Paul Cristian Bujor

QUOD DEUS NON POTEST. THE LIMITS OF GOD'S POWER IN THE THOUGHT OF THOMAS AQUINAS AND THEIR RELATION TO THE 1277 CONDEMNATION

MA Thesis in Comparative History, with a specialization
in Interdisciplinary Medieval Studies.

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Budapest

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(Romania)

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LIST OF ABBREVIATIONS

CT	*Compendium theologiae*
De aeternitate mundi	*De aeternitate mundi, contra murmurantes*
De unitate intellectus	*De unitate intellectus contra Averroistas*
DSS	*De substantiis separatis*
In BDH	*Expositio super librum Boethii De hebdomadibus*
In BDT	*Expositio super librum Boethii De trinitate*
De anima	*Sententia super De anima*
Met	*Sententia libri Metaphysicae*
De Caelo	*In libros Aristotelis De Caelo et mundo expositio*
In PA	*Sententia super Posteriora analytica*
In Phys.	*Commentaria in octo libros Physicorum*
In Sent.	*Scriptum super libros Sententiarum*
De anima	*Quaestio disputata de anima*
De potentia	*Quaestiones disputatae de potentia*
De spiritualibus creaturis	*Quaestio disputata de spiritualibus creaturis*
De veritate	*Quaestiones disputatae de veritate*
QQ	*Quaestiones quodlibetales*
SCG	*Summa contra gentiles*
ST	*Summa Theologiae*

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a – articulus
c – capitulum
d – distinctio
q – questio

… – omisi

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INTRODUCTION

The discussion of God's omnipotence – present in the Christian thought already with the Council of Nicaea – was influenced in thirteenth-century by the reception of Greco-Arabic philosophical ideas. The theological tensions produced by their reception made Pope John XXI to initiate an inquiry in a letter sent to Étienne Tempier, the bishop of Paris, on January 18, 1277. Going beyond the request of the Pope, Tempier issued a condemnation of 219 philosophical propositions at 7 March 1277, forbidding their use at the University of Paris.[1]

The formula *Quod Deus non Potest* – that God cannot do something – appeared on the frontispiece of this condemnation. For the theologians who enacted it, the limitation of God's power was a necessary consequence of some of the propositions which were to be condemned. This limitation was the product of a more regular and deterministic image of the universe, structured by created laws, which was made possible by the reception into Latin of various ancient writings on nature. These writing were centered around Aristotle's works on natural philosophy, accompanied by Greek and Arabic commentaries. An analysis of the thirteenth century reception of these books on natural philosophy and the consequences will form the historical background of my thesis.

The effects of the 1277 condemnation went beyond the immediate historical context constituting, according to some modern historians of science, the premises of early modern science. Within this new horizon of understanding, the tension between the philosophical principles of Aristotle's physics and the theological ideas on God's absolute power, a tension made explicit by the condemnation, produced various thought experiments which represent the first early modern scientific developments. Pierre Duhem's claim that the 1277 condemnation constitutes "the birth of modern science," was further discussed, receiving new

[1] See H. Denifle and E. Châtelain, ed., *Chartularium Universitatis Parisiensis*, vol. 1 (Paris: Delalain, 1889), 543-558.

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and important formulations, by Alexandre Koyré, Anneliese Maier, Amos Funkenstein, Edward Grant, John Murdoch, David Lindberg and others. The first chapter discusses these disputes, which will help me clarify the historical significance of the 1277 condemnation.

Bringing these medieval and modern dimensions of the 1277 condemnation I attempt to analyze the propositions which explicitly condemned various limitations of God's power and which were associated in the existing literature with Thomas Aquinas. Stressing, among other points, the absolute power of God, the 1277 condemnation banned some specific issues, among which one can also find some of Aquinas' ideas.

The analysis of these propositions will be contrasted with Aquinas' own conception of God's power, based on a textual analysis. The comparison between the idea of God's absolute power, as stressed in the condemnation, and Aquinas' ideas on God's power will help to discover if he could have been condemned in 1277. This approach is an essay in going beyond the insufficient information that can be found in the historical sources to look for the philosophical background behind Aquinas' possible condemnation.

In the development of this analysis I will analyze the reasons present behind Aquinas' conception of God's power and behind the conception of God's power implied by the condemnation. I will also try to see what the role of the reception of Aristotle's books on nature was and how it influenced, on the one hand, the 1277 condemnation – which stressed the idea of the absolute power of God, able to do everything short of a logical contradiction – and, on the other hand, Aquinas' conception of God's power – which implies the idea of God's self-limitation and self-contradiction. By describing the context, the reasons and the implications of the differences between the two positions, I will bring out some general features of the intellectual transformations that took place in this period.

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1. The impact of natural philosophy in the twelfth and thirteenth centuries

The condemnation of 1277 cannot be separated of the important transformations that took place in the Latin West in the late twelfth and thirteenth centuries: an increase in the level of material wealth, the formation of the first towns and of the first universities[2] – which have been seen as a renaissance of the Western world.[3] These social developments went hand in hand with translations and reception of Greek and Arabic philosophy, which produced a similar transformation on an intellectual level.

Without denying the presence of some translations of Greek philosophy before – as those realized by Boethius in the sixth century – it is certain that the first part of the thirteenth century constitutes the climax of a *translatio studii* process. The translations from Arabic and Greek into Latin, which had began in the twelfth century, slowly expanded their scope, from medicine and astrology to the classical texts of Greek philosophy.[4]

Charles Haskins mentions the translation movement present at the court of the Norman kings in Sicily, where substantial work was done as early as the middle of the twelfth century, with translations being made here directly from Greek.[5] He claims, however, that Spain was the most important channel by which the new learning reached Western Europe.[6] In Toledo, Dominicus Gundissalinus and Gerard of Cremona took the first steps in translating the Arabic texts into Latin while later, in the thirteenth century, William of Moerbeke translated various works of Greek philosophy – including the works of Aristotle –

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[2] The University of Paris came into being around the year 1200 and the University of Oxford around 1209, both being constituted as corporations, guilds of masters and students.

[3] The thesis of a twelfth century Renaissance, the subject of many disputes, can always be contested – as any thesis proposing a revolution – by emphasizing the continuities, rather than the differences it implies. For an analysis of this period, especially of the twelfth century, see Marie-Dominique Chenu, *Nature, Man, and Society in the Twelfth Century: Essays on New Theological Perspectives in the Latin West* (Toronto: University of Toronto Press, 1997) and Robert L. Benson and Giles Constable, ed., *Renaissance and Renewal in the Twelfth Century* (Toronto: University of Toronto Press, 1991).

[4] See David C, Lindberg, "The Transmission of Greek and Arabic Learning to the West," ed. David C. Lindberg, *Science in the Middle Ages* (Chicago: University of Chicago Press, 1978), 70.

[5] See Charles Homer Haskins, *The Renaissance of the Twelfth Century* (Cambridge, MA: Harvard University Press, 1955), 291-293.

[6] Ibidem, 284-285.

from Greek into Latin. This process of translation, and that of the reception which accompanied it, transformed the medieval curriculum of studies, giving rise to a pronounced interest in a domain in which Aristotle's contribution was seen as exemplary: the natural philosophy.

In her book, *The Intellectual Revolution in Twelfth-Century Europe*, considering that "the prevailing estimate about the medieval thinking about science is inaccurate on several counts," Tina Stiefel claims that ideas concerning the objective study of nature appeared in the Latin West before the translation of Aristotle into Latin. These influences would have been taken "in part, from Arabic scientific thought, scattered bits of Greek science and medicine, and the Chalcidius' version of Plato's *Timeus*."[7]

One has to admit that the twelfth century's natural philosophy, before the translations of Aristotle, was based on other, Arabic and Greek, sources. However, Aristotle books on nature, once translated into Latin after the end of the twelfth century, eclipsed any other possible influences, by offering a systematic treatment of natural philosophy. The reception of Aristotle's natural philosophy produced a change in the previous theological and moral direction, from one in which a platonic and neo-Platonic influence was essential to one that was closer to the study of nature. The translations of his works on natural philosophy completed the *Corpus Aristotelicum* since Aristotle's works on logic and rhetoric were already accessible in Latin before the thirteenth century's translation movement, being integrated in the Christian curriculum as preparatory exercises for the study of Scripture.

2. Condemnations of Aristotle's ideas

Even if the condemnation of 1277 was the most important action of this type, it was not alone. According to Hans Thijssen, Tempier's condemnation was only one of many in the thirteenth and fourteenth centuries:

[7] See Tina Stiefel, *The Intellectual Revolution in Twelfth-Century Europe* (London: Croom Helm, 1985), 2.

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> Tempier's condemnation is only one of the approximately sixteen lists of censured texts that were issued at the University of Paris during the thirteenth and fourteenth centuries. Most of these lists of propositions were combined into systematic collections of prohibited articles.[8]

These successive condemnations forbade the Aristotelian ideas – or ideas closely associated with them – which belonged to natural philosophy or to metaphysics, and which were taught without paying attention at their contradiction with the Christian faith. Among these ideas one can find that of the eternity of the world, which contradicted the Christian idea of a creation *ex nihilo*; the idea of the unity of the intellect, which implied a lack of individual responsibility and the impossibility of attaining personal immortality; the regular and deterministic functioning of the universe, according to physical laws, which limited the direct interventions of God; Aristotle's conception of God as Thought Thinking Itself, which made impossible the knowing of the singulars and the existence of divine providence.

Due to this situation various condemnations were pronounced. John Wippel mentions the early condemnations of 1210 and 1215, followed by the warning letters of Pope Gregory IX from early 1230. On April 13, 1231, Pope Gregory IX issued a papal bull according to which Aristotle's works were to be purged of errors; three theologians met on April 23 to eliminate these errors.[9] Wippel also notes that, despite these warnings and condemnations, the works of Aristotle were back in lectures after 1240-1245, and "by 1250 Aristotle was firmly in place in both Arts and Theology at Paris, so much so in fact that the Statutes of 19 March 1255 for Arts required reading of all known works of Aristotle."[10]

This situation produced new condemnations. In 1267, a condemnation organized by the Franciscan Bonaventure was directed against the idea of the eternity of the world and

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[8] See Hans Thijssen, "What Really Happened on 7 March 1277? Bishop's Tempier Condemnation and its Institutional Context," in *Texts and Contexts in Ancient and Medieval Science*, ed. Edith Sylla and Michael McVaugh (Leiden: Brill, 1997), 85. Thijssen mentions here the example of a *Collectio errorum in anglia et parisius condempnatorum*.

[9] The report of this commission on the errors of Aristotle was never found. See Edward Grant, *A History of Natural Philosophy. From the Ancient World to the Nineteenth Century* (Cambridge: Cambridge University Press, 2007), 243.

against that of the existence of a single intellect for the entire human race. In 1270, Étienne Tempier, the bishop of Paris, banned 13 propositions from Aristotle and his Islamic commentator Averroes.[11] In 1272, the Masters of Arts had to take an oath not to treat theological questions with the instruments of natural reason. Any contradiction that appeared in their discussions was to be resolved in favor of faith.[12]

On 7 March 1277, exactly three years after the death of Thomas Aquinas,[13] Étienne Tempier imposed a local censure of 219 propositions. In a short period of time – three weeks according to Fernand van Steenberghen – a commission of 16 theologians extracted from various works 219 propositions which were to be condemned. These propositions were put together without any order, systematization or unification.[14] Even if it had a local character, being confined to the region controlled by the bishop of Paris, the influence of the 1277 condemnation spread beyond this area.

On 18 March 1277, the Dominican, Robert Kilwardby, the archbishop of Canterbury, took similar action at the University of Oxford, condemning thirty propositions related to grammar, logic, natural philosophy and metaphysics.[15] In 1284-1285, more propositions were

[10] See John F. Wippel, "Thomas Aquinas and the Condemnation of 1277," *The Modern Schoolman*, No. 72 (1995): 233.
[11] See Edward Grant, *Physical Sciences in the Middle Ages* (Cambridge: Cambridge University Press, 1977), 26. Among these propositions one can find the theses of the unity of the intellect and of the eternity of the world, the idea that God does not know things others than himself, and others.
[12] See Edward Grant, *The Foundations of Modern Science in the Middle Ages*. *Their Religious, Institutional, and Intellectual Contexts* (Cambridge: Cambridge University Press, 1996), 71.
[13] Pierre Mandonnet considers that the promulgation of the condemnation exactly three years after Aquinas death is not a simple coincidence: "Si quelque chose peut mettre en évidence les sentiments des auteurs de la condamnation de 1277, c'est le fait qu'ils la promulguèrent à la date du 7 mars, anniversaire de la mort de Thomas d'Aquin. C'était une réponse de leur façon au panégyrique que les maîtres de la faculté des arts avaient fait du docteur dominicain, lorsqu'après sa mort, ils avaient réclamé pour l'Université de Paris l'honneur de posséder ses cendres près d'elle." See Pierre Mandonnet, *Siger de Brabant et l'averroïsme latin au XIIIe siècle* (Louvain: Institut Supérieur de Philosophie de l'Université, 1911), 231.
[14] See Fernand van Steenberghen, *Aristotle in the West. The Origins of Latin Aristotelianism* (Louvain: Nauwelaerts, 1970), 235. The names of the 16 theologians who took an active part in the formulation of Tempier's condemnation are not known except for the Augustinian Henry of Ghent.
[15] See H. Denifle and E. Châtelain, *Chartularium Universitatis Parisiensis*, vol. I, 558-560.

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condemned at the University of Oxford, by the same Robert Kilwardby, accompanied by the Franciscan John Pecham.[16]

Without ignoring the existence of the other condemnations mentioned above I will focus on that of 1277, acknowledging its special status. At a basic level this special status can be the product of its scale: 219 condemned propositions – compared to the 10 propositions condemned in Paris in 1270 or the 30 propositions condemned in Oxford in 1277 – is a figure which confirms its importance due to the numerous philosophical and doctrinal problems involved by it. Its special status is also confirmed in the secondary literature and in the discussions related to the history of medieval science which reveal the traces of the 1277 condemnation even in the seventeenth century.[17]

3. Thomas Aquinas' condemnation in 1277

Aquinas' involvement in the 1277 condemnation is interesting and problematic. Interesting, since Aquinas was not among the so-called Latin Averoists, who taught a radical form of Aristotelianism, and against whom the condemnation was specifically directed. Even if he was a theologian and not a teacher of the Faculty of Arts, and even if he wrote treatises against radical forms of Aristotelianism,[18] some of the ideas that he maintained throughout his work can be found among the condemned ones. This problematic situation still produces many scholarly debates which, by combining historical sources with a philosophical analysis, try to decide to what extent Aquinas was condemned in 1277.

3.1. The context of Aquinas' condemnation:

Since the 1277 condemnation banned propositions rather than directly naming the condemned people, immediately after the condemnation various disputes began related to

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[16] See Pierre Duhem, *Le Système du Monde. Histoire des Doctrines Cosmologiques de Platon à Copernic* (Paris: Hermann, 1958), vol. 6, 69.

[17] For an enumeration of the opinions which consider the 1277 condemnation as the most important condemnation of the middle ages see John Wippel "The Condemnations of 1270 and 1277 at Paris," *The Journal of Medieval and Renaissance Studies* no. 7 (1977): 170.

Aquinas' involvement in it. These disputes brought to the surface the rivalry between the various factions at the University of Paris: the condemnation made explicit not only the theoretical conflicts present between a conservative party and a more innovative one, but also between the Faculty of Theology and that of Arts, and between the Dominicans and the Franciscans.

Around the year 1277 at the University of Paris there was not only a dispute between the masters of the Faculty of Arts and the theologians, or between the traditionalist masters of Faculty of Arts and those who adopted a more innovative position.[19] A certain rivalry, at a social and intellectual level was also present among the theologians themselves – the seculars being opposed to accepting the mendicants as university teachers – and among the mendicants themselves due to various differences in their theological principles and their general attitudes towards various other issues.

Since Aquinas' condemnation, like the 1277 condemnation itself, remained local there were many voices – like John of Naples, Giles of Rome and Godfrey of Fontaines – who contested it, defending some of the condemned propositions.[20] Some even implied that the new bishops were actually sinning by not correcting a condemnation which affected such an important theologian like Aquinas and should have condemned only a few masters of the Faculty of Arts.[21]

In this context it becomes important that Aquinas was a Dominican friar who became a leading theologian, teaching in Rome, Bologna, Viterbo, Perugia, Naples, and at the University of Paris.[22] Being a disciple of Albert the Great, Aquinas took forward the interest

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[18] His most explicit treatises from this point of view are *De eternitate mundi* and *De unitate intellectus*, see: http://www.corpusthomisticum.org/ocm.html and http://www.corpusthomisticum.org/oca.html. (Accessed May 10, 2013).
[19] Duhem mentions a dispute which divided the Faculty of Arts for a few years and which opposed two factions: a traditionalist one represented by Albéric de Reims and a more innovative one represented by Siger of Brabant. See Pierre Duhem, *Le Système du* Monde, vol. 6, 20.
[20] See Pierre Duhem, *Le Système du Monde*, vol. 6, 70.
[21] Ibidem, vol. 6, 75.
[22] For more information about Aquinas life, see: Jean-Pierre Torrell, *Saint Thomas Aquinas. The Person and his*

of his master in natural philosophy, writing commentaries on Aristotle's books on nature, and developing the idea of harmony between faith and reason. The Franciscan order, more conservative and closer to the Augustinian tradition of the church, was generally against the Dominican imports of natural philosophy in theology and against the Dominican emphasis on the harmony between philosophy and revelation.

