once the will is moved by some appetible, it is no longer *ad utrumlibet*, but rather what he calls a cause *ut in pluribus*: a cause that yields its effect “for the most part”. Evidently he considers a cause *ut in pluribus* to be a cause in the proper sense. Indeed, as is well known, Thomas often applies this expression, or some equivalent such as *ut frequenter*, to the one special type of cause discussed in *Metaphysics* V (just prior to the discussion of necessity): nature<sup>17</sup>.

But this raises a question. If natures and other *ut in pluribus* causes are causes in the proper sense, how can he say that properly a cause is that upon which something else follows necessarily? A cause that succeeds only for the most part is one that occasionally (*ut in paucioribus*) fails. An *ut in pluribus* cause is determined toward some one definite result; but it can sometimes fail, because of some impediment<sup>18</sup>. It is not necessary, but rather «contingens ut in pluribus»<sup>19</sup>.

t. 2, Lib. II, lect. 8, §3; *Summa contra gentiles*, cum commentariis FRANCISCI DE SYLVESTRIS FERRARIENSIS, ed. Leonine, t. 13-15, Lib. III, c. 2, 6b9-17; *Summa theologiae*, cum commentariis THOMAE DE VIO CAJETANI, O.P., ed. Leonine, t. 4-11, I, q. 14, a. 8.

<sup>15</sup> See *Summa theol.*, I-II, q. 1, a. 2, where he also speaks of the need for an agent to be “determined”, i.e. aimed, toward something. See also *C. Gent.*, III, 2-3.

<sup>16</sup> See *In V Metaph.*, lect. 2, §775. Through the efficient cause, the final cause also causes the causality of the formal and material causes: «licet finis sit ultimus in esse in quibusdam, in causalitate tamen est prior semper. Unde dicitur causa causarum, quia est causa causalitatis in omnibus causis. Est enim causa causalitatis efficientis, ut iam dictum est. Efficiens autem est causa causalitatis et materiae et formae. Nam facit per suum motum materiam esse susceptivam formae, et formam inesse materiae. Et per consequens etiam finis est causa causalitatis et materiae et formae»: *In V Metaph.*, lect. 3, §782. This seems to suggest that matter, insofar as it is merely *ad utrumlibet*, is not even a *material* cause of anything. In order to constitute the full potency for a given form, it must first be disposed in a determinate way.

<sup>17</sup> See *In V Metaph.*, lect. 5; the expressions *ut in pluribus* and *ut frequenter* do not occur here, but the idea is explicit in §826. The expressions abound in *In II Ph.*, lects. 8-14. On the thomistic conception of nature, see J.A. WEISHEIPL, O.P., *The Concept of Nature*, «The New Scholasticism», 28 (1954), 377-408, reprinted in W.E. CARROLL (ed. by), *Nature and Motion in the Middle Ages*, The Catholic University of America Press, Washington 1985, 1-23; SELVAGGI, *Causalità...* (1964), 114-140; W.A. WALLACE, O.P., *The Modeling of Nature: Philosophy of Science and Philosophy of Nature in Synthesis*, The Catholic University of America Press, Washington D.C. 1996, 3-34.

<sup>18</sup> See *In II Phys.*, lect. 14, §7. On nature as determined *ad unum*, see also *De malo*, q. 6, a. un.; *Summa theol.*, I, q. 19, a. 4, & q. 41, a. 2; SELVAGGI, *Causalità...* (1964), 121-127, 135-140.

<sup>19</sup> Thomas uses this expression in the very continuation of *In VI Metaph.*, lect. 2, §1183; also at *C. Gent.*, III, c. 74, 218a7-8; *De malo*, q. 16, a. 7, obj. 15.

Still, Thomas's *ut in pluribus* cause is not Anscombe's non-necessitating cause. For it fails *only* if there is an impediment. What she is looking for is an *unimpeded* cause that might fail (and might not). And in fact, Thomas eventually does find a way of ascribing some kind of necessity even to causes that can be impeded. «Necesse est [...] causa posita sequi effectum, nisi sit impedimentum, quod quandoque contingit esse per accidens»<sup>20</sup>. So in a sense even they are causes upon which something else follows of necessity.

However, as we shall see, Thomas regards this as only a very restricted sense of necessity. It might serve to save the dictum about what is properly a cause, but it does not actually rule out causal contingency. If Thomas is reluctant to dissociate causality from necessity entirely, it is not because he wants to favor the position that every effect is necessitated by its cause. In fact the passage just quoted is part of an effort to refute that position. In the next two sections I shall look at his way of understanding and arguing against it. Then I shall return to his conception of necessity.

## 2. Accidental causes

Thomas addresses the position that everything is necessitated by its cause in many places<sup>21</sup>. Unfailingly he appeals to a doctrine he finds in *Metaphysics* VI.3. As he reads it, Aristotle there both identifies and refutes the two theses upon which the position always ultimately rests<sup>22</sup>. These are that everything that

<sup>20</sup> *In Metaph.* VI, lect. 3, §1193. The point is developed at *In IX Metaph.*, lect. 4, §1821. ANSCOMBE, *Causality...*, 134, cites the corresponding *Metaphysics* passage (IX, 5, 1048a1-21) as an example of the association of causation with necessity. Along this line we might also note another occurrence of «causa est ad quam de necessitate sequitur aliud»: *Summa theol.*, I-II, q. 75, a. 1, obj. 2. This objection is against the claim that sin has a cause. Sin is essentially voluntary and cannot be necessitated. The reply begins: «si illa definitio causae universaliter debeat verificari, oportet ut intelligatur de causa sufficienti et non impedita; alioquin sequeretur quod omnia ex necessitate contingerent, ut patet in VI *Metaph.*». The cause of sin can be impeded, and so the objection is resolved. But for us it is interesting that instead of rejecting the definition outright, Thomas finds a way to save it.

<sup>21</sup> GORIS, *Free Creatures...*, 283-9, offers a good overview, with bibliography, of Thomas's treatment of this question. The main texts, in roughly chronological order, are *C. Gent.*, III, c. 86, 262a12-b24; *Summa theol.*, I, q. 115, a. 6; *De malo*, q. 16, a. 7, ad 14 & ad 16; *In VI Metaph.*, lect. 3, §1191-1222; THOMAS DE AQUINO, *Expositio libri Peryrmeneias*, ed. Leonine, t. 1\*/1 (editio altera retractata, 1989), Lib. I, lect. 14, ll. 210-522, 74-79. Shorter discussions are found in *Summa theol.*, I, q. 116, a. 3; *De malo*, q. 6, a. un., ad 21; *In XI Metaph.*, lect. 8, §2280-2282; THOMAS DE AQUINO, *Quaestiones disputatae de quolibet*, ed. Leonine, t. 25, q. 12, q. 4.

<sup>22</sup> As Goris observes (GORIS, *Free Creatures...*, 283, n. 21), it is not clear that this is what Aristotle is actually about. In fact Aristotle seems to be taking the falsity of determinism for granted and arguing that it cannot be false unless there are things that happen *per accidens*; in particular, unless some principles and causes come into being and pass away *per accidens*. His real interest is in defending the existence of the *per accidens*. Thomas's reading of the first lines of the chapter, however, leads him to take Aristotle to

comes about («omne quod fit») has a *per se* cause, i.e., a cause able and determined to make it come about; and that a *per se* cause cannot fail<sup>23</sup>.

We have already seen that *per se* causes of the *ut in pluribus* type can fail, by being impeded. In the *Metaphysics* commentary and in his other discussions of the issue, Thomas stresses that he is talking about “sufficient” causes that can fail. Avicenna, he says, argues that a cause that fails of a given effect must be one that is not sufficient – not the sort of thing that *could* cause the effect. Such a cause *must* fail, and in fact it is not a true cause at all. If a true, sufficient cause cannot fail, and if everything that happens must have a true cause, then everything happens necessarily<sup>24</sup>. Thomas does not seem to see much need to defend the claim that a cause might be sufficient and still fail. Apparently he takes the very fact that some fallible causes do succeed *ut in pluribus* as proof that in themselves they are sufficient<sup>25</sup>. When they fail, it is not because they are not true causes, but because they are impeded by something else.

Now, the very fact of positing causes of the *ut in pluribus* type brings with it another type: causes *ut in paucioribus*<sup>26</sup>. These are chance causes<sup>27</sup>. A chance

be insisting on the fallibility of some *per se* causes and on the fact that their failure may have only a *per accidens* cause, all with a view to refuting determinism. There are places in the commentary where Thomas seems to sense that on the reading he is giving it, the chapter does not flow smoothly; but I cannot go into this now. In any case, none of this means that the line of thought which he pursues here is not good aristotelianism.

<sup>23</sup> If determinism depends upon both theses, then presumably it could be refuted by showing that either one of them is false. For instance, one might try to argue that although every cause necessitates its effect, some events have no cause at all, even *per accidens*; or, that although everything has a *per se* cause, some causes can fail even when nothing impedes them. But Thomas does not hold either of these views, and for him the two theses stand or fall together.

<sup>24</sup> *In VI Metaph.*, lect. 3, §1192. See AVICENNA LATINUS, *Liber de philosophia prima* (tr. I-IV), éd. S. van Riet, E. Peeters – E. J. Brill, Louvain – Leiden 1977, tr. I, cap. 6, 44-46, 37-71.

<sup>25</sup> In Thomas’s writings on causality the language of “sufficiency” is not entirely fixed. On at least one occasion he indicates that ‘sufficient’ might be taken as including *all* the conditions needed for a cause to succeed, including not only adequate active power but also the suitable material to act upon, the absence of impediments, and so forth. (This resembles the modern notion of “sufficient conditions”; see ANSCOMBE, *Causality* . . . , 135.) It is only when a power is sufficient in this sense, he says, that it has its effect necessarily (*In IX Metaph.*, lect. 4, §1821). There are also places in which Thomas speaks of causes that “can” move some mobile even though they are not “sufficient” movers of it; here ‘sufficient’ seems to mean something like ‘irresistible’ or ‘overpowering’. See *Summa theol.*, I-II, q. 10, a. 2, ad 1 (also I, q. 82, a. 2, ad 2); I-II, q. 75, a. 3; I-II, q. 80, a. 1. (Note that even this sort of sufficient mover might fail to move; it only overpowers the mobile once the mobile is subjected to it. Some impediment might intervene to keep them apart. Thus, in I-II, q. 10, a. 2, even happiness might not move the will, if it is not considered. See *De malo*, q. 6, a. un., ad 7.) Yet again, sometimes Thomas seems to speak of anything that “can” move, even if it is not “irresistible”, as sufficient; e.g., compare *Summa theol.*, I-II, q. 10, a. 2 with *De malo*, q. 6, a. un., ad 15.

On the meaning of ‘sufficient cause’ in connection with determinism, see also the remarks by Sylvester of Ferrara on *C. Gent.* III, c. 86, ed. Leonine, t. 14, §V.1, 264.

<sup>26</sup> See *In VI Metaph.*, lect. 2, §1182 ss.

<sup>27</sup> Thomas’s longest discussion of chance is *In II Phys.*, lects. 7-10. On the concept of chance in

cause is one that has some result *praeter intentionem*<sup>28</sup>. It has no tendency or determination to the result. What an agent can cause by chance is thus, with respect to the agent itself, indeterminate<sup>29</sup>. It is determined by a factor that the agent merely happens to coincide with. Chance causes are causes *per accidens*<sup>30</sup>.

Chance causes are not true or proper causes. This is not just because they have their effects infrequently. It is because, as Thomas often teaches, an accidental being, a coincidence, is not a true being<sup>31</sup>. This in turn is because it lacks true unity. We may give it a name, but it has no genuine identity. Only the *per se* units that constitute it do. The units happen to be together, but as far as they are concerned, they might just as well not be. There is no principle in them holding them together. And so what follows on their coincidence does not, as such, flow from any one principle.

Thomas illustrates this in an allusion to Aristotle's example of the fellow who eats salty food, goes outside for water, meets up with thugs and is killed by them<sup>32</sup>. Thomas says that the meeting itself, the «concursum», is due to a *two-fold* moving principle – his and the thugs<sup>33</sup>. It is a coincidence; it lacks a proper principle. But a cause is a principle<sup>34</sup>.

It should also be clear that coincidences cannot, of themselves, necessitate their results. For they have no necessity in themselves. There is no principle of unity in them at all, let alone one that makes their conjunction necessary.

By reason of an accidental factor, then, an agent may have a result apart from

Thomas see J.A. WEISHEPL, O.P., *The Concept of Nature: Avicenna and Aquinas*, in VICTOR B. BREZIK (ed.) *Thomistic Papers I*, C.S.B., Center for Thomistic Studies, Houston 1984, 79-80.

<sup>28</sup> *Intentio* in this context does not refer only to a certain act of will. It covers any active tendency or determination toward something. See *Summa theol.*, I-II, q. 12, a. 5. In this paper I use 'intend' in this broad sense.

<sup>29</sup> This is why, although there are always many things happening by chance, any specific chance result is going happen rarely, *ut in paucioribus*. Similarly, while the general *ratio* of chance can be treated scientifically, specific chance occurrences are not matters for science: *In VI Metaph.* 6, lect. 2, *passim* (§1180 on the general *ratio*).

<sup>30</sup> On the *ut in paucioribus* as *per accidens*, see *In VI Metaph.*, lect. 2, §1180-1190. Thomas also speaks of a qualified type of *per accidens* effect that is *ut in pluribus*. It is *per accidens* in the sense that it is not a direct object of the agent's intention; but it is *ut in pluribus* and not fortuitous, because it can still be traced to some secondary principle of the agent's action. This would be some kind of material element in the constitution of either the agent or what it intends to act upon. See *C. Gent.*, III, c. 5, 15a5-17; *In V Metaph.*, lect. 3, §789.

<sup>31</sup> See *In VI Metaph.*, lect. 2, §1176-1179; also *Summa theol.*, I, q. 115, a. 6; q. 116, a. 1.

<sup>32</sup> ARIST., *Metaph.*, VI, 3, 1027b2-6.

<sup>33</sup> *In VI Metaph.*, lect. 3, §1210. On the way in which the *per accidens* is "reduced" to the *per se*, see *In I Peryerm.*, lect. 14, ll. 254-269, 75.

<sup>34</sup> «Omnes causae sunt quaedam principia»: *In V Metaph.*, lect. 1, §760. 'Principle' is more general, having to do with order of any sort; 'cause' refers only to what has some influence on the existence of the thing caused: *In V Metaph.*, lect. 1, §750-751.



its intended one. Sometimes this is only an additional result, a side-effect. But sometimes it is the failure of the intended result itself. Obviously an agent does not intend its own failure.