In principle, the Franciscans and the Dominicans had different perspectives on Aquinas' condemnation.[23] While the Franciscans were more disposed to accept it, the majority of the Dominicans, believing in the validity of Aquinas' writings, fought for their propagation, wanting to impose his solutions as the only acceptable ones for the questions that he treated.[24] According to Duhem, since the University of Paris tried to maintain the validity of Tempier's condemnation throughout the fourteenth century, the Dominicans, due to their intransigent position, provoked various disputes at the University of Paris. From 1391 their order broke with the University and they could not preach or teach until 1403, when the university was again under the rule of Rome.[25]

Already from 1278-1279, the Franciscans forbade the use of Aquinas' condemned propositions, accepting them only accompanied by the corrections of William de la Mare made in *Correctorium fratris Thomae*.[26] This situation produced a reaction of the Dominicans trying to defend Aquinas and demonstrate that William's corrections were wrong. The Dominican reaction was materialized in five *correctoria* written after 1280 by young Dominicans from Oxford and Paris. They tried to underline the importance and the truth of

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Work (Washington D.C.: Catholic University of America Press, 1996).

[23] According to Étienne Gilson "the list of Thomistic propositions involved in the condemnation is longer or shorter, according as it is compiled by a Franciscan or by a Dominican." See Étienne Gilson, *History of Christian Philosophy in the Middle Ages* (New York: Random House, 1955), 728.

[24] See Pierre Duhem, *Le Système du Monde*, vol.6, 78.

[25] Ibidem, 78-80.

[26] In *Correctorium fratris Thomae* (1278) William selects 118 passages of Aquinas' work, especially of ST, Ia, criticizing and considering them non-orthodox. See John F. Wippel, "Thomas Aquinas and the Condemnation of 1277," 241.

Aquinas' accomplishments in metaphysics, seeing them in opposition to the Augustinian tendency of the Franciscans.[27]

Among all these tensions and disputes an important event took place on 14 February 1325: Aquinas was canonized and the condemned propositions related to him were nullified by the bishop of Paris.[28] Due to this measure no one professing Aquinas ideas was to be excommunicated from then on. Despite this fact the condemned propositions were not individually approved and accepted, since no one designated exactly which of them were directed at Thomas Aquinas, while knowing that some of them could have been directed at him, a fact which prolonged the various disputes of this question.

3.2. The principle of selection:

It was said and also contested, that the question of God's omnipotence was the kernel of the 1277 condemnation.[29] The idea that God cannot do something is present in many of the propositions condemned in 1277:

- "That God cannot beget his own likeness …" in the proposition 2 according to the original text of the condemnation which corresponds to the 186 proposition in the systematization of Pierre Mandonnet;[30]

[27] For an analysis of these *correctoria* see Mark D. Jordan, "The Controversy of the Correctoria and the Limits of Metaphysics," *Speculum* 57, no. 2 (1982), 292-314. See also the articles of Palémon Glorieux, "Pro et contra Thomam: Un survol de cinquante annes," in *Sapientiae procerum amore: Melanges medievistes offerts a Dom Jean-Pierre Muller...*, ed. T. W. Kohler, Studia Anselmiana 63 (Rome, 1974), 255-287; "Les correctoires: Essai de mise au point," *Recherches de theologie ancienne et medievale* 14 (1947): 287-305; and "La litterature des correctoires: Simples notes," *Revue thomiste*, 33 (1928): 69-96.

[28] For the text of Aquinas' canonization, see: Denifle, H. and E. Châtelain, ed., *Chartularium Universitatis Parisiensis* (Paris: Delalain, 1889), vol. 2, 280-81.

[29] In his *Études sur Léonard de Vinci* (Paris: Hermann, 1906-13). Pierre Duhem first underlines the importance of the problem of the omnipotence of God in the 1277 condemnation. Recently this idea was taken into consideration by Edward Grant in his article "The Condemnation of 1277, God's Absolute Power, and Physical Thought in the Late Middle Ages," *Viator* 10 (1979): 211-44.

[30] In the presentation of the condemned propositions I will use both their original version, given in H. Denifle and E. Châtelain, ed., *Chartularium Universitatis Parisiensis*, vol. 1, 543-558 and their more systematic presentation in Pierre Mandonnet, *Siger de Brabant et l'averroïsme latin au XIIIe siècle* (Louvain: Institut Supérieur de Philosophie de l'Université, 1911), vol. 2, 175-191. The first number designates the condemned proposition in the edition of H. Denifle and E. Châtelain while the second is the number that can be found in Mandonnet's systematization. The systematic presentation of the propositions by Mandonnet was also adopted by Roland Hissette in his *Enquête sur les 219 articles condamnés à Paris le 7 mars 1277* (Louvain: Publications universitaires de Louvain, 1977). For the English translation of the propositions I have used Edward Grant, *A Sourcebook in Medieval Science* (Cambridge, MA: Harvard University Press, 1974), 45-49 and that of Ernest L.

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- "That God cannot grant perpetuity to a changeable and corruptible thing" in the proposition 25/214;
- "That God could not make several numerically different souls" in the proposition 27/115;
- "That the first cause cannot make more than one world" in the proposition 34/27;
- "That without a proper agent, such as a father and a man, God could not make a man" in the proposition 35/195;
- "That the first principle cannot be the cause of diverse products here below without the mediation of other causes …" in the proposition 43/68;
- "That God cannot be the cause of a newly-made thing and cannot produce anything new" in the proposition 48/22;
- "That God could not move the heaven in a straight line, the reason being that He would then leave a vacuum" in the proposition 49/66;
- "That God cannot move anything irregularly, that is, in a manner other than that in which he does, because there is no diversity of will in Him" in the proposition 50/23;
- "That the first principle cannot produce generable things immediately because they are new effects …" in the proposition 54/67;
- "That the first cause cannot produce something other than itself …" in the proposition 55/30;
- " … God could not produce a necessary effect without posterior causes" in the proposition 60/95;
- "That God cannot produce the effect of a secondary cause without the secondary cause itself" in the proposition 63/69;

Fortin and Peter D. O'Neill, published in *Medieval Political Philosophy*: *A Source Book*, ed. Ralph Lerner, Muhsin Mahdi, (Ithaca, NY: Cornell University Press, 1963), 335-354.

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- "That God cannot make several intelligences of the same species because intelligences do not have matter" in the proposition 81/43;
- "That God cannot multiply individuals of the same species without matter" in the proposition 96/42;
- "That God cannot make an accident exist without a subject or make more than one dimension exist simultaneously" in the proposition 141/197;
- "That what is impossible absolutely speaking cannot be brought about by God or by another agent.– This is erroneous if we mean what is impossible according to nature" in the proposition 147/17.

Trying to see if Aquinas' ideas were condemned in 1277 I will analyze only the condemned propositions which can be associated with him. However, among the 219 propositions condemned in 1277 not all of those which were associated with Aquinas have something to say about God's power. Among the twenty condemned propositions that can be associated with him[31] and which condemn various other issues – the uniqueness of the substantial form, the localization of spiritual substances and the determinism which affects the will – this thesis will focus only on the ones explicitly formulated as limitations of God's power.

The propositions which can be associated with Aquinas and which are explicitly formulated as limitations of God's power are: the proposition 34/27 which condemns the idea that God is considered unable to make more than one world;[32] the proposition 96/42 which condemns the idea that God cannot multiply individuals of the same species without matter;[33] the proposition 81/43 which condemns the idea that God cannot make several intelligences of

[31] According to Pierre Mandonnet 20 of the propositions condemned in 1277 can be associated with Thomas Aquinas. See Pierre Mandonnet, *Siger de Brabant et l'averroïsme latin au XIIIe siècle*, 231. Duhem makes a more detail enumeration of the propositions that can be associated with Aquinas. See Pierre Duhem, *Le Système du Monde*, vol.6, 67.

[32] *Quod prima causa non potest plures mundos facere*. See the proposition 34/27 in H. Denifle and E. Châtelain, ed., *Chartularium Universitatis Parisiensis*, vol. 1, 545; see Mandonnet, *Siger*, 178.

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the same species because intelligences do not have matter;[34] the propositions 96/42 and 81/43 originated in the idea condemned by the proposition 191/110, that the forms are not divided except through matter.[35]

3.3. The limits of God's power: Thomas Aquinas and Étienne Tempier

Tempier's condemnation of the propositions which limit God's power and Aquinas' ideas which were interpreted in the same way meet in the idea of the existence of some acts considered to be impossible for God. This thesis will try to see what are the limits of God's power according to Aquinas, what he considers to be impossible for God, and how his ideas on these issues had implications for his condemnation in 1277. Are the limits of God's power that Aquinas formulates identical with the ones Tempier condemned in the propositions associated with Aquinas? And, beyond a simple yes or no, what is the relation between them?

An important issue here than an analysis can shed some light on – the tension that can be found at the basis of the condemnation – is constituted by the power distinction, by the opposition between *potentia dei absoluta* and *potentia dei ordinata*. The analysis of this distinction in Aquinas and its comparison with the position implied by condemnation, formulated based on *potentia dei absoluta*, will help me to develop the possible associations of the two positions.

The contribution of my thesis will be limited to the selected propositions and it will not produce a conclusion for all the 20 propositions that can be associated with Aquinas. However, this will help at the better understanding of Aquinas' possible involvement in the 1277 condemnation; it will shed some light on the thirteenth century discussions on God's power; and, on these grounds, it will also determine if Aquinas played a role in the

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[33] *Quod Deus non potest multiplicare individua sub una specie sine materia*. See the proposition 96/42 in *Chartularium Universitatis Parisiensis*, vol. 1, 549; see Mandonnet, *Siger*, 179.
[34] *Quod, quia intelligentie non habent materiam, Deus non posset facere plures eiusdem speciei*. See the proposition 81/43 in Ibidem, 548; see Mandonnet, *Siger*, 179.

development established by Pierre Duhem between medieval theological ideas and the early modern scientific positions.

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[35] *Quod formae non recipiunt divisionem, nisi per materiam. - Error, nisi intelligatur de formis eductis de potentia materiae*. See the proposition 191/110 in *Chartularium Universitatis Parisiensis*, vol. 1, 554; see

I. Natural Philosophy, Theology and Modern Science: Modern Interpretations of the 1277 Condemnation

As already mentioned in the introduction, this thesis analyzes certain theses of Aquinas' which were interpreted as limitations of God's power and condemned in 1277. These limitations were due, in the eyes of those who selected the propositions to be condemned, to an infiltration of reason from natural philosophy, metaphysics and logic in the treatment of theological questions and Christian mysteries.

Due to these reasons it is important to present the manner in which the thirteenth century's reception of natural philosophy in the Latin West, transformed the medieval universities' curriculum, and influenced the treatment of theological questions. This analysis sheds light on the general background in which Aquinas, a teacher in the faculty of Theology, a member of the Dominican order – an order which had a pronounced interest in education and learning[36] – the disciple of a theologian extremely interested in natural sciences – Albert the Great – and the proponent of harmony between philosophy and theology, could have been seen in this period.

In the same context, the historiography of the 1277 condemnation is of interest. Analyzing Duhem's formulation of it, together with some of the modern interpretations, I will take note of the positions which take into account the tension between God's omnipotence and the limitations of his power as being instrumental in the development of the first early modern scientific positions. These twentieth century debates demonstrate some of the historical consequences of the condemnation, offer a general theoretical background of the whole issue, and widen the perspective on the results of my research on Aquinas.

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Mandonnet, *Siger*, 184.

[36] For a presentation of the Dominican interest for education and learning see Roger French, Andrew Cunningham, *Before Science: the Invention of the Friars' Natural Philosophy* (Aldershot, Hants: Scolar Press, 1996), especially ch. 8, *Dominican Education*, 173-201.

I.1. The role of natural philosophy in university education, and its significance for theology

Constituted at the beginning of the thirteenth century as corporations of teachers and students, medieval universities had institutional precursors in the cathedral schools of the eleventh and twelfth centuries. The seven liberal arts were central to the medieval *studium* before the thirteenth century.

In the twelfth and thirteenth centuries, Aristotle's natural philosophy – together with its Greek and Arabic commentaries and some pseudo-Aristotelian works – were translated and became available in the Latin West, extending some of the scientific domains which were already part of the seven liberal arts.[37] According to Edward Grant, the seven liberal arts, which formed the curriculum of the Faculty of Arts, were relegated to introductory status while natural philosophy became the primary subject of education.[38]

The traditional curriculum of medieval universities was gradually replaced by a more rationalistic one based on Aristotle's works, while the *quadrivium* came to be accompanied by Aristotle's metaphysical, moral and natural philosophies.[39] Logic, significantly improved after the reception of Aristotle's two *Analytics*, *Topics* and *Sophistical Refutations*, increased its importance as an object of study, becoming an *organon* of all the other domains.

The import of this new knowledge also transformed teaching. The previous type of teaching, based on studying commentaries on authoritative texts, was replaced by one based on ordinary disputation, as the formulation of questions regarding the text, which was then known as the scholastic method.[40]

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[37] See Bernard G. Dod, "Aristoteles latinus," in *The Cambridge History of Later Medieval Philosophy from the Rediscovery of Aristotle to the Disintegration of Scholasticism 1100–1600*, ed. Norman Kretzmann, Anthony Kenny, and Jan Pinborg (Cambridge: Cambridge University Press, 1982), 70.
[38] See Edward Grant, *God and Reason in the Middle* Ages (Cambridge: Cambridge University Press, 2001), 101.
[39] See Edward Grant, *The Foundations of Modern Science in the Middle Ages*. *Their Religious, Institutional, and Intellectual Contexts* (Cambridge: Cambridge University Press, 1996), 43.
[40] See Grant, *God and Reason*, 105.

Due to the importance of these transformations, the education of medieval students was mainly formed by logic, exact science, and natural philosophy, disciplines which underlined the importance of experience and observation, of sense perception and experimentation. An attitude of the non-acceptance of authority developed, implying a rationalistic position towards nature and a secular understanding of the universe which tried to explain Aristotle's natural philosophy in itself and not to subordinate it to a theological and traditional Christian interpretation of things.[41]

When initially translated into Latin natural philosophy had a direct influence on the Faculty of Arts and Medicine but less on the Faculties of Law and Theology. Due to its revealed nature, theology was considered the queen of sciences, superior to all the secular ones, becoming an independent discipline in the thirteenth century.

The contacts between natural philosophy and theology were not without conflicts and prohibitions: discussion of theological questions in the Faculty of Arts for example, was forbidden. According to an oath taken in 1272, the Masters of Arts were not to treat theological questions with the instruments of natural reason: any contradiction that appeared in their theological discussions was to be resolved in favor of faith.[42]

To underline the impact that natural philosophy had on theology in the thirteenth century one has to take into account the fact that the students and teachers of the Faculty of Theology already had training in natural philosophy. Study in the Faculty of Arts was a prerequisite for the more advanced faculties of Theology, Law and Medicine, necessary to

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[41] This attitude was condemned in the proposition 150/5: *Quod homo non debet esse contentus auctoritate ad habendum certitudinem alicujus questionis*, in the proposition 152/183: *Quod sermones theologi fundati sunt in fabulis*, in the proposition 153/182: *Quod nichil plus scitur propter scire theologiam*, and in the 154/2: *Quod sapientes mundi sunt philosophi tantum*. Previous discussions about the proper relation between theology and philosophy were already present in early Christianity, in its first contacts with the pagan culture. One can already find here either a distrust of the pagan philosophy, or a tendency of integrating it as a tool for the better comprehension of the Sacred Scripture, while rejecting those implications which would be contrary to the Christian faith.

[42] See Edward Grant, *The Foundations of Modern Science*, 71.

earn a bachelor's degree.[43] Due to this situation it was not long before the teachers and the students of theology began to use arguments from natural philosophy in their theological questions. The teachers of theology, some of whom might have previously been teachers in the Faculty of Arts, continued this process of mixing natural philosophy and logic in theology, despite all the oaths and the warnings prohibiting it which try to keep philosophy in its traditional status of *ancilla theologiae*.

The consequence of these contacts was manifested in a process of systematization and rationalization of theology which began as early as the twelfth century, with the *Sentences* of Peter Lombard, and continued in the thirteenth century. According to Grant, in their adoption of natural philosophy in theology the medieval theologians even paid attention to quantified aspects of natural philosophy, using logico-mathematical techniques and quantifying various aspects of theology.[44] Logic, reason, and numerous ideas borrowed from natural philosophy were widely applied to theological questions.

It is clear that the theologians also accepted reason, logic, and natural philosophy, since they discovered in them a model of science which could help them in the study of theology. They probably took these new disciplines as a standard for an intellectual approach; therefore they used them in theology as such, not as new disciplines which would be actually opposed to it.

I.2. The status of medieval natural philosophy in-between religion and modern science

While some aspects of the 1277 condemnation have been considered to have an important role in the development of the early modern scientific positions, the relation of direct continuity between medieval and modern science remained questionable. The formula of medieval science remained problematic as long as it applied a modern concept of science, and the universe of understanding which accompanied it, in medieval times. This ignores, on

[43] See Grant, *A History of Natural Philosophy*, 146.
[44] See Grant, *God and Reason*, 277.

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the one hand, the specific differences between modern science and the medieval science, and, on the other hand, the religious universe of understanding within which the physical study of nature was developed in medieval times.