Still, what about the accidental factor that accounts for the failure, the impediment? Does it not tend to make the agent fail? How else could it explain the failure? And if it tends to make the agent fail, is there not after all a *per se* cause of the failure? There is, Thomas says; but he argues that sometimes this cause itself only arises from a coincidence. Prior to the coincidence there was nothing at all tending to make the agent fail, no *per se* cause of its failure.

For example, Thomas says that the thirsty fellow's being wounded by the thugs is a *per se* cause of his being killed; and their encountering him is a *per se* cause of their wounding him (this being the sort of thing that thugs tend to do). But the encounter itself is only a coincidence, not intended by either party. Prior to it there was nothing tending toward the fellow's death<sup>35</sup>. Of course there were things that "led up" to it. It has a story behind it. Telling the story in a certain way can give an air of inevitability to the final result. But it is only at a certain point in the story that a cause truly aimed at the result begins to exist. The cause itself was not always aimed at. It arose out of a coincidence<sup>36</sup>.

Fallible causes and chance: these form the basis of Thomas's reply to those who teach that everything happens of necessity. However, the teachings that he is faced with are complex. He must work to show how they are refuted on this basis. In doing so he gives us a fuller view of his thought on causal necessity and contingency.

### 3. The series of causes and necessary bodies

In the *Physics*, Aristotle tells us that some of the earlier thinkers held that nothing happens by chance or luck<sup>37</sup>. Everything has a definite, identifiable cause. For example, if you go to the market and unexpectedly meet someone you wanted to see, the cause is not something vague called luck. It is your desire to go and buy something.

This is a rather crude argument. It completely overlooks the difference between *per se* and *per accidens* causes. Your desire to go and buy something causes the unexpected meeting only *per accidens*. It contains nothing that connects

<sup>35</sup> *In VI Metaph.*, lect. 3, §1201.

<sup>36</sup> This is Aristotle's point: some principles and causes begin to exist without being "generated", i.e. without any prior process aimed at them.

<sup>37</sup> ARIST., *Phys.*, II, 4, 195b35-196a5.

it with whatever moves the other person to be there at the same time. The doctrine of the *per accidens* is enough to undo the ancient teaching.

Thomas, however, also has information about other thinkers, after Aristotle, who developed more sophisticated arguments for the position that nothing truly happens by chance. They did not completely disregard the distinction between *per se* and *per accidens*, and they also acknowledged that some agents can fail. But they argued, in one way or another, that accidents and failure exist only in relation to inferior, particular causes. If we raise our sights to the truest causes, those governing the world as a whole, we find that everything that happens is determined to happen, infallibly and necessarily.

Against these arguments, Thomas stands by his aristotelian principles. He thinks that they still do not fully appreciate what makes for either a fallible cause or an accidental event.

Thomas does not always identify the sources of the arguments. But the texts fall easily into two groups. One concerns an argument that he sometimes attributes to the Stoics; the other, to Avicenna. I shall present them only summarily. It would take us too far afield to explore the differences in Thomas's various accounts or the accuracy of his attributions. My interest is in certain points about causality and necessity that emerge in his treatments.

The Stoics, Thomas tells us, held that everything happens of necessity<sup>38</sup>. This is because they traced everything to a single *per se* cause, determined *ad unum*, governing the whole world. This cause is called fate. It consists in the very series or connection of all the particular causes in the world.

On this account, it may be true that if we consider things only in relation to a particular cause, we will judge that there is failure and chance. But in reality any particular cause is only a part of the one true universal cause. Fate contains the determination to absolutely all that happens. And by reason of its very universality, there can be nothing outside it that might intervene to impede its effect. Nothing happens that was not always meant to happen, and nothing that was always meant to happen ever fails. Everything is necessary.

Now, Thomas readily agrees that what is fortuitous or accidental in relation to a lower, particular cause may turn out to be intended and *per se* in relation to

<sup>38</sup> Thomas presents the doctrine and attributes it to the Stoics in *In I Peryerm.*, lect. 14, ll, 210-220,74. (The Leonine editor gives numerous references here to related texts in Thomas and to his sources. Another source is indicated at *C. Gent.*, III, c. 73, 216b24-27.) Two other important discussions mentioning the Stoics are *De malo*, q. 16, a. 7, obj. 14, and *Quodl.*, 12, q. 4. The doctrine is presented without attribution in *Summa theol.*, I, q. 116, a. 3 (on whether fate is "immobile"). There are also highly pertinent remarks in the treatments of fate in *In VI Metaph.*, lect. 3, §1203-1217, and *Summa theol.*, I, q. 116, a. 1.

a higher and more universal cause<sup>39</sup>. He gives an example. The particular growing power in a single plant causes that plant to flower. It does not cause other plants to flower at the same time; their flowering is accidental to it. But the simultaneous flowering of many plants in springtime is not accidental to the more universal power that rules the seasons, the heavenly bodies. On the whole it is natural, not fortuitous, that many plants flower in springtime.

Nevertheless, Thomas insists, no cause determined *ad unum*, i.e., no natural or physical cause, can be a *per se* cause of absolutely every event. No matter how universal or pervasive its influence is, there will always be some events accidental to it<sup>40</sup>. In order to see this, Thomas invites us to consider how events in the world are related among themselves. The flowering of many plants in the spring is not a single movement, but the many movements do have a common pattern. There might well be a single, external physical cause naturally determined to move things in that way; and if its radius of action is large enough, it will move many things at the same time. But some events have no such affinity or kinship with each other. They cannot all be traced to a single form or nature. Someone buries a treasure in a certain place, and someone else digs a grave there; «nulla ... natura per se hoc facere potest, quod intendens fodere sepulcrum, inveniatur thesaurum»<sup>41</sup>. There is order among the particular causes in the world, but they are not all parts of a single natural cause<sup>42</sup>. If they were, there would be much more uniformity in the events.

Thomas also has things to say about the claim that since there is no impediment to the whole set of causes in the world, what results from it does so necessarily. To judge that a cause is necessary merely because it happens to have no impediment, he says, is to judge on extrinsic and accidental grounds. On the most proper understanding, the necessary is what *cannot* be impeded, precisely *because* it is necessary, intrinsically<sup>43</sup>. Moreover, if each of a series of particular causes can be impeded and so is contingent in itself, then their mere combination, in whatever order, cannot make for a necessary cause<sup>44</sup>.

Avicenna's doctrine resembles that of the Stoics<sup>45</sup>. While granting accidents and failure at the level of particular causes, he reduces everything to a univer-

<sup>39</sup> See *In VI Metaph.*, lect. 3, §1205-6, §1211; *Summa theol.*, I, q. 116, a. 1; also *In II Phys.*, lect. 10, §13.

<sup>40</sup> *Summa theol.*, I, q. 116, a. 1; *In I Peryerm.*, lect. 14, 270-320, 75-76; *De malo*, 16, a. 7, ad 16.

<sup>41</sup> *Summa theol.*, I, q. 116, a. 1.

<sup>42</sup> See J.J. SANGUINETI, *La filosofia del cosmo in Tommaso d'Aquino*, Ares, Milano 1986, esp. 95-109, 236-240.