One of the most important differences in the comparison between medieval and modern science can be found in the fact that medieval science was an attempt of understanding the world at an ontological level – a seek for the things' intelligible nature, for their being, causes and essential structures – which was not based on empiricism, direct observation, experiments, and quantification. Most of the medieval natural philosophers adopted the empiricism of Aristotle but, as Grant notes, it was empiricism without observation.[45]

Furthermore, the religious universe of understanding in which the medieval study of nature was developed should not be ignored:

> Natural philosophy was concerned with studying nature as created by God and was both evidence of some of the attributes of God and also a route to a closer knowledge of spiritual communion with God. Natural philosophy was a study in which the central concerns were the detection, admiration and appreciation of God's existence, goodness, providence, munificence, forethought and provision for his creation. Thus natural philosophy was not simply some religious (or religiously motivated) early version of modern science, but had its own identity…[46]

The discussion of natural questions, even if they could have been discussed quite separately of direct theological reference, developed in this period in close relation with theology as long as nature was a creation of God, whose traces were still present in it. Hence, medieval natural philosophy was not only a philosophical discussion of nature – logic and philosophy constituting the scientific disciplines of the period – but also used theological concepts and ideas.[47]

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[45] See Grant, *God and Reason*, 181.
[46] See Roger French and Andrew Cunningham, *Before Science: the Invention of the Friars'Natural Philosophy* (Aldershot, Hants: Scolar Press, 1996), 4.
[47] For Aquinas' definition of natural science see *In BDT*, q. 5, a. 2.

According to Edward Grant, however, medieval natural philosophy had a certain independence and autonomy and was not at all religious. He considers that the Christian beliefs of the medieval natural philosophers did not affect the manner in which they wrote their treatises on natural philosophy, since they kept the doctrinal matters apart from natural questions.[48] Furthermore, theology and natural philosophy were studied in different faculties: they had been considered distinct disciplines already from medieval times so the distinction between them is not modern.

The 1272 oath which made it mandatory for masters of Arts to avoid theological discussions in their questions is also an element which could have implied a separation of domains or faculties. The masters of Arts would also have avoided the questions of theology since they were part of theological treatises and had nothing to do with explaining the natural phenomena at which they aimed. In these conditions, natural philosophy would have remained free of theology, according to Grant's claim.[49] However, one cannot help but notice that even if theological questions were not directly involved in the detailed treatment of some specific natural questions, the general universe of understanding within which they were discussed remained, in the end, religious.

The recognition of a link between natural philosophy and theology is present in Pierre Duhem's claim that the religious opposition to the philosophical ideas manifested in the 1277 condemnation, produced various thought experiments which led to the development of the early modern scientific positions.[50] In this context, religion became the source of various imaginary experiments by using the idea of God's absolute power so as to imagine situations which were logically possible but naturally impossible in Aristotle's physical world. They

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[48] See Edward Grant, *God and Reason*, 191: "It is obvious that religion and theology played a minimal role in treatises on Aristotle's natural philosophy, and, by a process of extrapolation, we may say that they played little role in the works of medieval natural philosophers as a whole."
[49] Grant, *God and Reason*, 185-186.
[50] See Pierre Duhem, *Medieval Cosmology*. *Theories of Infinity, Place, Time, Void, and the Plurality of Worlds* (Chicago: The University of Chicago Press, 1985), 4.

produced counterinstances[51] which contradicted Aristotle's conclusions, and led to the transformation of the Aristotelian and scholastic science in the direction of the modern science.

I.3. The medieval and the modern science: modern interpretations of the 1277 condemnation

Pierre Duhem's claim, which brought about many debates[52] once his *Système du monde* was published beginning with 1913, underlined the continuity[53] between the medieval theological issues and the beginnings of modern science. He stressed the importance of theological ideas in the development of the study of nature in the medieval period, discovering some Christian premises of the early modern scientific positions.

According to Duhem, the 1277 condemnation represented "the birth certificate of modern physics."[54] He considered that the 219 propositions were condemned due to the assumption that God, based on his absolute power, cannot be limited in his actions by the laws established by philosophy. Once the absolute power of God was stressed by the condemnation and directed against the principles of natural philosophy, it would have produced various thought experiments which were the premises of early modern scientific developments:

> Étienne Tempier et son conseil, en frappant ces propositions d'anathème, déclaraient que pour être soumis à l'enseignement de l'Église, pour ne pas imposer d'entraves à la toute puissance de Dieu, il fallait rejeter la Physique péripatéticienne. Par là, ils réclamait implicitment la creation d'une Physique nouvelle que la raison des chrétienes pût accepter. Cette Physique nouvelle, nous verrons que l'Université de Paris, au XIVe siècle, s'est efforcée de la construire et qu'en cette tentative, elle a posé le fondements de la

[51] The term of counterinstances is used by Edward Grant, see: Grant, *God and Reason*, 172.

[52] Admitting that there are many people who had something to say about the 1277 condemnation – like E.J. Dijksterhuis, Edith Sylla, Marshall Clagett, Ernest Moody, Curtis Wilson, George Molland, and others – this analysis will select only a few of them, based on the relevance of what they said for the topic of this thesis: Pierre Duhem, Annaeliese Maier, Alexandre Koyré, Edward Grant, Amos Funkenstein, John Murdoch and William Courtenay.

[53] Duhem's approach was relatively new for the beginning of the twentieth century, since it was situated beyond the opposition between science and religion established by the Enlightenment, and underlined the continuity between the two.

[54] See Pierre Duhem, *Medieval Cosmology*, 4.

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> Science moderne; celle-ci naquit, peut-on dire, le 7 mars 1277, du décret porté par Monseigneur Étienne, Évêque de Paris.[55]

This new physics would have appeared through the imagination of various hypothetical experiments, possible based on God's absolute power, and directed against the philosophies of nature and metaphysics of Aristotle and of his Greek and Arabic commentators. According to Duhem the premises of the seventeenth century scientific revolution were already present in the fourteenth century when Jean Buridan and Nicole Oresme, in their natural philosophies, anticipated the developments that took place at a later date in the discoveries made by Giordano Bruno, Copernicus, Descartes and Galileo.

Duhem also considered that among the 219 condemned propositions the ones directed against the limitation of God's power have a special status and represent the inner significance of the condemnation.[56] By rejecting the propositions which bind God's power on the basis of the natural laws of peripatetic physics, the condemnation underlined the idea of the absolute power of God, free to do everything short of a logical contradiction.

Writing in the 1940's Anneliese Maier made a critique of the continuity that Duhem established between medieval and modern science. She admits that one can find a certain relation between the late medieval physical theories and the modern scientific developments of the sixteenth and seventeenth centuries.[57] But she considers that one should first analyze these medieval physical theories in their own context, studying their methodology and the general worldview present behind them, and look for the concrete features that form their specificity. To avoid anachronism, the medieval scientific theories should not be seen directly as anticipations of those of the seventeenth century.

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[55] Duhem, *Le système du monde*, vol. 6, 66.
[56] Biard considers that Duhem's conception regarding the propositions condemned in 1277 is extremely narrow since he mainly uses only two from among the 219 condemned propositions: the 34/27 proposition which condemned the idea that the first cause cannot make many worlds and the 49/66 proposition which condemned the idea that God cannot move the heavens, see: J. Biard, "Le rôle des condamnations de 1277 dans le développement de la physique selon Pierre Duhem," *Revue des questions scientifiques* 175, (2004): 15–36.
[57] See Anneliese Maier, *On the Threshold of Exact Science: Selected Writings of Anneliese Maier* (Philadelphia: University of Pennsylvania Press, 1982).

Maier admits that medieval natural philosophers developed independent theories that went beyond Aristotle but she focuses on the late medieval natural philosophy of the fourteenth century claiming that only in this period did an original natural philosophy develop. At the same time, however, she accepts that this process began in the thirteenth century with the reception of Aristotle's natural philosophy and the Arab commentaries on it.[58] The thirteenth-century thinkers Robert Grosseteste, Roger Bacon, Albertus Magnus, Thomas Aquinas and Giles of Rome used natural philosophy but they did not go so far as to criticize their traditional world view.

Due to these considerations she rejects Duhem's claim that the medieval thought experiments were the premises that anticipated and made possible the development of the early modern science: "Pierre Duhem, who must be credited with having opened up this new field of medieval studies, viewed fourteenth-century "physics" predominantly through the eyes of a natural scientist."[59] He interpreted medieval texts in a modern sense, ignoring the intellectual context in which they appeared and which is essential for their understanding.

The influence of medieval natural philosophy on the development of modern science can be accepted, according to her, only if it is established in its "simple historical factuality," taking into account the broader context of its development: "It was perhaps at this deeper level, in the reflection about concepts, principles, and methods, that the most significant developments took place which made the thinkers of the late thirteenth and fourteenth centuries the forerunners of classical science."[60]

In what she sees as a process of gradual rejection of Aristotelianism, the thirteenth and the fourteenth centuries refused only individual theories while the seventeenth rejected the basic principles of Aristotle's natural philosophy. The medieval natural philosophers had

[58] See Anneliese Maier, "The Achievements of Late Scholastic Natural Philosophy," in *On the Threshold of Exact Science*, 144.
[59] Maier, "The Achievements of Late Scholastic Natural Philosophy," 146.

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a new attitude towards nature, since they were interested in what and how things are, developing independent analyses of them; they remained, however, at a purely philosophical level, producing speculations about the basic principles, concepts, and methods of natural philosophy and formulating their theories in metaphysical, ontological and epistemological languages.

The scholastics also made important advances in methodology; they discussed and give ontological definitions to the concepts used by Classical physics which became standard elements of natural philosophy: "What changes is the method of knowing nature. The attempt is made for the first time to find principles that permit a direct, individual, and empirical perception and understanding of nature, independent of all authority."[61]

However, the scholastics were still far from the mathematical and physical language in which theories of nature were formulated in the sixteenth and seventeenth centuries. They never tried to describe and measure things, considering that exact measurements are impossible since only God has knowledge of the measure and number of things.[62] Scholastic natural philosophy "prepared the way" for modern developments, but, beyond the analogies that can be established between the two, it cannot be considered as real anticipation of the latter since it did not go beyond the traditional view of nature, keeping the basic principles of Aristotle's physics.[63]

Duhem's thesis was also criticized in the 1940's by Alexandre Koyré in his analyses of the modern scientific revolution.[64] Koyré considered that the theological opposition to the propositions condemned in 1277 was not instrumental in producing the scientific developments that Duhem maintained. According to him, those who studied the medieval

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[60] See Anneliese Maier, *Metaphysische Hintergründe*, p. vii, quoted by Steven D. Sargent in *On the Threshold of Exact Science*, 9.
[61] Maier, "The Achievements of Late Scholastic Natural Philosophy," 147.
[62] Ibidem, 146.
[63] See Anneliese Maier, *The Significance of the Theory of Impetus for Scholastics Natural Philosophy*, 77.
[64] See Alexandre Koyré, *Études Galiléennes* (Paris: Herman, 1966).

cosmology would have preferred to observe the world as it really was rather than to develop their cosmological systems using the theological conclusions implied by the condemnation.

Unlike Duhem, Koyré underlined the novelty of the discoveries made by Galileo, Descartes, and Giordano Bruno showing that they were not directly related to the medieval past:

> Cette attitude intellectuelle nous paraît avoir été le fruit d'une mutation décisive … c'est qu'il s'agissait non pas de combattre des theories erronnés, ou insuffisantes, mais de transformer les cadres de l'inteligence elle-meme; de bouleverser une attitude intellectuelle, fort naturelle en somme, en lui en substituant une autre, qui ne l'était aucunement. Et c'est cela qui explique pourquoi – malgré les apparences contraires, apparences de continuité historique sur lesquelles Caverni et Duhem ont surtout insisté – la physique classique, sortie de la pensée de Bruno, Galilée, de Descartes ne continue pas, en fait, la physique médiévale des précurseurs parisiens de Galilée …[65]

In the late 1970's, Edward Grant claimed that main issue of the 1277 condemnation was "the manner in which God's relationship to the world and its physical operations was to be understood."[66] He rejects Koyré's idea that the preoccupation with unrealized possibilities implied in the condemnation had no consequences for the history of medieval and early modern science: "Koyré is mistaken when he argues that undue concern with unrealizable possibilities was unproductive and sterile for the history of medieval and early modern science."[67]

The supernatural alternatives possible based on God's absolute power produced hypothetical states of things situated outside Aristotle's natural philosophy whose consequences were thoughtfully explored through thought experiments which, by imagining various situations, naturally impossible, produced new speculative responses which eventually went beyond the principles of Aristotle's natural philosophy.[68]

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[65] See Koyré, *Études Galiléennes*, 15-16.
[66] Grant, Edward. "The Condemnation of 1277, God's Absolute Power, and Physical Thought in the Late Middle Ages," *Viator* 10 (1979): 212.
[67] Grant, *God's Power*, 216.
[68] Ibidem, 239.

In his view, the condemnation was due to the fact that, in the eyes of the theologians who formulated it, God's power was restricted by the "naturalistic determinism rooted in Aristotle's physical and metaphysical principles." Since it denied some basic Christian ideas, this determinism was rejected on the basis of God's absolute power – accepted by Grant as the main issue of the condemnation[69] – God being seen as able to do whatever he wants except what is logically contradictory.

Even if he considers Duhem's thesis "exaggerated" and "indefensible" in some regards, Grant tries to rehabilitate it. He claims that the issue of God's absolute power became a "powerful analytic tool in natural philosophy" which contributed to early modern scientific developments.[70] God's absolute power was used as an argument in various hypothetical physical situations, while alternative states of things impossible within Aristotle's physics became possible on its basis.[71]

Grant discovers the direct influence of the condemnation in the frequent quotation of numerous propositions in the fourteenth century and in the use of the idea of God's absolute power in a variety of hypothetical physical situations. He also traces an influence of the condemnation in the sixteenth and seventeenth centuries when, despite the fact that the knowledge of the condemnation disappeared, some of its consequences were still present, used by both scholastic and non-scholastic authors.[72] The influence of the 1277 condemnation would have been present, according to him, until the mechanical universe produced in the seventeenth century ended all possible divine intervention by replacing a God

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[69] Grant claims that "God's absolute power to do anything short of a logical contradiction was often the vehicle for subtle and imaginative problems in the form of counterfactual arguments." See Edward Grant, *A History of Natural Philosophy*, 246.
[70] Grant, *God's Power*, 217.
[71] See Grant, *A History of Natural Philosophy*, 201: "It became a common practice to assume hypothetical conditions relevant to other worlds and empty spaces and then to imagine how various problems could be resolved within the boundary conditions of these hypothetical constructs … they did, however, assume that, although these hypothetical conclusions were naturally impossible, God could produce them supernaturally if He wished."
[72] See Grant, *A History of Natural Philosophy*, 246.

who could do anything short of a logical contradiction with a God of constraint who created a perfect clock-like universe in which no intervention was possible.[73]

Writing in the 1980's and studying a later period of these developments, Amos Funkenstein also accepts Duhem's thesis.[74] He claims that the patterns of medieval hypothetical reasoning, the thought experiments of the medieval theological imagination, established some of the conditions necessary for the emergence of early modern science.[75] He also accepts that this was possible based on the distinction between *potentia Dei absoluta* and *potentia Dei ordinata* since this produced a situation in which medieval theological and philosophical thought was "intoxicated with varieties of hypothetical reasoning," with imaginary orders and states, which eventually underlined the contingency of the world.[76]

Aristotle's use of ideal thought experiments was limited to the reduction of false universal characteristics to impossible, in his various demonstrations of a *reductio ad absurdum*. Considered impossible, he did not use thought experiments in the formulation of general laws, due to their incommensurability with any natural state. The existence of alternative worlds was, for Aristotle, denied by the existence of our unique world, while ideal, non-existent, conditions were not helpful in the study of a thing since they took it out of its natural context.[77]

The alternative states of things considered impossible or absurd in Aristotelian-Ptolemaic science were turned into "well-argued interconnected logical possibilities" by the medieval hypothetical reasoning. Even if they were not directly related to our universe they were seen as possibilities *de potentia Dei absoluta*. Searching for orders of nature different from ours but still logically possible, these medieval discussions constitute the origin of the

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[73] Ibidem, 242-243. See also Grant, *A History of Natural Philosophy*, 246: "The Condemnation of 1277 had an impact on natural philosophy in the late thirteenth and fourteenth centuries. Specific articles from it were cited by numerous scholastic natural philosophers from the fourteenth to the seventeenth century."
[74] See Amos Funkenstein, *Theology and the Scientific Imagination from the Middle Ages to the Seventeenth Century* (Princeton: Princeton University Press, 1986).
[75] Funkenstein, *Theology and the Scientific Imagination*, 152.

modern questions about the status of the laws of nature. Beyond these discussions, the scholastic contribution to the development of modern science can also be seen in the *modus operandi* itself of early modern science, in its attempt to produce counterintuitive, hypothetical experiments, which made possible the development of modern physics.[78]

In this manner, the medieval theological imagination prepared the way for the modern scientific one. The difference between the two consists in the fact that in the medieval construction of these counterfactuals, these possible orders of nature remained incommensurable with the actual structure of the universe. No mediation was considered possible between the factual statements or generalizations about our world and these counterfactual assumptions since Aristotelian and scholastic thought saw no possible mediation between the factual and counterfactual conditions of a phenomenon – considering them incommensurable.

In the ideal *experimenta rationis* of the seventeenth century these medieval counterfactual assumptions became limiting cases of our universe being necessary for its explanation, even if they did not describe it. The novelty of the modern thought experiments was due to the relation that they established between the universe and these imaginary, counterintuitive and counterfactual states considering the last not only possible, as in their medieval version, but also commensurable, as limiting cases.[79]

In an article published at the beginning of the 1990's, John Murdoch also acknowledges the "startling" character of Duhem's thesis in a period when the scientific merits of the Middle Ages were totally ignored, considered inexistent, part of a "denial of

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[76] Ibidem, 123.
[77] Funkenstein, *Theology and the Scientific Imagination*, 164.
[78] Ibidem, 152.
[79] Ibidem, 11.

positive value to any medieval intellectual endeavor, philosophy as well as science."[80] At the same time, however, he considers it excessive.

His criticism focuses on the fact that Duhem maintained the seminal importance of the Parisian context in the fourteenth century – John Buridan, Nicole Oresme and Albert of Saxony – while having antipathy for its Oxford representatives – William of Ockham, Thomas Bradwardine, Richard Kilvington, Roger Swineshead. He also criticizes the fact that Duhem was selective, choosing only a few of the propositions condemned in 1277, mainly those related to place, void and the plurality of worlds, while ignoring all the others. Murdoch also notes that Duhem's choices of the studied period, places, and authors were usually followed not only in the history of medieval science but also in the history of medieval philosophy.[81]

In his book *Capacity and Volition*: *A History of the Distinction of Absolute and Ordained Power*,[82] William Courtenay claims that the relation between the propositions of 1277 and the idea of God's *potentia absoluta* was overstated since "none of the condemned propositions has directly challenged the distinction of absolute and ordained power."[83] He admits, however, that the distinction was still present at the level of a "general belief in divine causality and the contingency of creation," being directed by theologians against the limitation of God's supernatural action.[84]

An important idea mentioned by Courtenay is that the condemnation was not so much an assertion about what God was in himself – about the capacity of God – but rather about God's actions at their meeting with the order of creation. The theologians who enacted the condemnation tried to protect the possibility of a direct divine action which could have

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[80] See John Murdoch, "Pierre Duhem and the History of Late Medieval Science and Philosophy in the Latin West," in *Gli studi di filosofia medievale fra otto e novecento*, ed., Alfonso Maier and Ruedi Imbach (Rome: Edizioni di Storia e Letteratura, 1991), 254.
[81] Ibidem, 299-302.
[82] See William Courtenay, *Capacity and Volition*: *A History of the Distinction of Absolute and Ordained Power* (Bergamo: Pierluigi Lubrina, 1990).

suspended or contradicted the laws of creation. They tried to keep God's sovereignty over nature which implied the acceptance of a "general principle of contingency" and of "the historicity of miraculous divine intervention." Hence, "the issues to which the actions of 1277 were a response were at the level of divine actions in nature, ordinary and extraordinary" and not something that would have tried to keep the "range of initial divine capacity apart from action."[85]

Courtenay is skeptical about the continuity between the propositions condemned in 1277 and the future thought experiments developed in the fourteenth century. He considers that the condemned propositions were not essential in the later developments since the theologians who had an interest in natural philosophy would have pursued their interests anyhow, with or without the condemnation.

The positions which deny that the 1277 condemnation was the origin of modern science – like that of Koyré – and those which do not admit that the doctrine of the absolute power of God would have been the unique and essential issue implied by the condemnation – as Courtenay claims – also have some truth. One has to admit that that there were many condemned propositions which referred to other issues, without making a direct reference to God's absolute power; and that, over a period of centuries there could have been other influences that produced the development of modern science.

Without trying to solve this question here, it is sufficient to admit that, even if the doctrine of the absolute power of God was not the unique and essential issue involved in the condemnation, it was certainly one of the most important ones. This conclusion would remain true even if one stops at a statistical measuring of its presence among the condemned propositions. Furthermore, the propositions which condemn the limitation of God's power

[83] Courtenay, *Capacity and Volition*, 95.
[84] Ibidem, 95.
[85] Ibidem, 96.

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can be seen in themselves, even without extrapolating their importance to the whole of the condemnation, as something that would make its inner meaning explicit.

The authors mentioned above, even if they simply accepted, criticized or reformulated Duhem's interpretation of the 1277 condemnation, generally admitted that medieval hypothetical reasoning had a certain importance in the development of early modern science. However, most of them consider that the central moment of this development, beyond its possible origin in the 1277 condemnation, would have taken place in late medieval philosophy, at the end of thirteenth and in the fourteenth century, in the work of such philosophers and theologians as John Buridan, Nicole Oresme, Albert of Saxony, Themon Judaeus and Marsilius of Inghen.

Since Aquinas himself have had a role in this context due to his interest in Aristotle's metaphysics and natural philosophy, this thesis tries to see his possible involvement in the 1277 condemnation – formulated with exactly three years after his death – as an earlier position of this development. Aquinas had his own interpretation of God's omnipotence, of the distinction between *potentia absoluta* and *potentia ordinata*, of the existence of some limits to God's power, while also maintaining some of the ideas condemned in 1277. The analysis of these issues in the next two chapters will make possible the discovery of the specificity of his position in this context.

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II. God's Omnipotence and the Limits of his Powers in Aquinas:

The developments produced by the reception of the Greco-Arabic thought in the Latin West in the late twelfth and in thirteenth century also influenced the doctrine of God's omnipotence. Even if it was not a new issue, already present in Christian thought before this period, in the thirteenth century the doctrine of God's omnipotence received new accents.[86] The consistency of the intellectual understanding of the natural world, founded on the metaphysical necessitarianism discovered in Aristotle and in his Greek and Arabic commentators, determined a new perception of God's omnipotence.[87]

According to Michael Resnick the thirteenth century had "define omnipotence as a power to do anything which does not imply contradiction, and therefore as a power which can be understood in itself by human reason," while for the Church fathers, and for the early Scholastics, the divine omnipotence was considered to be beyond human comprehension.[88] Furthermore, again according to Resnick, the problem of God's omnipotence shifted its accent in the thirteenth century, especially in Aquinas, from God's will to the possible objects that God, as an omnipotent being, can create.[89]

This change of accent does not imply that the possibility of things would be separated of the divine essence since, as John Wippel claims, "the ultimate ontological foundation for a possible is the divine essence itself."[90] Beyond this fact, however, Wippel also admits that "it is because things are possible in themselves that they fall under God's omnipotence, not vice

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[86] An important discussion of God's omnipotence and the power distinction can be found in Peter Damian's position in the third quarter of the eleventh century. See Peter Damian, *De divina omnipotentia* and Irven Michael Resnick, *Divine Power and Possibility in St. Peter Damian's* De divina omnipotentia (Leiden: E. J. Brill, 1992).
[87] Grant, *God's Power*, 214.
[88] See Resnick, *Divine Power*, 38.
[89] Ibidem, 6. For Aquinas' attribution of will to God see *SCG*, I, c. 72.
[90] See John Wippel, "The Reality of Nonexisting Possibles According to Thomas Aquinas, Henry of Ghent, and Godfrey of Fontaines," *The Review of Metaphysics* 34, No. 4 (1981): 734.

versa. And it is because others are impossible in themselves and hence cannot be made that they do not fall under God's power."[91]

As already noted in the first chapter, the stressing of God's omnipotence was considered to be one of the most important aims of the 1277 condemnation. The analysis of Aquinas' formulation of God's omnipotence, of the distinction between *potentia absoluta* and *potentia ordinata* and of the limits to God's power that he establishes is necessary in order to make a comparison, in a next chapter, with the limits of God's power condemned by Tempier in 1277.

II.1. Aquinas on God's omnipotence

According to Aquinas God's omnipotence is firstly manifested by the fact that God is *summum bonum*.[92] God's goodness is the first foundation of all divine works and the end of all things.[93] God has mercy and forgives sins, of his own free will, without being bound by the laws of a superior, this being a moral proof of his omnipotence, a sign of his sovereignty. As far as God is the cause of being, his omnipotence is effective within the domain of what is ontologically possible. In consequence, Aquinas conception of God's omnipotence was also developed within his theory of being, in relation to the absolute possibility of existence of the objects.[94]

Describing God's omnipotence, Aquinas firstly establishes the existence of such an operative faculty as power in the infinite divine essence, identical with God's will and knowledge, and only logically distinct from them.[95] God's power is part of the infinite divine

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[91] See Wippel, "The Reality of Nonexisting Possibles," 738, n.18.
[92] *SCG*, I, c. 41: *Id quod per essentiam dicitur, verius dicitur quam id quod est per participationem dictum. Sed Deus est bonus per suam essentiam, alia vero per participationem, ut ostensum est. Est igitur ipse summum bonum.*
[93] See *ST*, Ia, q. 25, a.3 and *De Potentia*, q. I, a.1.
[94] Despite Resnick's claim that Aquinas' definition of omnipotence is metaphysical not theological, God cannot be considered a secondary reference to omnipotence compared with the grounds of being as being, since the theological and the metaphysical go hand in hand in Aquinas' conception of God.
[95] *ST*, Ia, q. 25, a.1: *potentia importat rationem principii exequentis id quod voluntas imperat, et ad quod scientia dirigit.*

essence, identical with God's substance and being, not received by participation.[96] Being the ultimate perfection, God is a pure and perfect act, the source of being of all things, a first agent which has no admixture of potency, having an active power in the highest degree. [97]

Since God is the first cause, the source of all being, action and movement in the created realm, nothing can act on him. He is totally different from things which have in their composition matter and which are subject to contrariety, motion and change. Acting upon creatures, he produces effects upon them, while his permanent sharing of being preserves the things within the order of creation.[98] His infinite power, identical with the divine essence, is distinct only retrospectively, as the principle of the effects found at the level of creatures, which are dependent and potential beings, caused and moved things.[99]

God is a pure and perfect being, not limited by any species or genus since all his faculties have no limit. His actions are limited neither by the status of the agent nor by that of the recipients since it proceeds from an infinity which never produces so many effects that it cannot produce more and never acts with such intensity that it cannot act more intensely.[100]

Accepting some of the features of the previous understanding of God's omnipotence Aquinas underlines the impossibility of determining based on them what exactly this omnipotence means. Since God cannot do some things – he cannot sin or die, for example – one cannot say that his omnipotence consists in the fact that he can do absolutely all things. Aquinas also refuses the explanations of God's omnipotence which are only descriptions and not reasons for the way in which God has power. The perfection, infinity, impassibility and

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[96] *SCG*, II, c. 8.
[97] See *SCG*, II, c. 7-10 and *SCG*, I, c.16: *Unumquodque agit secundum quod est actu. Quod igitur non est totus actus, non toto se agit, sed aliquo sui. Quod autem non toto se agit, non est primum agens: agit enim alicuius participatione, non per essentiam suam. Primum igitur agens, quod Deus est, nullam habet potentiam admixtam, sed est actus purus*.
[98] See *De Potentia*, q. V, a. 1: *Dicendum quod absque omni dubio concedendum est, quod res conservantur in esse a Deo, et quod in momento in nihilum redigerentur, cum a Deo desererentur*.
[99] *ST*, Ia, q. 25, a.1.
[100] See *De Potentia*, q. I, a.2: *Nam nunquam tot effectus facit quin plures facere possit, nec unquam ita intense operatur quin intensius operari possit*.

the indefectibility of God's power, the fact that he can do whatsoever he wills, are not the real reasons for his omnipotence.

Ultimately, God's omnipotence is determined based on the possibility of things, this being the only proper reference to God's omnipotence according to Aquinas. The possibility of things is determined neither in relation to the created nature, since God's power extends beyond the things possible to it, nor by saying that God is omnipotent because he can do all things that he is able to do – since this is considered a vicious circle.

The possibility of things is eventually determined based on what is possible absolutely, in reference to no power.[101] One can find three other meanings of the possible in Aquinas: one, still in reference to no power, is discovered in mathematics where a line is potentially measurable because its square its measurable;[102] the two others are in reference to a power, one based on an active potency, due to the agent which has the power to bring it into being, and one based on a passive potency as a thing which has a potentiality for something, like the wood for being burn.[103]

A thing or states of things are possible absolutely according to the relation between the terms involved in their constitution: incompatibility between the predicate and the subject implies the impossibility of that state of things, while their compatibility implies its possibility.[104] Hence, a relation between God's operation and its objects becomes essential in the determination of God's omnipotence since God's omnipotence is manifested in his

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[101] *ST*, q. 25, a. 3: *Non autem potest dici quod Deus dicatur omnipotens, quia potest omnia quae sunt possibilia naturae creatae: quia divina potentia in plura extenditur. Si autem dicatur quod Deus sit omnipotens, quia potest omnia quae sunt possibilia suae potentiae, erit circulation in manifestatione omnipotentiae: hoc enim non erit aliud quam dicere quod Deus est omnipotens, quia potest omnia quae potest. Relinquitur igitur quod Deus dicatur omnipotens, quia potest* omnia possibilia absolute ...

[102] See *De potentia*, q. I, a. 3: *Tertio modo dicitur possibile secundum potentiam mathematicam quae est in geometricis, prout dicitur linea potentia commensurabilis, quia quadratum eius est commensurabile.*

[103] See Ibidem, q. 3, a. 14. Despite the existence of these various forms of the possible what is possible absolutely seems to be the basic form of the possible, always presupposed in the existence of the other forms.

[104] John Wippel notes that the absolutely possible that Aquinas maintains based on the absence of incompatibility between the terms is not linguistic or logical but ontological. See Wippel, "The Reality of Nonexisting Possibles," 735.

possibility of creating whatever is not inconsistent with the notion of a created thing.[105] God's power extends to those objects which do not imply a contradiction, while the contradictory ones are impossible to God since they are impossible in themselves.[106] In consequence, God's omnipotence is manifested in the fact that he can do all things that are possible in themselves.[107]

The object of an omnipotent divine power which "possesses within itself the perfection of all being," is everything that has the nature of being: God is omnipotent since he is able to do all things with which the notion of being is not incompatible.[108] The compatibility or the incompatibility between the predicate and the subject, corresponding to what can or cannot have the nature of being, determine what is possible absolutely and constitute the object of God's omnipotence. Something possible does not imply a contradiction in terms, being within the scope of God's omnipotence; if a contradiction in terms is implied than the situation of things is outside the scope of God's omnipotence, since it is impossible it itself and God cannot do it.[109]

II.2. Aquinas on potentia absoluta and potentia ordinata

The distinction between *potentia absoluta* and *potentia ordinata* is due to the fact that God's power is not limited to what was realized within the created order, and extends beyond the possibility of all things as present within it.[110] God's absolute power is infinite, having no defect, and encountering no exterior resistance.[111] At the same time, however, God's power

[105] See *De potentia*, q. III, a. 14: *Praeterea, quidquid non est contra rationem creaturae, Deus potest in creatura facere; alias non esset omnipotens*.
[106] In the eleventh century, Peter Damian considered that God could make such a thing as a past historical event not to have happened if he willed it despite the contradiction in this situation. In this manner, Damian rejected the application of logic and reason in the domain of faith, a position, which changed after the reception of logic, natural philosophy, and metaphysics in the thirteenth century, when God's inability to make a contradiction true was generally accepted.
[107] See *De potentia*, q.I, a.7.
[108] See *ST*, III, q. 13, a. 1, and *SCG*, II, c. 22: *Virtus autem divina est per se causa essendi, et esse est eius proprius effectus, ut ex dictis patet. Ergo ad omnia illa se extendit quae rationi entis non repugnant.*
[109] *ST*, Ia, q. 25, a. 3.
[110] Ibidem, Ia, q. 25, a. 3.
[111] See *De potentia*, q. I, a. 3: *Sic ergo aliquid dicitur impossibile fieri tribus modis. Uno modo propter defectum activae potentiae, sive in transmutando materiam, sive in quocumque alio; alio modo propter aliquod resistens*

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operates on the basis of a divine plan, executing what the will commands and the wisdom directs. In consequence, a logical distinction is present between God's absolute power and that power of God materialized in the present order of creation, based on the free choice of his will.[112]

The power distinction brings under *potentia absoluta* the sum of all those conceivable things which are possible for God and which were not realized in the present order of creation. The things present in God's plan of creation are possible based on his *potentia ordinata*. The power distinction is present in Aquinas as a difference between those things which God can do absolutely, according to his infinite power considered in itself – all things which have the nature of being – and those things exterior to the divine power whose production is determined by the relation with a concrete order of creation – representing God's ordained power.[113]

God's power is not restricted to the present order of creation neither on the basis of his divine wisdom and justice, which are identical with God's power, nor due to natural necessity. The rational plan of creation, based on divine wisdom, accompanies God's will in creation establishing divine goodness as the first principle of action and the ultimate end of everything.[114]

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vel impediens; tertio modo propter hoc quod id quod dicitur impossibile fieri, non potest esse terminus actionis. Ea ergo quae sunt impossibilia in natura primo vel secundo modo, Deus facere potest. Quia eius potentia, cum sit infinita, in nullo defectum patitur, nec est aliqua materia quam transmutare non possit ad libitum; eius enim potentiae resisti non potest.

[112] According to Norman Kretzmann, there is a different accent on God's necessity and freedom to create something in Aquinas' treatement of creation: it would be necessary for God to create something, while he would remain free to chose what he creates. See *The Metaphysics of Creation: Aquinas's Natural Theology in Summa contra Gentiles II* (Oxford: Clarendon Press, 1999), 131-136. Kretzmann's view was criticised by Wippel who considers that one cannot find any necessity in Aquinas description of the manner in which God creates the things. See John Wippel "Norman Kretzmann on Aquinas's Attribution of Will and of Freedom to Create to God." *Religious Studies* 39, No. 3 (2003): 287-298.

[113] According to Lawrence Moonan, Aquinas firstly used the power distinction in a theological context, in his *Commentary on the Propositions of Petrus Lombardus*. Here Aquinas questions the idea, accepted by Lombardus, that God the Father could have taken flesh, implying the fact that the Redemption might have been brought otherwise than it was, see: Lawrence Moonan, *Divine Power. The Medieval Power Distinction up to its Adoption by Albert, Bonaventure, and Aquinas* (Oxford: Clarendon Press, 1994), 232.