<sup>43</sup> *In I Peryerm.*, lect. 14, ll. 167-181, 73; also *In II Phys.*, lect. 8, §4. See below, section 4.

<sup>44</sup> *C. Gent.*, III, c. 86, §4.

<sup>45</sup> Thomas mentions Avicenna's *Metaphysics (Philosophia prima)* in *C. Gent.*, III, c. 86, 262a14. See

sal, necessitating *per se* cause<sup>46</sup>. However, his universal cause is not the connection or series of particular causes. It is the heavenly bodies. This is a significant difference, because it is assumed – by Thomas as well – that both the existence of the heavenly bodies and their own motions are absolutely necessary<sup>47</sup>. Thomas also agrees that the heavenly bodies are the dominant agents in the physical world. All earthly things are under their influence.

But Thomas will not concede that the necessity of the existence and motions of the heavens excludes contingency and failure in their terrestrial effects<sup>48</sup>. They cannot fail in their own movements, since they admit no defect. But the earthly matter upon which they act may still be indisposed to receive a particular influence. He grants that such indispositions may in turn be caused by other celestial influences. But these influences will not be *per se* causes of the very *concursus* of the other influences with the indispositions. The *concursus* will be a mere coincidence<sup>49</sup>.

In the *Metaphysics* commentary Thomas goes on to consider how chance and failure in things are compatible with the existence of a cause upon which absolutely everything depends – the highest, divine cause. To be sure, he says, this cause does not itself bring anything about by chance; nor can it be impeded from bringing about what it intends<sup>50</sup>. But this does not mean that there is no failure or chance in the things themselves.

His explanation for this rests on the fact that the divine cause is not physical but intellectual. The operation of intellect extends to whatever somehow falls under the common notion of being – even to the *per accidens*. Intellect can therefore be a *per se* cause of what is in itself only a *per accidens* being<sup>51</sup>. There are coincidences in the world because God wants there to be.

AVICENNA LATINUS, *Liber de philosophia prima* (tr. V-X), éd. S. van Riet, E. Peeters – E. J. Brill, Louvain – Leiden 1980, tr. X, cap. 1, 522-530. Places where Thomas treats the same position without citing a source are *In I Peryerm.*, lect. 14, 270-320, 75-76; *In VI Metaph.*, lect. 3, §§1203-1217; *De malo*, q. 16, a. 7, ad 16; *Summa theol.*, I, q. 115, a. 6; *Quodl.*, 12, q. 4.

<sup>46</sup> See WEISHEIPL, *The Concept of Nature: Avicenna...*, 79.

<sup>47</sup> See GORIS, *Free Creatures...*, 282, n. 18. The fact that there is matter in the heavens does not, for Thomas, exclude absolute necessity in them or in their motions: *In I Peryerm.*, lect. 14, 196-209, 74. See also *C. Gent.*, III, c. 86, 262a7-10; THOMAS DE AQUINO, *Expositio libri Posteriorum*, ed. Leonine, t. 1\*/2 (editio altera retractata, 1989), Lib. I, lect. 16, §142. Cfr. DE KONINCK, *Réflexions...*, 233, and SELVAGGI, *Causalità...* (1964), 150.

<sup>48</sup> In support of this point he often cites Aristotle's *On Divination in Sleep*, II, 463b22. He also notes that the heavens cannot necessitate all human activity, because their influences upon the sense-appetites can be resisted by reason and will.

<sup>49</sup> See *C. Gent.*, III, c. 86, and the remarks by Sylvester of Ferrara (ed. Leonine, §VII, 265); also *Summa theol.*, I, q. 115, a. 6, with Cajetan's discussion (ed. Leonine, §§XVI-XIX, 550a-551a).

<sup>50</sup> *In VI Metaph.*, lect. 3, §§1215-1216; see *Summa theol.*, I, q. 19, a. 6.

<sup>51</sup> «Nihil prohibet id quod est per accidens, accipi ut unum ab aliquo intellectu, alioquin intellectus

It is not just that God causes coincidences to occur. He causes there to be such a thing as the coincidental or the accidental. He causes the common nature of being itself, and all its modes. These include the *per se* and the *per accidens*. They also include the necessary and the contingent. This is how Thomas reconciles God's infallible efficacy with contingency in things<sup>52</sup>.

#### 4. Absolute and conditional necessity

Having seen how Thomas rebuts the claim that everything happens by necessity, we can now ask whether in doing so he establishes the kind of indeterminism that Anscombe is looking for. This is the possibility of diverse results from identical situations.

The answer is clearly no. Nowhere in his treatment does Thomas propose anything like a cause that might fail even without an impediment. He only insists upon causes that can be impeded, *per accidens*.

What we must bear in mind is that the determinism that Thomas is rejecting is a specific sort, and very strong. It is the claim that there is a physical cause – one agent or an ordered set of them – that intends all that happens, and that cannot fail of anything that it intends. The determinism that concerns Anscombe is of a weaker sort. Put in modern terms, it would be the thesis that given the things that there are, with the tendencies or laws of their natures plus the conditions in which they are found at a given moment, all subsequent events are inevitable. Thomas is only arguing against doctrines that hold that the sheer laws of the natures of things, *by themselves*, make everything happen necessarily. For his purpose, it suffices to show that the natures of the things do not themselves completely determine the original conditions, i.e., that some of the conditions are merely accidental to the things.

As we shall see, Thomas does not hold the weaker kind of determinism either. It is incompatible with his conception of free choice and its efficacy in the world. However, in itself choice for Thomas is a spiritual phenomenon. If we confine ourselves to the purely physical order, setting aside any influence of free choice, he does appear to be a determinist, in Anscombe's sense.

formare non posset hanc propositionem, fodiens sepulcrum invenit thesaurum. Et sicut hoc potest intellectus apprehendere, ita potest efficere»: *Summa theol.*, I, q. 116, a. 1. See also *De malo*, q. 16, a. 7, ad 16; *In I Peryerm.*, lect. 14, 321-333,76; *Summa theol.*, I-II, q. 18, a. 10. Cfr. D'ARENZANO, *Necessità...*, 60.

<sup>52</sup> See, e.g., *In VI Metaph.*, lect. 3, §§1220-1222; *Summa theol.*, I, q. 23, a. 4; *In I Peryerm.*, lect. 14, 437-461, 78-79. For a full treatment, see GORIS, *Free Creatures...*, 296-304.

We see this in a passage from the *Summa contra gentiles*: «Sicut ex causa necessaria certitudinaliter sequitur effectus, ita ex causa contingenti completa si non impediatur»<sup>53</sup>. One might even wonder whether there is any real difference between this and the “strong” determinism that Thomas rejects. In this passage, to avoid saying *necessarie*, he uses the word *certitudinaliter*. But although the context is a discussion of God’s knowledge, the certainty here is not that of knowledge. It is the certainty of an effect’s following, a certainty “in the things”. Is this anything other than necessity? Recall the passage cited earlier: «necesse est ... causa posita sequi effectum, nisi sit impedimentum».

The difference rests on a distinction in Thomas between two kinds, or rather two senses, of necessity: absolute and conditional. Absolute necessity is also called natural necessity. What belongs to a thing with absolute necessity is what is necessarily in it by reason of its own nature. In a caused thing (any creature<sup>54</sup>), this is what is necessary in virtue of some cause of thing’s nature: either an essential principle – formal or material – or else a cause upon which the nature depends, e.g., the action of the sun<sup>55</sup>.