[114] See *SCG*, III, c. 97.

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While God cannot do anything except that which, if he did it, would be suitable and just,[115] the divine goodness and wisdom exceed beyond all proportion the things created, so that the divine power cannot be restricted to a particular order.[116] The same thing is true of natural necessity: it cannot limit God's will, which is identical with his power, constituting the cause of all things. In consequence, the present course of events is not produced by God based on any kind of necessity – moral or natural – that would limit his will and power; other courses of events can happen since God could have done other things than those he has.

A reason for the difference between *potentia absoluta* and *potentia ordinata* can be also found in the fact that God is not a univocal agent, since nothing agrees with him in species or genus.[117] While each active power has its corresponding effect in a possible thing, which is its proper and natural effect, God's effects upon creatures do not correspond directly to his power. The infinite power of God is not wholly manifested in the effects present in the created realm so as to produce an infinite effect.[118] God's effects in the created realm are always less than his power, which is not exhausted in the present order of creation, God being beyond all proportions more than the created things.[119]

The only possible limitation of God's power that Aquinas accepts, which constitutes the basis of the power distinction, is due to the necessity of supposition.[120] By this necessity

[115] *ST*, Ia, q. 25, a. 5: *Deus non potest facere nisi id quod, si faceret, esset conveniens and iustum*.
[116] See *SCG*, III, 98: *Ostensum est autem in secundo quod res ipsae quae a Deo sub ordine ponuntur, proveniunt ab ipso non sicut ab agente per necessitatem naturae, vel cuiuscumque alterius, sed ex simplici voluntate, maxime quantum ad primam rerum institutionem. Relinquitur ergo quod praeter ea quae sub ordine divinae providentiae cadunt, Deus aliqua facere potest; non enim est eius virtus ad has res obligata*.
[117] See *Comp.Theol.*, I, 13: *Omne genus differentiis aliquibus dividitur. Ipsius autem esse non est accipere aliquas differentias: differentiae enim non participant genus nisi per accidens, inquantum species constitutae per differentias genus participant. Non potest autem esse aliqua differentia quae non participet esse, quia non ens nullius est differentia. Impossibile est igitur quod Deus sit genus de multis speciebus praedicatum*.
[118] *ST*, Ia, q. 25, a. 2.
[119] See *De Potentia*, q. III, a. 5.
[120] The origin of this necessity of supposition seems to have been in the second book of Aristotle's *Physics*, in the technique of demonstrating *ex suppositione finis*. This is related to the necessity proper to natural science which is not absolute but only conditional, being a "demand for whatever may be required to achieve a certain end." The essence of the argument is that due to the contingent, or even defective character of natural causes judgments regarding them are not made from the cause to the effect but rather from the effect to the cause. For a short presentation of this issue – which is also commented on by Aquinas in his "Commentary on the Posterior Analytics of Aristotle" (lect. 42, n. 3), see: the study of William A. Wallace, *Albertus Magnus on Suppositional*

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of supposition Aquinas implies the existence of a self-limitation of God, who, once he decided to do a certain order, foreknowing and pre-ordaining something, is bound by his decision and cannot do something which would be essentially against this order.[121] This opens a gap between God's absolute power and his ordained power, determined by the essential features present in an order of creation.

The creation of an order of things ordains God's power, by implying the existence of some essential features of things. A realized order of creation is structured by a specific gradation of forms and operations, having various degrees of perfection, which determine the degree of the things' participation in being. These features determine not only the diversity of species, but also what can be considered natural to things, their numerical plurality, the diversity of their inclinations to various ends, the existence of agents, patients and accidents, and their different relation to matter. All these general characteristics constitute a harmonious order of creation in which God's rational plan is manifested.[122]

The distinction between *potentia absoluta* and *potentia ordinata* is based on a separation, within the divine power, between what is willed by God and which is included in the order of creation and what is not willed and therefore not included in it. God's wisdom plays an important role in what is willed by him, because the order of creation is seen as providential, while what is repugnant to God's wisdom is not created.

In consequence, from among those things which can be realized by God through his absolute power, only those willed by him become part of an order of creation. The things

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Necessity in the Natural Sciences in *Albertus Magnus and the Sciences: Commemorative Essays*, ed., James A Weisheipl (Toronto: Pontifical Institute of Mediaeval Studies, 1980), 103-128.

[121] *Sed quia ipse non potest facere quod contradictoria sint simul vera, ex suppositione potest dici, quod Deus non potest alia facere quam quae fecit: supposito enim quod ipse non velit alia facere, vel quod praesciverit se non alia facturum, non potest alia facere, ut intelligatur composite, non divisim*. See *De Potentia*, q. I, a. 5.

[122] See *Summa Contra Gentiles*, III, c. 97: *Patet ergo ex dictis quod, cum per divinam providentiam rebus creatis diversa accidentia, et actiones et passiones, et collocationes distribuantur, non hoc absque ratione accidit*, and after a few lines: *ut per mensuram quantitatem, sive modum aut gradum perfectionis uniuscuiusque rei intelligamus; per numerum vero pluralitatem et diversitatem specierum, consequentem ex diversis perfectionis gradibus; per pondus vero inclinationes diversas ad proprios fines et operationes, et agentia et patientia, et accidentia quae sequuntur distinctionem specierum*.

which are not part of this order of creation are not willed, receiving a hypothetical character, since they remain possible. God's absolute power, however, has the same characteristic of infinity as his nature, and God can always do other things than those he has done.[123]

Once God has decided on a certain order of creation he cannot do anything which he had not foreknown or preordain that he would do within that order. This is due to the fact that God's action of doing is subject to his foreknowledge and pre-ordination: since the present order of creation was made, being foreknown and pre-ordained by God, no other order will be suitable or good for the things which are part of this order. Within it God can make something else better than each individual thing made by him, or make the same thing, in a certain sense, better than it is but he cannot change the essential features of the things present in this order.[124]

On the other hand, God's power and nature remain infinite and are not subject to the limits imposed by God's foreknowledge and pre-ordination, which are only related to the present order of creation.[125] While God's power is ordained in relation to the present order of creation due to his pre-ordination and foreknowledge, it remains free and absolute in itself, not determined by the relations of necessity linked with the actual order of creation. Through his absolute power, God can realize whatever is possible, freely choosing other things and other orders,[126] the only absolute limit remaining the logical impossibility of a thing: a thing with contradictory features cannot exist and consequently God cannot do it.[127]

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[123] *ST*, Ia, q.25, a.5.
[124] *ST*, Ia, q. 25, a.6. Aquinas makes here an analogy based on a comparison between mathematics and natural philosophy. He mentions the example of the number 4, quoting Aristotle's *Metaphysics* (VIII, 10) and considering that: *Et quantum ad hoc bonum, Deus non potest facere aliquam rem meliorem quam ipsa sit, licet possit facere aliquam aliam ea meliorem. Sicut etiam non potest facere quaternarium maiorem: quia, si esset maior, iam non esset quaternarius, sed aliud numerus*. In consequence, from this point of view, God cannot essentially change things within a created order because they will cease to be what they are.
[125] *ST*, Ia, q. 25, a. 5.
[126] See *De Potentia*, q. I, art. 5; *ST*, Ia, q. 25, a. 6. For God's freedom of choosing other worlds, as opposed to the necessity of choice which would be due to his divine nature, see: *De Veritate*, q. 24, a. 3.
[127] *ST*, Ia, q. 25, a. 5.

II.3. The limits of God's power according to Aquinas:

The idea that there are some things which are impossible for God was always involved in the discussions of God's omnipotence, being present in Christian thought as early as Augustine, and receiving, before the thirteenth century, important formulations by Peter Damian, Anselm, and others. In these approaches, the limits of God's power manifested in God's impossibility of doing evil, of sinning, of deceiving, of creating another God or of destroying himself. The formulation of these limits was based on the idea that God cannot do anything contrary to his nature.

Beyond these limits related to God's nature there were some other areas which had a more problematic status regarding the possibility of God's direct intervention. This was the case of the past, the course of nature or the laws of mathematics, which, due to the necessity each of involves, imposed limits or impossibilities on God's direct intervention.

Aquinas claims that all philosophical and theological attempts of limiting God's power are doomed to failure since God is a perfect agent who determines his own action and end. Philosophical attempts were generally based on the idea of natural necessity, while theological attempts tried to limit God's power by using the idea of the order of divine justice and wisdom.[128] The necessary features proper to the present order of creation, the divine wisdom and goodness, once realized in an order, determine God's power in relation to it. But acting on the basis of his free will – the cause of all things – God cannot be limited by the natural necessity present in this order. In relation to justness, God is actually the norm of the justness present in creation, so the last cannot function retrospectively as a limit of his power.

Despite these affirmations Aquinas accepts the existence of certain limits of God's power. God's power is firstly limited by his inability to do those things which imply a contradiction.[129] Other limits are determined based on the opposition between the infinity of

[128] *De Potentia*, q. I, a. 3.
[129] *ST*, Ia, q. 25, a.3.

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the divine nature, power, and wisdom, and the rational plan materialized in the order of creation, based on God's will.

Most of these limits are developed by using the idea of a self-contradiction in God: God cannot make evil because this would imply a self-contradiction to his nature; God cannot make contradictories true because God is the source of being, while the contradictories do not have the nature of being; God cannot make anything against his *potentia ordinata* because he would enter in a contradiction with the order of things that he created.

II.3.1. The limits of God's power versus his divine nature:

The first limits that God's power encounters are those due to his nature. These limits are formulated as impossibilities of God, consisting in the fact that God cannot do evil, cannot be imperfect and cannot make those things which would imply the existence of a defect of his nature. A tension is present here between God's divine nature and the possibility of evil or imperfection, since God cannot do anything against his nature.

Being a voluntary and rational agent, God cannot do what he cannot will. Among the things that God cannot will, and which imply the existence of a preeminence of the divine nature over the divine will, Aquinas mentions the fact that God cannot make himself not to be, not to be good or happy, cannot lack anything, cannot fail, cannot suffer from weariness or forgetfulness – since they imply a defect of power or knowledge – cannot suffer violence – since it implies motion – cannot repent, and cannot be angry or sorrowful – because these states imply passion and defect.[130]

II.3.1.1. God cannot will evil

Due to the fact that he is the highest good, God cannot will anything evil. His inability to attain a good end would be not only a defect of his will but also the sign of an error in his reason. However, both the presence of an error in the divine intellect and the deviation of his

[130] See *SCG*, II, c. 25.

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good will from its end are impossible. Consequently, good is the only possible end of God's will, and he can not will its contrary.[131]

II.3.1.2. God cannot sin

Due to the same necessary characteristics of his will, God is unable to do what he cannot will and he cannot will what is contrary to his goodness, since he wills this naturally.[132] In consequence, God cannot sin, since this would imply the existence of a disorder in his action. God's inability to sin is not judged only in a moral or theological framework, but also within the general conditions for action. "To sin is to fall short of a perfect action; hence to be able to sin is to be able to fall short in action, which is repugnant to omnipotence. Therefore it is that God cannot sin, because of His omnipotence."[133]

II.3.1.3. God cannot act upon himself

God cannot use his power to act upon himself and to change his being, since there is nothing in him that needs to be changed. The infinite perfection of the divine nature implies the existence of a limit to God's power since it leaves no place for any possible change. The need for change would imply a certain deprivation or absence of something, a deficiency, a passive potency which would be improper to God.[134]

There is potency with respect to being only in those things which have matter subject to contrariety and whose possibility entails passive potency.[135] But, since there is no passive potency in God, his power cannot extend to any thing pertaining to his own being. In consequence, since motion is the act of this passive potency, God cannot be a body, cannot be

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[131] See *De Potentia* q. I, a. 3. and *SCG*, I, 95: *Deus est summum bonum, ut supra probatum est. Summum autem bonum non patitur aliquod consortium mali: sicut nec summe calidum permixtionem frigidi*.
[132] *De Potentia*, q. I, a. 6.
[133] *ST*, Ia, q. 25, a. 3, Reply to objection 2: *Ad secundum dicendum quod peccare est deficere a perfecta actione: unde posse peccare est posse deficere in agendo, quod repugnant omnipotentiae. Et propter hoc Deus peccare non potest, qui est omnipotens*.
[134] *SCG*, II, c. 25.
[135] Ibidem, II, c. 25.

changed and cannot suffer from increase, diminution, or alteration, coming to be and passing away, all these actions being foreign to his nature.[136]

II.3.1.4. God cannot create God

God's omnipotence cannot go so far as to create another God equal to himself, since his superiority in being and perfection cannot depend on another. This dependence on something else is proper only to the things made which, by their essence, need a superior cause to make them possible. But, by his essence, God cannot depend on something else since this would be contrary to his divine nature.[137]

II.3.1.5. God cannot fail

Due to his nature God cannot fail. Since various failings and imperfections are inseparable from movement, God cannot be moved, cannot walk or perform any other actions that characterize bodies.[138] Situations in which God fails are also made impossible by the fact that every failing implies the existence of some privation, possible only on the basis of the potency of matter, which is absent in God.[139]

II.3.2. Limits of God's power versus the created order

Different limits of God's power beyond those which are due to his nature are developed based on the power distinction. While God's absolute power is limited by the fact that God cannot make things which imply a contradiction, the tension between *potentia absoluta* and *potentia ordinata* determines the existence of other limits, since the existence of an ordained potency of God indirectly limits God's power in relation to a created order of things.

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[136] *SCG*, II, c. 25: *Huius potentiae passivae motus actus est. Deus igitur, cui potentia passiva non competit, mutari non potest. – Potest autem ulterius concludi quod non potest mutari secundum singulas mutationis species: ut quod non potest augeri vel minui, aut alterari, aut generari aut corrumpi.*
[137] Ibidem, II, c. 25.
[138] *De Potentia*, q. I, a. 6: *Can God Do What Others Can Do?*
[139] *SCG*, II, c. 25.

II.3.2.1. God cannot make contradictions true at the same time

The idea that God cannot make the contradictories to be true was generally accepted in the thirteenth century and Aquinas' formulation of it is the sign of his acceptance of the common point of view existent in this period.[140] Since God's power could not have any defect due to which the creation of a thing would fail to reach its effect, nor can encounter an external resistance that would hinder it, the only way in which God cannot create a thing will consist in the impossibility of that thing, so not "through lack of power, but through lack of possibility, such things being intrinsically impossible: 'God can do it, but it cannot be done'."[141]

God's power is only limited by the fact that he cannot do things which are impossible in themselves, implying a contradiction.[142] Since contradictory terms cannot be true at the same time, not even God, whose omnipotence is limited to that which is absolutely possible, can make them true. God cannot will that affirmation and negation be true together, and this is present in everything which is impossible, contradictory with itself.[143]

A contradictory thing does not have the nature of being since being does not admit that something is and is not at the same time. Since God is the cause of being he cannot do anything against the logical law of non-contradiction since this would imply that his actions

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[140] See Edward Grant, *A History of Natural Philosophy*, 245: "But if it had to be conceded that God could perform any naturally impossible act short of a logical contradiction, almost all would have denied that God could perform a logically impossible action."
[141] See *De Potentia,* q. I, a. 3: *Are Those Things Possible to God Which Are Impossible to Nature?*
[142] God's ability to act was limited by the principle of contradiction. See William Courtenay, *Capacity and Volition*: *A History of the Distinction of Absolute and Ordained Power* (Bergamo: Pierluigi Lubrina, 1990), 90.
[143] *SCG*, I, c. 84: *Ex hoc apparet quod voluntas Dei non potest esse eorum quae sunt secundum se impossibilia. Huiusmodi enim sunt quae in seipsis repugnantiam habent: ut hominem esse asinum, in quo includitur rationale esse irrationale. Quod autem repugnat alicui, excludit aliquid eorum quae ad ipsum requiruntur: sicut esse asinum excludit hominis rationem. Si igitur necessario vult ea quae requiruntur ad hoc quod supponitur velle, impossibile est eum velle ea quae eis repugnant. Et sic impossibile est eum velle ea quae sunt impossibilia simpliciter*.

end in non-being. God's will has an end which it wills naturally, while its contrary cannot be willed.[144]

Due to this impossibility, things which involve a contradiction, and which do not have the nature of being, are situated outside the scope of God's power. In consequence, God cannot make one and the same thing to be and not to be at the same time since he is unable to do what is contrary to the nature of being as being.[145] The nature of being remains the necessary horizon of God's absolute power[146] within which he is able to act, while "that which implies being and non-being at the same time is repugnant to the idea of an absolutely possible thing."[147]

In the same manner in which something that implies a contradiction cannot be conceived by the intellect, things which involve a contradiction cannot exist. A contradictory thing cannot be the object of the divine intellect; it cannot be wanted and produced by God as such. Contradictories cannot be made to exist simultaneously; such things are impossible, thus God cannot do them[148] since his power does not extend to this type of things.[149] One can find the same type of contradiction in contraries and privative opposites: God is unable to make opposites exist in the same subject at the same time and in the same respect: he cannot make a thing white and black at the same time.

God's absolute power remains limited by the objects' absolute possibility of existence since God cannot create an object whose existence is impossible or contradictory. His

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[144] *De potentia*, q. I, a. 3.
[145] *SCG*, II, c. 25: *Quia potentiae activae obiectum et effectus est ens factum, nulla autem potentia operationem habet ubi deficit ratio sui obiecti, sicut visus non videt deficiente visibili in actu: oportet quod Deus dicatur non posse quicquid est contra rationem entis inquantum est ens, vel facti entis inquantum est factum*.
[146] *ST*, Ia, q. 25, a. 3: *Esse autem divinum, super quod ratio divinae potentiae fundatur, est esse infinitum, non limitatum ad aliquod genus entis, sed praehabens in se totius esse perfectionem. Unde quidquid potest habere rationem entis, continetur sub posibilibus absolutis, respectu quorum Deum dicitur omnipotens*.
[147] Ibidem, Ia, q. 25, a. 3.
[148] *SCG*, II, c. 25.
[149] *De potentia*, q. I, a.5: *Sed dupliciter dicitur Deum absolute non posse aliquid. Uno modo quando potentia Dei non se extendit in illud: sicut dicimus quod Deus non potest facere quod affirmatio et negatio sint simul vera, ut ex supra dictis patet*.

absolute power is then effective only within the universe described by the law of contradiction, which is seen as a principle of being.

II.3.2.2. God cannot make a thing to be preserved in being without himself

The impossibility of God doing something which would imply a contradiction is not limited to individual things present in the order of creation but also refers to their principles. The preservation in being of a thing depends on its cause, so that, if the cause is taken away, the thing would be also removed.[150]

In consequence, a contradiction of being and not-being would also result if a thing would remained present in the order of being while its essential and original principles changed. Since God cannot make a thing to be and not to be at the same time, he also cannot make a thing to lack any of its essential principles while the thing itself remains in being.[151]

This is also true for the principles of sciences: God cannot make the contraries of the principles of logic, geometry, and arithmetic, since they are derived from the formal principles of things, upon which their essence depends: "He cannot make the genus not to be predicable of the species, nor lines drawn from a circle's center to its circumference not to be equal, nor the three angles of a rectilinear triangle not to be equal to two right angles."[152]

II.3.2.3. God cannot make the past not to have been

The same presence of contradiction, which limits the domain of what God can do, is to be found in the fact that God cannot make the past not to have been.[153] A contradiction would be present here if the past, once it was, should not have been, in itself and absolutely. Something that has been cannot be considered not to have been without implying a contradiction.

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[150] *SCG*, II, c. 25.
[151] *SCG*, II, c. 25: *Si igitur Deus non potest facere rem simul esse et non esse, nec etiam potest facere quod rei desit aliquod suorum principiorum essentialium ipsa remanente: sicut quod homo non habeat animam*.
[152] *Ibidem*, II, c. 25.
[153] For a more general presentation of what the fact that God cannot change the past meant in the history of the idea of God's omnipotence see Calvin G. Normore, "Divine Omniscience, Omnipotence and Future

Since this implies a contradiction it cannot be within the scope of God's omnipotence. Hence, despite his omnipotence, God cannot change the past: if a thing was, it is necessary for it to have been.[154] Aquinas considers this to be more impossible than the raising of the dead which, even if impossible in reference to natural power, remains possible on the basis of divine power.

Between what is absolutely possible and absolutely impossible there are some things, like those belonging to the past, which were once in the nature of possibility: once they happened, however, change is not longer possible. In consequence, God is not able to do them: he can change everything but not the fact that those things happened.[155]

II.3.2.4. Limits of God's power produced by the opposition between *potentia absoluta* and *potentia ordinata*:

Other limits of God's power are the consequence of the fact that God cannot make something against his pre-ordained will, against the ordained manifestation of his power. These limits are neither determined by the nature of God – as the previous divine impossibility of sinning – nor due to the fact that the impossible things contain a repugnancy – as a square circle, which could not be brought into existence even by the absolute power of God. They are the product of a tension between God's absolute power, and wisdom and their actual materialization in the present order of things.[156]

Based on a rational plan, the will of God produces an order of things which ordains God's power. At the same time, however, God's absolute power and God's wisdom exceed

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Contingents: An Overview," *Divine Omniscience and Omnipotence in Medieval Philosophy*, ed., Tamar Rudavsky (Dordrecht: D. Reidel Publishing Company, 1985), 3-22.

[154] *ST*, Ia, q. 25, a. 4.

[155] *Ibidem*, q. 25, a. 4.

[156] See *SCG*, III, 98: *Si autem consideremus praedictum ordinem quantum ad rationem a principio dependentem, sic praeter ordinem illum Deus facere non potest. Ordo enim ille procedit, ut ostensum est, ex scientia et voluntate Dei omnia ordinante in suam bonitatem sicut in finem. Non est autem possibile quod Deus aliquid faciat quod non sit ab eo volitum … neque etiam est possibile ab eo aliquid fieri quod eius scientia non comprehendatur … neque iterum est possibile quod in creaturis aliquid faciat quod in suam bonitatem non sit ordinatum sicut in finem. Similiter autem, cum Deus sit omnino immutabilis, impossibile est quod aliquid velit cum prius noluerit … Nihil igitur Deus facere potest quin sub ordine suae providentiae cadat: sicut non potest aliquid facere quod eius operationi non subdatur*.

the order of things created since God has the hypothetical ability of doing everything, short of a logical contradiction.

God's actual doing is subject to foreknowledge and pre-ordination but his power is not.[157] Even if God's absolute power does not suffer the limitation of his foreknowledge and pre-ordination, it remains impossible, based on the necessity of supposition, that God would do anything which he had not foreknown or preordained he would do within a created order.[158] Hence even if God can do things by his absolute power beyond what he has foreknown and pre-ordained, within a pre-ordained, created order it is impossible that He should do anything which He had not foreknown or preordained that He would do.

God's will makes possible the suppositional limitation of his power, in relation to an order of creation. God's inability to do something is not absolute since the limits of his power are only suppositional, manifested in the fact that, if the existence of an action is supposed – the decision for a certain order of things – then its opposite cannot be realized because the previous condition prevails.[159] By producing something contrary to the order of creation that was pre-ordained, God would enter in a contradiction with himself. Hence, within a created order of things God cannot do actions which do not share the essential characteristics which were foreknown and preordained for that order, since this would destroy the harmonious features proper to it.

Within a created order, God can make something else better than each thing made by him, but only over and above its essence. On the basis of his absolute power, God can make another, better universe,[160] but he cannot change essentially the created order since, if each thing would be bettered, the proportion of order would be destroyed. Once a substantial

[157] *ST*, Ia, q. 25, a. 5.
[158] Ibidem, Ia, q. 25, a. 5.
[159] *De Potentia*, q. I, a. 3.
[160] See *ST*, Ia, q. 25, a. 5-6.

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difference would be added to the definition of things, the harmony proper to that order would be destroyed and the things would cease to be what they are.[161]

The necessity of supposition is determined by the fact that the will of God is not mutable: once God has willed something, that thing has to be fulfilled. While considered in themselves God's will and power remain absolute, both suffer a certain limitation once the supposition that God might have willed a certain order of things is accepted. Once the supposition of what God did, *de potentia ordinata*, is admitted, God's power cannot extend to a contrary, incompatible, possibility.[162] God cannot do the contrary of a certain state of things proper to a necessarily willed order as long as the supposition stands, either because he does not wish to or because he foresaw that he would not do otherwise.[163]

Within the universe of this suppositional necessity God can neither abstain from doing what he has foreseen and preordained that he will do, nor do what he did not foreseen and preordained that he will do, since this would change the essential features of the order of things. In consequence, the fact that God cannot do some things is accepted – since once the suppositional necessity is admitted God cannot do a contrary state of things – at the same time with the idea that God can do everything that is possible – which has the nature of being – since his power remains absolute in itself.[164]

In consequence, Aquinas maintains both an absolute and an ordained aspect of God's power: while God's power remains, in a certain sense, absolute, it is in the same time limited. It is necessary now to see the differences between the various limitations of God's power that Aquinas established and the ones which were associated with him in Tempier's

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[161] *ST*, Ia, 25, a. 6.
[162] See Aquinas, *De potentia*, q. I, a. 5; ST, Ia, q. 25, a.3, and *SCG*, I, c. 84.
[163] See *De potentia*, q. I, a.5. See also *SCG*, II, c. 25: *Huiusmodi autem potest quidem Deus vel facere vel velle, si eius voluntas vel potentia absolute consideretur, non autem si considerentur praesupposita voluntate de opposito: nam voluntas divina respectu creaturarum necessitatem non habet nisi ex suppositione, ut in primo ostensum est*.
[164] *SCG*, II, c. 25: *Pari igitur ratione non potest facere quae se facturum non praescivit, aut dimittere quae se facturum praescivit, qua non potest facere quae facere non vult, aut dimittere quae vult. Et eodem modo*

condemnation. The analysis of these differences will shed some light on Aquinas' possible condemnation in 1277.

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conceditur et negatur utrumque: ut scilicet praedicta non posse dicatur, non quidem absolute, sed sub conditione vel ex suppositione.

III. Aquinas in the 1277 Condemnation

The balance between God's absolute and ordained power, essential to Aquinas' theory of God's power, is not to be found in Tempier's condemnation. The condemnation underlines God's power in its absolute aspects, but has no regard for any ordained aspects of it. Based on this difference, some of Aquinas' ideas were condemned, being interpreted as limitations of God's power; interestingly enough, however, these limits are not the ones which Aquinas himself admitted as limitations of God's power.

III.1. Was Aquinas condemned in 1277?

The name of Thomas Aquinas can be associated with twenty of the 219 propositions condemned by the bishop of Paris, Étienne Tempier, in 1277. Expressing their point in various ways these propositions mainly condemned the following issues:

- the uniqueness of creation, which implied the fact that God could not have created more than one world;
- the fact that God cannot multiply individuals of the same species without matter, due to the fact that individuation is impossible in the absence of matter;
- the existence of a particular type of individuation of separated substances, which affirmed that it is impossible to have many intelligences of the same species because intelligences do not have matter;
- the angelic presence and operation in place, on the basis of which the status and operations of the separated substances were contrasted with those of the corporeal bodies;[165]
- the question of the soul and its intellectual operations, which were seen as dependent on the conditions of the body;

[165] For Aquinas' conception on these issues, see: *QQ*, I, q. 3, a. 1-2.

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- and, at the end, the determinism which affects the operations of the will.[166]

As already mentioned in the introduction, Aquinas was a theologian, a teacher at the Faculty of Theology of the University of Paris and neither the faculty nor his name were explicitly mentioned in Tempier's prologue. When he was canonized, 14 February 1325, the condemned propositions related to him were nullified by the bishop of Paris, and no one professing his ideas was to be excommunicated from then on.[167] Despite this fact, the condemned propositions were not individually designated, approved, and accepted, so that the subsequent discussions, often influenced by factional interests, prolonged the absence of a concrete association between some of the condemned propositions and Aquinas. In consequence, despite the possible associations which were made, and despite all the discussions which tried to solve this question, the precise content of the actual theses that condemned Aquinas directly, is still problematic.

As the prologue of the condemnation clearly affirms, the condemnation was firstly directed against "some students of the arts in Paris," and secondly against all "those who shall have taught the said errors or any one of them, or shall have dared in any way to defend or uphold them, or even to listen to them."[168] For these reasons Roland Hissette considered that even if one can find in Aquinas some of the ideas which were condemned, he was not directly condemned by Tempier.[169] Hissette considers that the condemned propositions that seem

[166] The selection of the propositions which can be associated with Aquinas are the result of various discussions related to his possible condemnation that developed in the various *correctoria* written imediately after 1277, which tried to prove that he was or that he was not condemned. Pierre Mandonnet mentions 20 possible propositions in his *Siger de Brabant et l'averroïsme latin au XIIIe siècle* (Institut Supérieur de Philosophie de l'Université: Louvain, 1911), 232. Pierre Duhem discusses this issue in *Le système du monde. Histoire des Doctrines Cosmologiques de Platon à Copernic* (Paris: Hermann, 1958), vol. 6, 67.

[167] See the text of the decree issued by Stephen of Bourret, Bishop of Paris in 1325, in *Chartularium Universitatis Parisiensis*, ed., H. Denifle and E. Châtelain, vol. 2 (Paris: Delalain, 1889) 280-81.

[168] See H. Denifle and E. Châtelain, *Chartularium Universitatis Parisiensis*, 543 and Edward Grant, *A Source Book in Medieval Science*, 45.

[169] Roland Hissette, *Enquête sur les 219 articles condamnés à Paris le 7 mars 1277* (Louvain: Publications universitaires de Louvain, 1977), 84, 306-307 and his article "Albert le Grand et Thomas d'Aquin dans la censure Parisienne du 7 mars 1277," *Miscellanea Mediaevalia* 15 (1982): 236. James Weisheipl also considered that Tempier did not condemn Aquinas. See James Weisheipl, "The Life and Works of Albert the Great" in *Albertus Magnus and the Sciences: Commemorative* Essays, ed. Weisheipl, James A. (Pontifical Institute of Mediaeval Studies: Toronto, 1980), 45.

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related to Aquinas were not directly associated with him by Tempier. Even if Aquinas maintained the truth of some of them, he was not condemned, since he was a theologian and not a master of the Faculty of Arts, while the condemnation was directed against the students and masters of this Faculty.[170] This position also invokes Aquinas' prestige as a theologian, a prestige which would not have let him be condemned, despite the fact that he maintained some of the condemned positions.

A thing which complicates the whole issue even more is that a problematic position of Aquinas, that of the unicity of substantial form in human beings, was not included in the 1277 condemnation, even if it was condemned in 18 March 1277, eleven days later, in Oxford by the Dominican, Archbishop Robert Kilwardby.[171] Due to some of these reasons Robert Wielockx claims that he found hints of a separate process against Aquinas, which was planned, but never realized. According to him this separate process would also imply that Aquinas was not condemned in 1277 since he was to be condemned only afterwards.[172]

It seems Tempier was planning a separate condemnation of Aquinas, which banned the idea of the unicity of the substantial form in human beings.[173] Wielockx claims that a certain number of theologians assembled and condemned Aquinas for themselves, except that Tempier did not make the condemnation public. This would have been due to the fact that once Pope John XXI, the logician and theologian Petrus Hispanus, died on 20 May 1277

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[170] This view is defended by Hissette in his book *Enquête sur les 219 articles condamnés à Paris le 7 mars 1277* (Louvain: Publications universitaires de Louvain, 1977) and in his article "Albert le Grand et Thomas d'Aquin dans la censure Parisienne du 7 mars 1277," *Miscellanea Mediaevalia* 15 (1982): 226-246. Wippel contradicts this idea considering that Aquinas was also condemned. See Wippel, "Thomas Aquinas and the Condemnation of 1277," *The Modern Schoolman* 72 (1995): 233-72.

[171] According to Leland E. Wilshire, who contradicts Daniel A. Callus' arguments, Aquinas was not directly condemned in Oxford, since one can find no reference to him in the condemnation, while the historical events surrounding the event cannot be interpreted as leading to his condemnation, see: Leland E. Wilshire "Were the Oxford Condemnations of 1277 Directed against Aquinas?" *The New Scholasticism* 48, no. 1 (1974): 125-132.

[172] See Robert Wielockx. "Autour du proces de Thomas d'Aquin," in *Thomas von Aquin. Werk und Wirkung im Licht neurerer Forschungen*, ed. A. Zimmermann (Berlin: W. De Gruyter, 1988), 413-38.

[173] The idea of the unity of the substantial form maintained by Aquinas had important theological consequences. According to the theologians who formulate the Oxford condemnation this would have implied the fact that Christ's body in the tomb, or on the cross after his death, would not have been Christ's body.

Tempier received orders from the cardinals of the Roman Curia not to go forward with the condemnation during the vacancy of the Papal See, until he received new orders.[174]

The idea of a separate process for Aquinas was contested by Hans Thijssen and by John Wippel, who considered that Aquinas was actually condemned in 1277 and that, if a separate process existed, than it was included in the censure of Gilles of Rome's position.[175] The conclusions of Fernand van Steenberghen are close to those of John Wippel since he considers that Aquinas' thought deviated from the traditional teaching of the Paris theologians, a fact which brought him closer to Siger's position. Hence, "in the eyes of the conservative theologians, Thomas Aquinas was to appear as the ally, later as the accomplice, of heterodox Aristotelians."[176]

In consequence claiming that they condemned pagan errors the theologians who formulated the condemnation also attacked Aquinas. One should admit then that "Thomism was affected by a series of articles in Tempier's syllabus, and perfectly orthodox doctrines received the same censure as the worst errors of Aristotle, Avicenna or Averroes."[177] Hence, according to van Steenberghen, Aquinas was also condemned in 1277, which had having a "disastrous" effect on Thomism since it retarded its progress.[178]

Edward Grant also considers that some propositions were deliberately included in the 1277 condemnation so as to ban the views held by Aquinas.[179] In his analysis of Siger's condemnation Pierre Mandonnet claims that Aquinas was among those directly condemned in 1277. He considers this revenge of Étienne Tempier and of the secular masters of

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[174] The idea of a separate process against Aquinas is discussed by Wippel, see: John F. Wippel, "Bishop Stephen Tempier and Thomas Aquinas: A Separate Process against Aquinas?" *Freiburger Zeitschrift für Philosophie und Theologie*, 44 (1997): 117-36.
[175] John Wippel, "Thomas Aquinas and the Condemnation of 1277," *The Modern Schoolman* 72 (1995): 245;
[176] See Fernand van Steenberghen, *Aristotle in the West. The Origins of Latin Aristotelianism* (Nauwelaerts: Louvain, 1970), 232.
[177] Van Steenberghen, *Aristotle in the West*, 237.
[178] Ibidem, 238.
[179] See Edward Grant, *A History of Natural Philosophy. From the Ancient World to the Nineteenth Century*, 246.