What is in a thing by conditional necessity is what is necessary only on the supposition of something that the thing’s nature does not depend on. Its necessity is not rooted in the thing’s own principles. For instance, what is necessary if a present thing is to attain a future goal is not, as such, in the thing by absolute necessity. Likewise, what is forced upon a thing by violent action is not in it by absolute necessity. The forced is contrary to the thing’s nature; its source can hardly be a principle of the thing’s nature<sup>56</sup>. Any impediment to a natural agent is a source of something contrary to its nature.

As for a thing’s natural *ut in pluribus* results, these of course are rooted in the principles of its nature. But they do not result from it with absolute necessity. If

<sup>53</sup> *C. Gent.*, I, c. 67, 190b1-7. The passage is part of an argument for God’s having certain knowledge of future contingents: «Sicut ex causa necessaria certitudinaliter sequitur effectus, ita ex causa contingenti completa si non impediatur. Sed, cum deus cognoscat omnia, ut ex supra dictis patet, scit non solum causas contingentium, sed etiam ea quibus possunt impedi. Scit igitur per certitudinem an contingencia sint vel non sint». As far as I know, this argument does not appear in any of Thomas’s other discussions of God’s knowledge of future contingents. It might even seem to be in conflict with *Summa theol.*, I, q. 14, a. 13, although there no mention is made of impediments. In any case, as Sylvester of Ferrara suggests in his commentary (ed. Leonine, t. 13, §VII, 193-194), the argument would surely have to be confined to strictly natural contingencies, i.e. those outside the influence of human choice. Still, the first sentence is Thomas’s constant view. And even if the argument’s ultimate value is unclear, it still casts doubt on the claim that for Thomas natural contingencies could not be foreseen in their antecedents, with certainty, by any mind; see D’ARENZANO, *Necessità...*, 67, and SELVAGGI, *Causalità...* (1964), 158.

<sup>54</sup> On the existence of absolute necessity in creatures, see *C. Gent.*, III, c. 30.

<sup>55</sup> See *In II Phys.*, lect. 15, §270; also *Summa theol.*, I, q. 82, a. 1; III, q. 14, a. 2; *In V Metaph.*, lect. 6, §§833-5; *C. Gent.*, II, c. 28, 335b35-336a10; II, 30, §15.

<sup>56</sup> *In V Metaph.*, lect. 6, §§834-5.

they did, they could never be impeded and would always result. It is true that if, in a given case (a normal case), no impediment is present, the result will follow, “certainly”. But the absence of impediments to a thing’s action is not itself a principle of the thing’s nature. Otherwise any such impediment would simply destroy the thing. Obviously the absence of impediments “suits” its nature. But it is still only a kind of extrinsic condition, and so it is not a source of absolute necessity. The necessity with which a thing produces its natural effect when there is no impediment is only conditional. The natural effect results necessarily, *if* there is no impediment.

Necessity in the unqualified sense, necessity *simpliciter*, is absolute necessity. Conditional necessity is necessity only in a restricted sense, *secundum quid*<sup>57</sup>. Speaking unqualifiedly, what has merely conditional necessity is not necessary but contingent. This point considerably mitigates Thomas’s association of causality with necessity.

It also sets him at odds with Suárez, who says:

«effectus, qui est contingens respectu causae proximae naturaliter operantis, si comparetur ad totum ordinem ac seriem causarum universi, et in his causis nulla intercedat libere agens, saltem ut applicans alias causas vel removens impedimenta, non habet contingentiam, sed necessitatem.... Et ita simpliciter et absque dubitatione verum est respectu totius ordinis seu collectionis causarum agentium, nullam posse esse contingentiam in effectibus, nisi in illa collectione causarum aliqua causa libera interveniat»<sup>58</sup>.

Suarez is judging that if the whole set of particular physical causes were left to itself, with no free cause intervening, then the physical effects that actually result would be necessary *simpliciter* and not contingent. This is in fact the very conception of necessity that Thomas criticizes in the Stoics<sup>59</sup>. For Thomas, if the effect of a given cause is necessary *simpliciter* and not contingent, then no other cause, free or otherwise, *could* intervene.

On the other hand, even if Thomas’s physics is in a way “deterministic” and has nothing resembling Anscombe’s «mere hap», does it thereby exclude the influence of free choice in the physical world? It has physical causes whose *per se* effects can be impeded or modified by another cause; in some cases, by choice.

<sup>57</sup> For an excellent explanation of the difference between absolute and conditional necessity and of its bearing on the determined character of natural events, see J. MARITAIN, *Réflexions sur la nécessité et la contingence*, «*Angelicum*» 14 (1937), 281-295. He terms absolute necessity «nécessité de droit», and conditional necessity «nécessité de fait».

<sup>58</sup> F. SUÁREZ, *Disputationes metaphysicae*, in *Opera omnia*, XXV, ed. C. Berton, Vivès, Parisiis 1866, Disp. XIX, sect. x, §§5-6, 736. Suarez cites precisely *C. Gent.* I, c. 67, 190b1-7 in support (§5).

<sup>59</sup> See above, at n. 43.

No doubt, if choice is free, *its* causes must be such that under identical circumstances, they can yield diverse results. But is there any reason why physical causes must be as undetermined as is the will, in order for them to be subject to its determinations?

## 5. Weak causes

However, we still need to see whether there is after all something like Anscombe's indeterminism, or at least a basis for it, in Thomas's physics. As I mentioned, important 20<sup>th</sup>-century interpreters have held that there is. Their main line of argument is an appeal to a "margin of indetermination" in physical matter, as Thomas conceives it<sup>60</sup>. The pertinent elements in his natural philosophy are well known and may be sketched briefly.

Following Aristotle, Thomas understands a physical agent to be a substance constituted by matter, which is potency, and form, which is act. The form, as act, has a double role<sup>61</sup>. It is first of all the determination by which the substance actually exists, as an individual of a certain kind. Secondly, it is the source of the substance's active power and tendency<sup>62</sup>. A substance is naturally active by virtue of its form, and in the way determined by the form<sup>63</sup>. Matter, however, is a potency for a variety of forms. No single form exhausts the potency of its matter. That is, whatever form a material substance actually has, it always retains po-

<sup>60</sup> The expression of DE KONINCK, *Reflexions...*, 241-2, 245; D'ARENZANO, *Necessità...*, 58; SELVAGGI, *Causalità...* (1964), 153.

<sup>61</sup> «Primus autem effectus formae est esse, nam omnis res habet esse secundum suam formam. Secundus autem effectus est operatio, nam omne agens agit per suam formam», *Summa theol.*, I, q. 42, a. 1, ad 1.

<sup>62</sup> On this texts abound. See, e.g., *Summa theol.*, I, q. 3, a. 2; I, q. 5, a. 5; I, q. 77, aa. 4 & 6; I, q. 80, a. 1; I, q. 115, a. 1; I-II, q. 55, a. 2; III, q. 13, a. 1. Perhaps especially interesting, with respect to Thomas's general doctrine of causality, is *Summa theol.*, I, q. 5, a. 4. A thing's formal cause is the "seed" of its power to act, its agent causality; and this in turn is what makes it a cause of inclination, i.e., attractive, good – a final cause. Final causality comes first in the overall order of dependence in the exercise of the kinds of causality (see above, n. 16). But the order is reversed in the process by which any particular natural thing, which is a *caused* thing, is made capable of exercising them; and so is the order in the process of our coming to understand them. On this teaching see L. DEWAN, O.P., *Saint Thomas and the Principle of Causality*, in J.L. ALLARD (ed. by) *Jacques Maritain: A Philosopher in the World*, University of Ottawa Press, Ottawa 1985 (Philosophica 28), 53-71.