Theology against the Dominicans, who went beyond the papal intervention by condemning Aquinas together with Siger.[180]

The reasons listed make it clear that it is difficult to say whether Aquinas' opinions were directly banned by the condemnation. However, beyond the fact that students and masters of Faculty of Arts were explicitly condemned – without mentioning any names, except some book titles – one has to take into account the local character of the condemnation, the fact that it forbade the use of these propositions at the University of Paris, which was within the purview of the bishop of Paris.

However, as Wippel notes,[181] had a proposition been condemned it would have probably had the same status, no matter who used it, a student or a teacher at the Faculty of Arts or Theology. Anyone at the University of Paris who used it would have come under the ban of the condemnation. Hence, the condemnation was not so much about people, even if some people were eventually affected by it. It was rather about some theses which were not to be used any longer at a certain place, the University of Paris. One has to admit that Aquinas had maintained some of the condemned ideas, which were still used after his death at the University of Paris. In consequence, one cannot exempt him from having been condemned even if one cannot find any historical documents 1270's which would directly associate his name with the theses condemned in 1277.

III.2. Aquinas' ideas that could have been condemned in 1277

From the point of view of this research the most interesting propositions among those which can be associated with Aquinas are the ones which explicitly limit God's power. The other condemned propositions which can be related to Aquinas' ideas, such as the ones which

[180] See Pierre Mandonnet, *Siger de Brabant et l'averroïsme latin au XIIIe siècle* (Louvain: Institut Supérieur de Philosophie de l'Université, 1911), vol. 1, 214: "On ne saurait nier, après ce que nous connaissons de l'état des écoles parisiennes, que l'autorité ecclésiastique ne pouvait se dispenser d'intervenir pour mettre ordre aux agissements des maîtres averroïstes. Mais au lieu de limiter son action à cet objet, le seul qui eût sollicité l'intervention pontificale, Étienne Tempier et les maîtres séculiers de la faculté de théologie saisirent l'occasion

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condemned the uniqueness of the substantial form, the localization of spiritual substances or the determinism which affects the will, will not be discussed.

The analysis of these propositions can also offer an answer to the question of Aquinas' condemnation by showing not if he was or not condemned, which is difficult to decide in the absence of sufficient information offered by the historical sources, but rather if he could have or could have not been condemned. This will be established through a textual analysis which searches for the philosophical grounds on the basis of which his ideas on God's power came into conflict with the formulation of this issue in Tempier's condemnation.

The propositions on which I will focus are the following: Proposition 34/27, which condemned the fact that God is considered to be unable to make more than one world, will be treated on its own;[182] proposition 96/42, which condemns the idea that God cannot multiply the individuals of the same species without matter,[183] proposition 81/43, directed against those who affirm that God cannot make several intelligences of the same species because intelligences do not have matter,[184] and proposition 191/110 which condemns the idea that the forms are not divided except through matter,[185] will be treated together since all of them contributed to the condemnation of the impossibility of a plurality of intelligences of the same species.

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de prendre leur revanche contre l'école dominicaine en englobant dans la même réprobation les doctrines de Siger de Brabant et celles de Thomas d'Aquin."

[181] See Wippel, "Thomas Aquinas and the Condemnation of 1277," 241.

[182] *Quod prima causa non potest plures mundos facere*. See the 34/27 condemned proposition in H. Denifle and E. Châtelain, *Chartularium Universitatis Parisiensis*, 545; see Mandonnet, *Siger*, 178.

[183] *Quod Deus non potest multiplicare individua sub una specie sine materia*. See the proposition 96/42 in *Chartularium Universitatis Parisiensis*, vol. 1, 549; see Mandonnet, *Siger*, 179.

[184] *Quod, quia intelligentie non habent materiam, Deus non posset facere plures eiusdem speciei*. See the 81/43 condemned proposition in Ibidem, 548; see Mandonnet, *Siger*, 179.

[185] *Quod formae non recipiunt divisionem, nisi per materiam. - Error, nisi intelligatur de formis eductis de potentia materiae*. See the proposition 191/110 in Ibidem, 554; see Mandonnet, *Siger*, 184.

III.3. That the first cause cannot make more than one world

According to Pierre Duhem, the 34/27 condemned proposition was essential in the development of medieval thought experiments since before 1277 most of the Parisian masters had denied God the power to create a plurality of worlds while afterwards the contrary was true.[186] Even if this claim was only hypothetical, since they unanimously considered that God has not and will not actually create more than one corporeal world, they still tried to formulate arguments so as to make the possible existence of other worlds intelligible, based on God's supernatural intervention.[187]

The majority of the scholastic authors considered that God can make a plurality of worlds due to his absolute power while others, among them Thomas Aquinas, invoked arguments which made this act of God unfeasible, limiting God to the creation of a single world.[188] Condemning the thesis that God could not have created more than one world, Tempier refused the Aristotelian conception of the universe considering that God can create a plurality or an infinite number of worlds due to his absolute power.

According to Aristotle our world contains everything since the heaven is unique and finite in magnitude while outside the world there is no place or time.[189] This conception was based on his definition of place as the "container of the thing," the void – defined as a space without any body – becoming in these conditions impossible.[190]

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[186] Pierre Duhem, *Le Système du Monde. Histoire des Doctrines Cosmologiques de Platon à Copernic*, vol. 9, 380.
[187] Edward Grant, "The Condemnation of 1277, God's Absolute Power, and Physical Thought in the Late Middle Ages," *Viator* 10 (1979): 220.
[188] See Edward Grant, *Planets, Stars, Orbs. The Medieval Cosmos, 1200-1687* (Cambridge: Cambridge University Press, 1994), 152.
[189] See Aristotle, *De Caelo*, I, 9, 277b27-278a16: "We must show not only that the heaven is one, but also that more than one heaven is impossible, and, further, that, as exempt from decay and generation, the heaven is eternal;" and, after a few lines in 279a12-279b3: "It is therefore evident that there is also no place or void or time outside the heaven."
[190] For Aristotle's definition of place see *Physics*, IV, 212a3-212a31: "place necessarily is … the boundary of the containing body at which it is in contact with the contained body… the place of a thing is the innermost motionless boundary of what contains it… place is thought to be a kind of surface, and as it were a vessel, i.e. a container of the thing … place is coincident with the thing, for boundaries are coincident with the bounded." For Aristotle's conception of the void see *Physics*, IV, 213b32-214a17.

Assuming that two worlds cannot occupy the same space simultaneously, an intermediary space should have existed in between them. But this intermediary space can not be filled by a body – since it would not belong to either of the two worlds – and can not be void – since void space was impossible. In consequence, since these two cases are impossible, the existence of other worlds outside of ours is also considered impossible.[191]

Another argument against the plurality of worlds was based on the idea that the elements and the movement of the elements belonging to another world would be identical with those of our world. This was made possible by Aristotle's assumption of the identity of structure and operation of these many worlds, which would have had only one center and one circumference.[192] For a plurality of worlds – each formed by the same elements and motions – many centers would be required; but the elements of one world – the earth, for example – would tend towards the center of another, rising upward, contrary to its natural downward movement, destroying the natural order of its own world.[193] In consequence, there are not many centers but only one, and these elements form only one world with one center and one circumference.

A third argument against a plurality of worlds, that can be also found in Aquinas' commentary on *De caelo et mundo*, is formulated on the basis of the relation between form and matter. If one takes the example of a circle, one can make a distinction between its specific form, which is general, and its actual presence in matter, which is individual, and can be multiplied infinitely as far as one has the quantity of matter available for its multiplication.

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[191] See Aristotle, *De Caelo*, I, c. 9, 278b22-279a11: "it is evident not only that there is not, but also that there could never come to be, any bodily mass whatever outside the circumference. For the world as a whole includes all its appropriate matter, which is, as we saw, natural perceptible body. So that neither are there now, nor have there ever been, nor can there ever be formed more heavens than one, but this heaven of ours is one and unique and complete.

[192] See Edward Grant, "The Condemnation of 1277, God's Absolute Power, and Physical Thought in the Late Middle Ages," *Viator* 10 (1979): 218 and *A History of Natural Philosophy*, 203. Grant mentions the fact that Albert of Saxony and John Buridan saw each of these worlds as a self contained entity and consequently they rejected Aristotle's argument considering that the earth of each world would remain where it is and the coexistence of a plurality of worlds is possible.

[193] Aquinas discusses this issue in his commentary on Aristotle's *De caelo*, see: *In De caelo*, I, 16, 111.

If, taking this analogy forward, the universe is seen as a composition of matter and form, a plurality cannot be asserted since this created world contains the entirety of matter, so one cannot find any matter in which the form of the universe could have been multiplied: "a thing whose essence resides in a substratum of matter can never come into being in the absence of all matter."[194]

Aquinas accepts Aristotle's arguments regarding the unique character of the world. However, his arguments are mainly based on the conception of a unique order in which the things are arranged, an order which has one aim due to the existence of a guiding wisdom.

On the one hand, this order is present between God and things, being a consequence and a proof of the existence of one first and perfect God.[195] Since God is one, he created a unique world, which is the only effect which would be similar to him, not only in its being and goodness but also in its unity. In consequence, God, the one and supreme simplicity, cannot be the cause of multiplicity or composition, as he cannot be the cause of evil or non-being. [196]

On the other hand, this unique character of the world is present within the order existent among things themselves, they being ordered and harmonized in relation to each other. Aquinas contrasts this view to that of chance, which refuses any ordaining wisdom,[197] implying a plurality, a lack of limit, a tendency toward infinity which cannot constitute an

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[194] *De caelo et mundo*, I, 19, 135. The same argument based on the relation between form and matter is also used in the case of intelligences or angels.
[195] See *ST*, Ia, q. 11, a. 3. The fact that God is one is proved according to Aquinas not only by God's simplicity and by God's infinity of perfection but also by the unity of the world: *Omnia enim quae sunt, inveniuntur esse ordinata ad invicem, dum quaedam quibusdam deserviunt. Quae autem diversa sunt, in unum ordinem non convenirent, nisi ab aliquo uno ordinarentur. Melius enim multa reducuntur in unum ordinem per unum, quam per multa: quia per se unius unum est causa, et multa non sunt causa unius nisi per accidens, inquantum scilicet sunt aliquo modo unum. Cum igitur illud quod est primum, sit perfectissimum et per se, non per accidens, oportet quod primum reducens omnia in unum ordinem, sit unum tantum. Et hoc est Deus.*
[196] See *De potentia*, q. III, a.16.
[197] According to Aquinas this view was present in the atomism of Democritus.

end in itself. These two types of order go hand-in-hand since the ordering of things in relation to one another is made for the sake of their order to an end.[198]

In these conditions, Aquinas indirect limitation of God's power to one perfect world is mainly due to God's guiding wisdom since a multiplicity of simultaneously existing words, even if not contradictory in itself, is repugnant to it. Divine wisdom is present in God's providential design and in the unity of the created world, directing every action of his will.[199] Due to God's wisdom it is better to make one unique, perfect and good world than many which are imperfect, where one can find a division of what is perfect and good.[200]

Against the conclusion of the uniqueness of the world, Tempier's condemnation implies the fact that God's absolute power cannot be limited to the creation of only one universe.[201] He does not take into account neither the arguments of Aristotle and of his commentators – since they were pagans – nor the arguments of Christians such as Scot, Bacon, and Aquinas who established a relation between God's perfection and the unity of the world. Considering all this a limitation of God's power, he implies the existence of the supernatural intervention of God which could have created a plurality of words. As far as Aquinas accepted the uniqueness of the world, he came under the ban of the condemnation.[202]

What one has to notes nevertheless is the different manner in which the two positions are formulated. Aquinas himself accepted the fact that due to his absolute power God can make a plurality of worlds and he does not develop his arguments about the uniqueness of the world based on a direct limitation of God's power to create a plurality of worlds, as

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[198] *SCG*, II, c. 24.
[199] Ibidem, II, c. 24.
[200] See *ST*, Ia, q.47, a.3.
[201] Pierre Duhem claims that the question of the plurality of worlds discussed by Aristotle was related in a Christian milieu with that of God's omnipotence, which eventually transformed the whole issue taking it beyond Aristotle's arguments, see: Pierre Duhem, *Le Système du Monde. Histoire des Doctrines Cosmologiques de Platon à Copernican*, vol. 9, 366.
[202] This forced such masters as Richard of Middleton, Henry of Gand, Giles of Rome and then Ockam, Holkot, Jean Buridan and others to refuse the arguments of Aristotle, developing new situations on the basis of God's absolute power, considering that even if Aristotle's arguments are not to be ignored they cannot be applied to God.

Tempier's condemnation implies.[203] He does not claim that God could not have created two or more different worlds due to his lack of power, the idea which Tempier condemns.

Aquinas would rather admit that God has infinite power and that he could have created a plurality of words, since he accepts that God's power is infinite. He would accept this however only by mentioning that God would not have created them.[204] Aquinas does not limit God's power, but he acknowledges the impossibility of a plurality of worlds existing due to a self-limitation of God to the creation of one and a perfect world, his only appropriate correspondence in creation.

The specificity of Aquinas' position, beyond the arguments of Aristotle, Simplicius, or Averroes that he adopted can be discovered in the manner in which he explicitly rejects the opinion of those who, using the idea that God has infinite power, tried to demonstrate the possibility of a plurality of worlds – a position which would clearly imply that he maintained a position that was condemned in 1277.[205] Aquinas would have probably accepted their main claim, that infinite power cannot be limited to the creation of this world alone, since his arguments are not based on the direct limitation of God's power.

However, according to him, the existence of multiple worlds would have no meaning, and it would not serve the noble ends of God. These worlds would either be like our world and then they be superfluous, created in vain or they would be unlike this world and then each of them would be partial, including only some parts of the natures of sensible bodies;

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[203] *De caelo et mundo*, I, 19.
[204] *ST*, Ia, q.47, a.3.
[205] See *De caelo et mundo*, I, 19, 197: *Sciendum est autem quod quidam aliis modis probant possibile esse plures caelos. Uno modo sic. Mundus factus est a Deo; sed potentia Dei, cum sit infinita, non determinatur ad istum solum mundum; ergo non est rationabile quod non possit facere etiam alios mundos. Et ad hoc dicendum est quod, si Deus faceret alios mundos, aut faceret eos similes huic mundo, aut dissimiles. Si omnino similes, essent frustra: quod non competit sapientiae ipsius. Si autem dissimiles, nullus eorum comprehenderet in se omnem naturam corporis sensibilis: et ita nullus eorum esset perfectus, sed ex omnibus constitueretur unus mundus perfectus*.

none of them would be then perfect since only the combination of all of them could form a perfect world.[206]

For Aquinas the uniqueness of this world remains a consequence of its perfection, a perfection which comprehends everything, having no need of being multiplied. He claims that more power is actually necessary to make one individual perfect world which contains all its necessary characteristics than several imperfect ones. The multiplication of the world would only imply the division of its perfection, of its containing all the natures of sensible bodies, and of its goodness, which would be distributed between many worlds. In these conditions God's wisdom implies a self-limitation of his absolute power and stops at the creation of only one perfect world.

III.4. That God could not make several intelligences of the same species because intelligences do not have matter

The second type of condemned proposition that can be associated with Aquinas conveys the idea that, alongside existence and form,[207] matter is the principle of the individuation of things and only based on it the multiplication of individuals within a species is possible.[208] In consequence, a multiplicity of intelligences within the same species becomes impossible since they are pure forms, having no matter to be divided so as to form many individuals within the same species. Each separate substance, in its formal uniqueness, is identical with its own species, identifying all its specific features in one individual. Accordingly, one cannot find two or more separate substances within the same species since this would be contradictory and impossible.

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[206] *De caelo et mundo*, I, 19, 197.

[207] For a study on Aquinas' ideas on individualization see Jorge Gracia, *Individuation in Scholasticism : The Later Middle Ages and the Counter-reformation (1150-1650)* (Albany, NY: State University of New York Press, 1994), 173-194. For existence as a principle of individuation, considered by Gracia the basic principle of individuation in Aquinas, see *ST*, Ia, q.3, a. 5. For the role of the form in the individuation of things, see the discussion related to the human soul present in *De spiritualibus creaturis*, a. 3.

[208] For Aquinas on matter as the principle of individuation see *Sent* I, d. 23, q.1, a.1. and *In BDT*, q. 4, a. 4: "It must be said that, as is evident from previous statements, diversity according to number is caused by division of matter existing under dimensions."

Maintained by Aquinas throughout his work, this idea was also present in Tempier's condemnation, where it was condemned as limitation of God's power.[209] It was condemned in the 81/43 and in 96/42 propositions, which affirm that God could not make several intelligences of the same species because intelligences do not have matter[210] and, respectively, that God cannot multiply individuals of the same species without matter.[211] The 191/110 proposition, which condemns the idea that forms are not divided except through matter, considering it "erroneous unless one is speaking of forms educed from the potency of matter," can also be associated with these.[212]

Roland Hissette, who does not believe that Aquinas was not directly condemned in 1277, claims that these condemned propositions were directed against the Averoists who confounded the impossibility according to nature with an impossibility *simpliciter*.[213] The condemnation would have implied that even if these things can be considered impossible according to nature they are not impossible *simpliciter*, since God, on the basis of his absolute power, could, by a miracle, unite them with matter and make them multiple. As far as Aquinas shared the position of the two so-called Latin Averoists, Boethius of Dacia and Siger of Brabant, it would be again difficult to say that he was not directly condemned while they were, using an *argumentum a silentio* based on the insufficient information present in the historical sources.