<sup>63</sup> Here I am speaking only of substantial form, but for Thomas any form, as form, is a principle of action. See THOMAS DE AQUINO, *Sententia libri De anima*, ed. Leonine, t. 45/1, Lib. II, cap. 14, 363-364, 130. Moreover, all *per se* action is rooted in a form. For it is some kind of "communication" of form. That is, as Thomas teaches in many places, what every agent intends to effect is something somehow like it. (Likeness consists in having a common form.) See *Summa theol.*, I, q. 4, a. 3; I, q. 115, a. 1; *In VII Metaph.*, lect. 7, §1443.



tency for other forms<sup>64</sup>. This is why a physical substance is corruptible. Its matter can lose the form that it has and take on a new form, constituting a new substance.

Moreover, even while it remains subject to a given form, the matter of a thing makes it possible for the thing to have dispositions that are accidental, and even contrary, to the order of its form. Most importantly for us, the matter makes it possible for the thing not to have the full active power that is due to it according to its form. The thing can have some weakness or defect, for instance lameness. Such weakness is accidental and unnatural for it, but possible by reason of its matter. This in turn means that when a physical agent fails to produce its natural effect, e.g. when a walker stumbles and falls, the reason may not be any indisposition in the thing that it is acting upon (slippery pavement), nor any obstacle coming between it and what it is acting upon (a stone). The reason may be a defect in the agent itself.

Now, the proponents of the indeterminist interpretation do grant that many failures are due to determinate accidental factors such as impediments. But in their judgment, the “margin of indetermination”, i.e. the undetermined potency remaining in a thing by reason of its matter, also allows for failures that cannot be traced to any determinant or set of determinants at all, even accidental ones. For, they argue, it allows for defects or weaknesses which themselves have no such determinants.

It is Selvaggi who develops the idea most fully. First he raises the question whether Thomas’s doctrine is not ultimately deterministic.

«Infatti, si potrebbe dire, anche il venir meno dell'agente fisico nella sua azione è un evento particolare e, come ogni evento, esso deve avere una causa determinata. Di fatto, gli esempi portati da S. Tommaso si prestano a questa critica: il venir meno dello zoppo nel camminare è dovuto a un complesso di cause e circostanze, che l'indagine scientifica potrebbe, almeno in linea di principio, pienamente precisare e ricondurre così ad un rigido determinismo causale».

He replies:

«Riteniamo, tuttavia, che l'obiezione, almeno in linea di principio, non sia valida. La defettibilità dell'agente fisico, infatti, non è qualcosa di positivo, che possa produrre un effetto positivo, ma è di sua natura puramente negativa. Ora, il negativo in quanto tale non esige una causa positiva, ma solo la mancanza di una causa. Tutto ciò che di positivo e di determinato si ha nell'azione fisica procede dalla forma, principio posi-

<sup>64</sup> For Thomas the heavenly bodies are an exception. On this see especially THOMAS DE AQUINO, *Sententia super librum De caelo et mundo*, ed. Leonine, t. 3, Lib. I, lect. 6, §6, 24.

tivo di determinazione; il margine di indeterminazione, invece, procede dalla negatività della materia, non totalmente dominata dalla forma che l'attua.

Il principio di causalità, quindi, non esige che si debba assegnare una causa positiva e determinata al fatto che l'agente fisico, qualche volta, venga meno alla sua azione naturale. In tali casi, avremo un fatto puramente casuale, nel senso appunto che esso manca di una causalità e intenzionalità positiva»<sup>65</sup>.

He is arguing that a natural cause might fail without any impediment. Thus,

«è possibile a priori concepire una natura, che sia per se stessa ordinata a produrre un determinato effetto e che di fatto la produca nella maggior parte dei casi, ma che possa almeno in qualche caso venir meno nella sua azione e nella produzione dell'effetto predeterminato, non solo per l'interferenza di altre cause, ma anche per l'intrinseca defettibilità e contingenza dell'agente stesso»<sup>66</sup>.

It sounds just like Anscombe's non-necessitating cause.

My disagreement with this reading rests on the following considerations.

First, we have already noted how constant Thomas is in teaching that natural causes do not fail of the effects to which they are naturally ordered except through some impediment<sup>67</sup>. Certainly he acknowledges the possibility of weakness in natural causes; and weakness, too, can be a reason why a cause fails. But this only means that weakness, too, counts as an impediment<sup>68</sup>.

This may seem a mere matter of words. Selvaggi's substantive claim is that a defect or weakness, being something negative, need not always have any positive cause determining its subject to it. He is arguing that in some cases there may be no debilitating influence. The matter's margin of indetermination is

<sup>65</sup> SELVAGGI, *Causalità...* (1964), 156. Evidently *puramente* here adds something to *casuale*. It excludes even *per accidens* causes such as those cited in the example of the *zoppo*. Similarly, D'Arenzano says: «nella realtà microscopica, per la potenzialità della materia, date le stesse condizioni fisiche iniziali, ne possono casualmente seguire anche fenomeni alquanto differenti»: D'ARENZANO, *Necessità...*, 61, n. 118. Clearly *casualmente* here cannot mean «by reason of some accidental condition»; all the conditions are taken as given. It is certainly not Thomas's «chance». Thomas is explicit about the fact that chance causes pertain to the domain of efficient causality, not material: *In II Phys.*, lect. 10, §11; *In VI Metaph.*, lect. 3, §1202.

<sup>66</sup> SELVAGGI, *Causalità...* (1964), 418. See also SELVAGGI, *Filosofia...*, 432-433.

<sup>67</sup> See esp. *Summa theol.*, I, q. 115, a. 6: *ut in pluribus* causes «non deficiunt in minori parte, nisi propter aliquam causam impediendam».

<sup>68</sup> «In rebus autem inanimatis causarum contingentia ex imperfectione et defectu est: secundum enim suam naturam sunt determinata ad unum effectum, quem semper consequuntur nisi sit impedimentum vel ex debilitate virtutis, vel ex aliquo exteriori agente, vel ex materiae indispositione»: *C. Gent.*, III, c.73, 215b2. On the *per accidens* character of *debilitas*, see *In VI Metaph.*, lect. 3, §1210; *Summa theol.*, I, q. 49, a. 1.

enough to account for the defect. In such a case, the failure that follows upon it will not have been pre-determined by anything.

Thomas, however, is categorical about the fact that the failures of what a thing does naturally must be traced to a positive cause. To be sure, the *immediate* source of some failures of this sort may be a defect in the agent. It is also true that in *some* cases a negation has only a negative cause<sup>69</sup>. But a defect in an agent's natural power is a special type of negation. It is a privation, a lack of something that it is natural for the agent to have. Such a lack runs contrary to the active tendency of the agent's form. Only a conflicting active principle can account for it<sup>70</sup>. It is necessary, Thomas says, that a privation «habeat causam agentem per accidens; quod enim natum est inesse et debet, nunquam abesset nisi propter causam aliquam impredientem»<sup>71</sup>.

Might there be a way to defend Selvaggi's interpretation? Its central notion is «partial determination». Suppose we focus on defects of a certain kind: those that only partially incapacitate the agent. Thomas presents a simple example of this sort: a colored body or a surface of which only part has the color «in act», i.e., illuminated<sup>72</sup>. Such an object, Thomas notes, may or may not move the power of sight. Looking directly at it, you may see it, and you may not. It seems to be a kind of *ad utrumlibet* situation.

Yet not even this is a case in which opposite results are possible under the same circumstances. If you look at the object's illuminated part, you definitely will see it. If you look at the unilluminated part, you definitely will not. The partial defect does not by itself constitute a sufficient basis for indeterminacy<sup>73</sup>.

In sum, what the imperfect determination of an agent's matter by its form explains is only the possibility of its being impeded. It does not create a possibility of failure without impediment. The margin of indeterminacy is not a sufficient condition for failure. It is only the first condition.

<sup>69</sup> *Summa theol.*, I-II, q. 75, a. 1.

<sup>70</sup> The power naturally arises from the form at some point in the agent's development, and it is then that the lack of the power is unnatural and a privation. The process by which a thing reaches the full complement of its active power is no less determinate than the power itself or its effects; in fact the powers of a thing result from its form as from an active source – a natural one, of course, determined *ad unum*. (See *Summa theol.*, I, q. 77, a. 4 & a. 6.) On this see the excellent article by F. SELVAGGI, *Il concetto di natura in Aristotele e S. Tommaso*, in *Scritti in onore di Carlo Giacon*, Antenore, Padova 1972, 259-276.

<sup>71</sup> *Summa theol.*, I-II, q. 75, a. 1. Also I, q. 49, a. 1: «Quod autem aliquid deficiat a sua naturali et debita dispositione, non potest provenire nisi ex aliqua causa trahente rem extra suam dispositionem, non enim grave movetur sursum nisi ab aliquo impellente, nec agens deficit in sua actione nisi propter aliquod impediendum. [...] Causam autem per modum agentis habet malum, non autem per se, sed per accidens».

<sup>72</sup> *Summa theol.*, I-II, q. 10, a. 2.

<sup>73</sup> In his commentary on *Summa theol.*, I, q. 115, a. 6 (ed. Leonine, §XX, 551a), Cajetan places the root of physical contingency in the potency of matter, and its complement in the *concursus* of accidental causes.

Does Thomas's philosophy then exclude indeterminacy at the physical level? What it excludes is that if something is open to various possible results, there not be any determinant that accounts for which one actually occurs. The crucial point would be that a *physical* determinant always takes time to yield its result. It has to *move* something<sup>74</sup>. And what it moves cannot be being moved in opposite ways at the same time. Hence it *pre*-determines the result (perhaps only a short time before, as in the case of the thirsty fellow's death). The physical determinant in turn must itself be the result of some determinant; and if this is physical, it must again be temporally prior; etc. So it does seem that the order of physical causes, *in itself*, is deterministic.

Still, as we saw, it is not absolutely necessary. This leaves it open to influences by non-physical determinants such as choices. Obviously Thomas does not confine these to human beings. So his view may still allow for indeterminacy in what actually happens in the physical world, even outside the sphere of human influence<sup>75</sup>. But of course this is only if choice is not pre-determined too.

## 7. The indeterminacy of choice

This is hardly the place to undertake a full account of Thomas's doctrine of human choice<sup>76</sup>. I only wish to consider how he accounts for its indeterminacy.

With respect to the things that fall under the power of choice, practical things, human beings are for Thomas "self-determining"<sup>77</sup>. A choice is a person's determination with respect to some matter of action. It is an order or inclination toward handling the matter in one particular way rather than another. The one who makes the choice is the person himself. It is he who orders or determines himself to one of various alternative ends or effects.

This entails that the choice is not pre-determined. It does not arise by nature,

<sup>74</sup> See *Summa theol.*, I, q. 46, a. 2, ad 1: «causa efficiens quae agit per motum, de necessitate praecedit tempore suum effectum, quia effectus non est nisi in termino actionis, agens autem omne oportet esse principium actionis».

<sup>75</sup> For a very interesting interpretation of quantum indeterminacy along such lines, by a highly qualified physicist, see W. SMITH, *The Quantum Enigma: Finding the Hidden Key*, S. Sugden, Peru (IL) 1995. Smith proposes a non-physical cause to explain quantum discontinuity (85-97). At least one prominent thomistic philosopher of science judges the book very favorably: W. WALLACE, O.P., *Thomism and the Quantum Enigma*, «The Thomist», 61 (1997), 455-468.

<sup>76</sup> What follows is largely a selection of points elaborated in BERGAMINO, *La razionalità...*, cap. 5.

<sup>77</sup> Texts that speak of the will's (or the person's) self-determination: THOMAS DE AQUINO, *Quaestiones disputatae de veritate*, ed. Leonine, t. 22, q. 8, a. 12; q. 22, a. 4; q. 24, a. 4; q. 25, a. 5; *C. Gent.*, III, c. 3, 9a37-b3; *Summa theol.*, q. 19, a. 3, ad 5; q. 9, a. 6, ad 3. See also *Summa theol.*, I, q. 18, a. 3; I-II, q. 6, a. 2.

nor is it the direct result of the person's nature plus the circumstances under which he makes it. The formulation by Anscombe that we saw at the beginning applies to it. Under the very conditions in which a person chooses in favor of something, he can also choose against it (or even choose to abstain). No "relevant further difference" is needed in order for him to choose otherwise.

Now, the indeterminacy of choice does not require that a given choice have no cause or causes at all. It only requires that the presence of the causes not make the choice necessary. They must not preclude the possibility of an opposite choice or preempt the person's own self-determination.

God causes all agents to act, including human beings. But he causes each thing to act in the mode proper to it, and he causes human beings to engage in acts of self-determination<sup>78</sup>. A person's own nature is also a cause of his choice. In particular, the natural desire for the "last end" – the perfect good, happiness – naturally moves a person to deliberate about what to do (if anything) in pursuit of it<sup>79</sup>. But it does not determine his choice. There are many "concrete instantiations" of the last end, many paths to happiness<sup>80</sup>.

Every choice also has a cause that explains the person's making that very choice rather than another. This is the choice's object. The object of a choice is some particular good (true or apparent). No one chooses a thing unless it seems choiceworthy to him; and its seeming choiceworthy is an inducement to choose it. Its very goodness constitutes a power to move the will in favor of it.

It is here that "weak" causes play a role in Thomas's doctrine of choice. A particular good thing, insofar as it is good, *can* move the will. But because it is only a particular or partial good, it does not "overpower" the will. It is not irresistible. According to the consideration of its goodness, it can move the will. But according to the consideration of its lack of goodness, it can be rejected by the will<sup>81</sup>.

However, the weakness or deficiency of the object of choice is not enough, on its own, to account for the will's power to determine itself with respect to the object. In fact, it is to illustrate such weakness that Thomas offers the example mentioned earlier, that of the partially colored object; and we saw that this does not constitute a sufficient basis for indeterminacy. Thus, as regards things partially good, other animals too may at one time be struck by something attractive

<sup>78</sup> See *Summa theol.*, I-II, q. 10, a. 4.

<sup>79</sup> *Summa theol.*, I-II, q. 9, a. 4. The natural inclination of the will is in a way *ad unum*, but this *unum* is only something common, open to a multiplicity of particular determinations: *Summa theol.*, I-II, q. 10, a. 1, ad 3.

<sup>80</sup> See *De malo*, q. 6, a. un., ad 9. Cfr. WILLIAMS, *The Libertarian...*, 205.

<sup>81</sup> *Summa theol.*, I-II, q. 10, a. 2.

about a thing, and at another by something unattractive about it. Yet at any given moment, their appetitive response to it is the necessary result of how it strikes them at that moment<sup>82</sup>.

In addition to the “weakness” of its possible objects, choice also needs another factor to account for its indeterminacy. It is a factor proper to human beings. Thomas never tires of saying that the root of the freedom of human choice is reason, as it bears on matters of action<sup>83</sup>. This is deliberative reason. A choice is a deliberated desire<sup>84</sup>.

Reason, as Thomas puts it, is capable of a *collatio* of objects. It can bear upon many things, and many features of a thing, together. It makes comparisons. In this it differs from sensation. The result is a difference in how it moves appetite:

«vis sensitiva non est vis collativa diversorum, sicut ratio, sed simpliciter aliquid unum apprehendit. Et ideo secundum illud unum determinate movet appetitum sensitivum. Sed ratio est collativa plurium; et ideo ex pluribus moveri potest appetitus intellectivus, scilicet voluntas, et non ex uno ex necessitate»<sup>85</sup>.

By deliberating, reason can gather together the various features of a possible object of choice. It can present, in a single and as it were global consideration, both the desirability and the undesirability of a thing. “This job is interesting, but also difficult”. A thing is chosen for what seems desirable about it. But even while considering this, the chooser may also be considering what is desirable about the alternatives to it, the reasons for choosing any of them instead<sup>86</sup>. And even if, at the moment, he is not actually considering these, he can still choose to go on deliberating<sup>87</sup>.

The immediate source of a choice, then, is the chooser’s own rational act of considering the object’s choiceworthiness. This is the determining factor of the

<sup>82</sup> *Summa theol.*, I, q. 82, a. 2, obj. 3. See WILLIAMS, *The Libertarian...*, 201-204.

<sup>83</sup> See, e.g., *Summa theol.*, I, q. 83, a. 1; *Summa theol.*, I-II, q. 13, a.6; *De malo*, q. 6, a. un.; *In I Peryerm.*, lect. 14, 462-474,79.

<sup>84</sup> *Summa theol.*, I, q. 83, a. 3.

<sup>85</sup> *Summa theol.*, I, q. 82, a. 2, ad. 3. See I, q. 83, a. 1; *In III De anima*, cap. 11, 69-87, 250.

<sup>86</sup> One need not ignore the goodness in the object in order to consider a lack of goodness in it. If something is only a partial good, Thomas says, «poterit ... aliquis uelle eius oppositum, etiam de eo cogitans, quia forte est bonum uel conveniens secundum aliquod aliud particulare consideratum, sicut quod est bonum sanitati, non est bonum delectationi, et sic de aliis»: *De malo*, q. 6, a. un.; emphasis added.

<sup>87</sup> He may or may not, because the act of deliberating or considering is itself only a partial good — even when it is about total good: «potest aliquis non uelle tunc cogitare de beatitudine, quia etiam ipsi actus intellectus et uoluntatis particulares sunt»: *De malo*, q. 6, a. un.

<sup>88</sup> *Summa theol.*, I-II, q. 9, a. 6, ad 3; emphasis added.

choice. «Homo *per rationem* determinat se ad volendum hoc vel illud»<sup>88</sup>. Yet it does not make the choice of that object necessary. For it is also a consideration of the choiceworthiness of some alternative. The one global consideration presents many choosable objects, many possible determinants of the will. It does not pre-determine the chooser to any one of them. Only the choice itself settles upon one alternative to the exclusion of the others<sup>89</sup>.

So the act of choice has many causes or active principles; but they do not make it necessary, either absolutely or even conditionally<sup>90</sup>. At the same time, it bears very little resemblance to what happens by chance. The alternative to a given choice is not something *praeter intentionem*. It is something else that would also be ordered to the chooser's intended end.

This is not to say that there is no element of the *per accidens* in choice. It is accidental to the thing chosen that something else might be chosen instead<sup>91</sup>. But this is not accidental to the chooser. For his consideration of the one is not accidental to his consideration of the other. As we saw, intellect can bear *per se* on that which in itself is only *per accidens* and issue determinations about it<sup>92</sup>. Reason's *collatio* of the alternatives is a truly unified act, rooted in a single principle of comparison<sup>93</sup>. And the act of choice reflects reason's *collatio*<sup>94</sup>. A choice does not bear solely on the thing chosen, as an acceptance of it. It also bears on the alternative, as a rejection of it. «Ex hoc [...] liberi arbitrii esse dicimur, quod possumus unum recipere, alio recusato, quod est eligere»<sup>95</sup>.

The freedom of choice in Thomas is not chance, and even less does it resemble Anscombe's «mere hap». It does not involve causes that can fail without impediment or results that have no determinant at all. No matter which alterna-

<sup>88</sup> Something is chosen because it seems preferable, better than the alternatives. But 'better', like 'good', is not univocal. The forms of goodness are many, not even confined to a single genus. (See THOMAS DE AQUINO, *Sententia libri Ethicorum*, ed. Leonine, t. 47, Lib. I, lect. 6, 22b76-23b168; lect. 7, 26b152-27b213.) What is better in one way is not so in some other way, and so the choice remains open. See *Summa theol.*, I-II, q. 13, a. 6, ad 3.

<sup>89</sup> In some cases a choice may be necessary for an end. But it is not necessitated by its active principles — not even by the *consideration* of it as necessary for the end. This does not necessitate it, because there are also other ways of considering it. See *Summa theol.*, I-II, q. 13, a. 6, ad 1.

<sup>91</sup> Likewise, the contingency of choice must involve some imperfection, but the only imperfection strictly essential to it is on the side of the object. See *Summa theol.*, I, q. 19, a. 3, ad 4 & ad 6; I, q. 59, a. 3, ad 1 & ad 2.

<sup>92</sup> See above, at n. 51.

<sup>93</sup> See *Summa theol.*, I, q. 85, a. 4, c. & ad 4; cfr. I, q. 14, a. 7. Thus the root of true causal indeterminacy in Thomas is not the indefiniteness of matter, but the amplitude of intellectual form. Intellect can extend to many particular principles of action simultaneously; and it can do so not only in potency, but also in act, through a single intelligible species. See also *C. Gent.*, III, c. 73, 216a11-15.

<sup>94</sup> *Summa theol.*, I, q. 83, a. 1, ad 3.

<sup>95</sup> *Summa theol.*, I, q. 83, a. 1.

tive is chosen, there is always reason for wanting it and for preferring it to the others. A reason that can motivate a choice can also fail to do so, but only because another reason might prevent it (and also might not).

Anscombe's paper concludes, abruptly, with an indication for further study. «The most neglected of the key topics in this subject are: interference and prevention»<sup>96</sup>. Surely this makes it all the more a pity that we can only guess what she might have made of Thomas Aquinas's treatment<sup>97</sup>.

<sup>96</sup> ANSCOMBE, *Causality...*, 147.

<sup>97</sup> My thanks to Kevin Flannery, S.J., and Luca Tuninetti for their helpful comments on earlier drafts of this paper.