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[209] Boethius of Dacia maintained the same position in his *Topics* (IV, 3), in his *De anima intellectiva*, c. 7, in his Commentary on the *Metaphysics* (III, 13), and in his *Quaestiones super Librum de causis* (q. 24). Boethius directly related it to the idea of God's power not so much as to say that God himself could not have done otherwise – the thesis which was condemned – but to stress the respect that one should have for the mystery of divine wisdom, see: Hissette, *Enquête*, 84-86.

[210] See proposition 81/43: *Quod, quia intelligentie non habent materiam, Deus non posset facere plures eiusdem speciei*, in *Chartularium Universitatis Parisiensis* vol. 1, 548; see Mandonnet, *Siger*, 179.

[211] See proposition 96/42 condemned: *Quod Deus non potest multiplicare individua sub una specie sine material*, in *Chartularium Universitatis Parisiensis*, vol. 1, 549; see also: Mandonnet, *Siger*, 179.

[212] See proposition 191/110: *Quod formae non recipiunt divisionem, nisi per materiam. - Error, nisi intelligatur de formis eductis de potentia materiae*, in *Chartularium Universitatis Parisiensis*, vol. 1, 549; see also: Mandonnet, *Siger*, 184.

[213] See Roland Hissette, *Enquête*, 84.

Beyond other possible influences – like that of Porphyry, of Boethius and of other Islamic or Christian authors – the origin of the idea that individuals cannot be multiplied in a species without matter can be found in Aristotle's philosophy. The impossibility of having many intelligences within the same species is ultimately due to considerations of quantity, which immediately imply relations with substance and matter: "Matter, however, is not divisible into parts except as regarded under quantity; and without quantity substance is indivisible" maintains Aquinas, quoting Aristotle.[214]

In Aquinas' view, intelligences are incorporeal, immaterial, and subsistent creatures, not dependent on matter. Their status is determined by their position and operation in the created universe, situated between the corporeal bodies, human intellects, and God, who is the first, immaterial, and absolute simple principle. Their intellectual character is also a consequence of the perfection of the universe which, being produced through the will and intellect of God, requires their existence.[215]

Within creation as a whole, the lowest degrees of creation, corporeal bodies, are the product of a twofold composition: first of designated matter and substantial form, which gives them their nature;[216] and second of their nature with the act of existence, obtained by participation from God.[217] As pure forms, the angels have a higher status compared to corporeal bodies, but they do not equal the divine simplicity, God being the only subsisting being.

The status of pure forms of intelligences is also demonstrated by the fact that they do not comprehend the things understood in terms of "quantitative commensuration," the whole

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[214] *ST*, Ia, q. 50, a. 2. For Aristotle's view on matter as the principle of individuation see *Met*. A, 1016 b 31-2; *Met*. Z, 1034 a 5-8; *Met*. Z, 1035 b 27-31, *Met*. I, 1054 a 34, *Met*. A, 1074 a 31-4; and *De Caelo* 278 a 7-b 3. For a questioning of the idea that Aristotle's considered matter as the principle of individuation see W. Charlton, "Aristotle and the Principle of Individuation," in *Phronesis*, Vol. 17, No. 3 (1972): 239-249.

[215] See *SCG*, II, 46: *Cum igitur intellectus Dei creaturarum productionis principium sit, ut supra ostensum est, necesse fuit ad creaturarum perfectionem quod aliquae creaturae essent intelligentes*.

[216] For Aquinas' distinction between the undesignated and the designated matter and for the role of the last in the individuation of the substantial forms see *De Ente et Essentia*, 23.

[217] They are composed of forms and existence, see *SCG*, II, c. 49, c. 52 and c. 53.

in the whole and the part in the part, since they understand whole and part, things great in quantity and things small.[218] Their operation, the understanding, is immaterial, perfected by receiving the universal forms of the things understood, without losing their form by corruption while receiving them, like bodies do. This operation also implies their incorporality as substances, since their capacity for understanding is proportional with their degree of immateriality.[219]

Angels were created in great numbers, exceeding the number of material substances, due to the fact that God creates the more perfect things in greater numbers than the imperfect ones.[220] However, this excess of multitude is not present within a species, the distinction of angels being only a distinction of forms not one due to matter and quantity.[221]

Accordingly, one cannot find a numerical multiplicity of several separated substances within the same species.[222] Every angel forms its own species, preserving its specific nature in one incorruptible individual who possesses the power to fulfill on its own the aim of its species, since its species and its form coincide.[223] In the case of the separated intelligences, the specific difference is the product of the diverse degrees of intellectual nature, each angel having a different degree and constituting a different species, its forms being individuated on its own.[224] Due to the fact that their status has nothing to do with considerations of matter or

[218] *SCG*, II, c. 49.
[219] *ST* Ia q. 50 a. 1. This also implies their incorruptibility since, being pure forms, they cannot be separated from matter.
[220] See *SCG*, II, 92: *Sicut autem caelestia corpora digniora sunt elementaribus, ut incorruptibilia corruptibilibus; ita substantiae intellectuales omnibus corporibus, ut immobile et immateriale mobili et materiali. Excedunt igitur in numero intellectuales substantiae separatae omnium rerum materialium multitudinem*.
[221] See *ST* Ia, q. 50, a. 3: *unde multiplicatio Angelorum neque secundum materiam, neque secundum corpora est accipienda, sed secundum divinam sapientiam, diversos ordines immaterialium substantiarum excogitantem*.
[222] See *SCG*, II, 93: *Quaecumque sunt idem specie differentia autem numero, habent materiam: differentia enim quae ex forma procedit, inducit diversitatem speciei; quae autem ex materia, inducit diversitatem secundum numerum. Substantiae autem separatae non habent omnino materiam, neque quae sit pars earum, neque cui uniantur ut formae. Impossibile est igitur quod sint plures unius speciei*.
[223] *SCG*, II, 55: *Ubi autem non est compositio formae et materiae, ibi non potest esse separatio earundem. Igitur nec corruptio. Ostensum est autem quod nulla substantia intellectualis est composita ex materia et forma. Nulla igitur substantia intellectualis est corruptibilis*.
[224] See *SCG*, II, c. 93. Aquinas uses the same idea of the individuation of form without matter for the human souls which, even if their individuation is due to the body, remain individuated after its death.

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quantity, being pure forms, they cannot be more than one in a species due to the fact that "the principle of diversity among individuals of the same species is the division of matter according to quantity."[225]

Tempier condemned these theses since he considered them limitations of God's power. By condemning these propositions he implied that, due to his absolute power, God could have created more intelligences within the same species.[226] The impossibility of the existence of two or more intelligences of the same species was not seen by the theologians who formulated the condemnation as a characteristic proper to the order of creation, developed based on philosophical principles, but as a direct limitation of God's absolute power. John Wippel has described their position as: "Because any multiplicity or unity of angels results not from nature but from an exercise of divine power, to say that it is impossible for two angels to belong to the same species is really to say that God could not or cannot have done this."[227]

Maintaining these conclusions throughout his work, Aquinas did not consider them limitations of God's power.[228] He rather saw them as situations of things involving contradiction which did not limit God's power since they were impossible in themselves, a situation which made the question of whether God can or cannot do them superfluous. In the text of the condemnation, this thesis was transposed from a philosophical context of metaphysics and natural philosophy – developed within the universe of suppositional

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[225] Ibidem, c. 49.
[226] John Wippel mentions the fact that the same position can be found in *Quodlibet* (II, q.8) of Henry of Ghent, a member of Tempier's Commission. Henry considered that those who hold Aristotle's opinions regarding the impossibility of multiplying the separate substances within a species should also maintain, as Aristotle did, that every separated form is a god, a necessary being. However, if they admit that the separated forms were created by God, than they should also admit that these forms can also be multiplied within species by God, see: Wippel, "Thomas Aquinas and the Condemnation of 1277," 245.
[227] John F. Wippel, "Thomas Aquinas and the Condemnation of 1277," 243.
[228] In his *QQ* III, q.1, a.1, Aquinas claims that God cannot make matter exist without form since this would involve a contradiction.

necessity proper to the *potentia ordinata* – to a theological one, being seen as a direct limitation of God's absolute power and, accordingly, condemned.[229]

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[229] In his *Correctorium* directed against William de la Mare's *Correctorium fratris Thomae*, Richard Knapwell maintained exactly this: that Aquinas' position does not detract from faith and that it is not directed against God's power, see: Wippel, "Thomas Aquinas and the Condemnation of 1277, 243.

Conclusions

1. Thomas Aquinas, the 1277 condemnation, and the continuity between medieval thought experiments and modern scientific positions

As admitted from the very beginning of this thesis, one can find a distinction between Aquinas' position and that of Nicole Oresme, Jean Buridan, Albert of Saxony, and others, considered by Duhem to have anticipated the early modern scientific developments. If such a development can be accepted, then Thomas Aquinas cannot be omitted in an analysis of the earliest period. The analysis of his views is always present in Duhem's *Le Systèm du monde* and Anneliese Maier also accepts that, together with Robert Grosseteste, Roger Bacon, Albertus Magnus, and Giles of Rome, Thomas Aquinas was among those who made possible the later scientific developments, while maintaining a traditional world view.[230]

Thomas Aquinas participated in the reception of natural philosophy in the Latin West while some of the ideas that he maintained were condemned in 1277. If the 1277 condemnation was the origin of this development – as Pierre Duhem claims – or only an important event within it – as William Courtenay would have said – the name of Thomas Aquinas cannot be omitted from this process. This remains true even if Aquinas was not a *magister* of the Faculty of Arts but a teacher in the Faculty of Theology and even if he was not among the so-called Latin Averroists, like Siger of Brabant and Boethius of Dacia, who maintained a heterodox form of Aristotelianism.[231]

Due to the importance of education for their order, the Dominicans played an important role in the reception of Aristotle, especially of his books on nature. This was already present in the case of Aquinas' master Albert the Great, who accepted the autonomy of sciences versus theology and established a hierarchy of them. Thomas Aquinas developed his own conception by using ideas belonging to the Greco-Arabic metaphysics and natural

[230] See Anneliese Maier, "The Achievements of Late Scholastic Natural Philosophy," 144.
[231] As already mentioned in the introduction, using the specificity of Aquinas' position Roland Hissette claimed that Aquinas was not condemned in 1277, see: Hissette, *Enquête*, 306-307.

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philosophy, especially the ideas of Aristotle: Aristotle's logic, his theory of knowledge, his division of the sciences, the doctrine of actuality and potentiality and that of form and matter.[232]

One has to admit, however, that the reception of Aristotle and of his Greek and Arabic commentators in the thirteenth century varied. John Wippel claims that one can find three types of philosophical positions in this period, each influenced by the reception of Greco-Arabic philosophy and directly related with the 1277 condemnation:

I. A radical one – or heterodox, according to van Steenbergh[233] – which adopted Aristotle's arguments without trying to reconcile them with the Christian faith – this being the position of Latin Averoists, of Boethius of Dacia and Siger of Brabant;

II. A more harmonious one – represented by Thomas Aquinas – which admitted no possible contradiction between philosophical and the religious truth;

III. The reaction against Aristotelianism of the so-called neo-Augustinians – such as Henry of Gand and Bonaventure – the consequences of their position were manifest, among other things, in the 1277 condemnation.[234]

Hence, one can discover in this period two types of Aristotelianism, one influenced by Averroes – represented by Siger of Brabant – and a Christian form represented by Albert the

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[232] For a study of the relation between Aristotle and Aquinas see Joseph Owens, "Aristotle and Aquinas" in *The Cambridge Companion to the Philosophy of Aquinas*, ed., Norman Kretzmann, Eleonore Stump (Cambridge: Cambridge University Press, 2006, 38-59. According to Fernand van Steenberghen Aquinas purified the Aristotelian theories that he adopted of the neo-platonic and Stoic influences manifested in such ideas as that of the spiritual matter, the *rationes seminales*, and that of the plurality of substantial forms. However, he claims that this process did not transform Aquinas' philosophy into pure Aristotelianism and that his system can still be characterized as a "neo-Platonizing" Aristotelianism, see: Fernand van Steenberghen, *Aristotle in the West. The Origins of Latin Aristotelianism* (Louvain: Nauwelaerts, 1970), 182.

[233] See Fernand van Steenberghen, *Aristotle in the West*, 198.

[234] See John Wippel, *Thomas Aquinas and the Condemnation of 1277*, 239: "It seems clear that the condemnation of 1277 marked the triumph within the Theology Faculty of a highly conservative group of theologians who were uncomfortable with many of the new developments in philosophy and theology and who were only too ready to recommend them to Tempier for condemnation."

Great and Thomas Aquinas. The propositions condemned in 1277 originated in both these forms of Aristotelianism, alongside other Arabic and neo-platonic influences.[235]

Due to the idea of the harmony between philosophy and theology that he maintained, Aquinas' contribution to the reception of metaphysics and natural philosophy can only be seen in his theology. Mark Jordan claims that no single work was written by Aquinas as a work of philosophy and he claims that "any appropriate formulation must begin by recognizing that whatever philosophy there is in Aquinas can be approached only through his theology if it is to be approached as he intended it."[236] In his commentaries on Aristotle's works, the only place where theology is not directly present, Aquinas does not go beyond a literal level of interpretation.[237]

Within his theology, however, Aquinas used philosophy extensively since he considered both theology and philosophy as means of attainting the same truth, represented by God. He considered both philosophy and the sacred doctrine as sciences admitting the existence of distinction and possible collaboration between them, manifested in theology: revelation can be a guide for reason, while the last can defend the truth of the revelation. [238]

However, one cannot find in Aquinas' work a detailed treatment of natural questions separated from theology, which Edward Grant discovered in Nicole Oresme and Jean Buridan, who developed, according to Duhem, the premises of Early Modern science.[239] The harmony established between theology and philosophy does not lead to the questioning or rejection of peripatetic philosophical principles based on God's absolute power or on other theological doctrines. In some cases, as far as possible, Aquinas tries to maintain both of

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[235] According to Pierre Mandonnet one can discover the influence of Aristotle in all the condemned propositions: "Elles appartiennent toutes à la direction péripatéticienne et nous savons que le péripatétisme du xiii siècle revêtait alors une double forme, la forme averroïste, constatée chez Siger de Brabant, et la forme chrétienne créée par Albert le Grand et Thomas d'Aquin," see: Mandonnet, *Siger*, vol. 1, 220.
[236] See Mark D. Jordan, "Theology and Philosophy," in *Cambridge Companion to Aquinas*, ed., Norman Kretzmann, Eleonore Stump (Cambridge: Cambridge University Press, 2006), 232.
[237] Aquinas wrote commentaries on many of Aristotle's book on nature: on *De Generatione et Corruptione*, on *Physica*, on *De caelo*, and on *Meteorologica*.
[238] See *SCG*, I, c. 8.

them, being at the same time close to a conservative theological position while not far off the heterodox philosophical one.[240]

Aquinas' position remains, therefore, at the other extreme of the spectrum opened by Tempier, who directly opposed theological doctrines with ideas belonging to natural philosophy and metaphysics, which would have formed, according to Duhem, the origins of a new physics. The perfect opposite of Aquinas' idea of a harmony between the philosophical truth and the theological truth can be found in Tempier's critique of double truth, which he discovered in some of the condemned positions.[241] Aquinas' unique truth, theological and philosophical, became double for Tempier, while its theological dimension turned against its philosophical one. I will now analyze the question of God's power, central to this thesis, attempting to discover other differences between Aquinas' position and those which can be assumed to lie behind Tempier's condemnation, which could have lead to his condemnation in 1277.

2. Thomas Aquinas and Étienne Tempier on God's power

The most appropriate perspective in which the two positions on God's power can be seen, in the context of this thesis, is that of the relation between God and the order of creation. An example of the manner in which a certain consistency of the created order was implied by Aristotle's works, can be discovered in the previous, eighth and ninth century, reception of his work in the Muslim world. The Muslim reception of Aristotle produced a theological reaction materialized in the occasionalism of the Mutazilites. In their opposition

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[239] See Edward Grant, *God and Reason*, 186.

[240] *SCG*, I, c. 7: *Quamvis autem praedicta veritas fidei Christianae humanae rationis capacitatem excedat, haec tamen quae ratio naturaliter indita habet, huic veritati contraria esse non possunt. Ea enim quae naturaliter rationi sunt insita, verissima esse constat: in tantum ut nec esse falsa sit possibile cogitare. Nec id quod fide tenetur, cum tam evidenter divinitus confirmatum sit, fas est credere esse falsum. Quia igitur solum falsum vero contrarium est, ut ex eorum definitionibus inspectis manifeste apparet, impossibile est illis principiis quae ratio naturaliter cognoscit, praedictam veritatem fidei contrariam esse*.

[241] See H. Denifle and E. Châtelain, ed., *Chartularium Universitatis Parisiensis*, 543: *Dicunt enim ea esse vera secundum philosophiam, sed non secundum fidem catholicam, quasi sint due contrarie veritates, et quasi contra veritatem sacre scripture sit veritas in dictis gentilium dampnatorum, de quibus scriptum est : « Perdam sapientiam sapientium », quia vera sapientia perdit falsam sapientiam.*

to Aristotle's philosophy they considered that the created world has no consistency of its own, God having a continuous and direct intervention in the course of natural things. God creates the world, together with everything it consists of, and lets it vanish each second, only to re-create it again.[242]

In the Latin West, beyond the differences existent among various parties, the opposite situation seems to have been true. Underlining the consistency of the created order the theologian-natural philosopher, developed the idea of a self-limitation of God's power.[243] In Aquinas' conception, this self-limitation was the product of the tension between God's will, which implied the restriction of his powers to the present order of creation – God's *potentia ordinata* – and God's power considered in itself, which was absolute – God's *potentia absoluta*.

Aquinas' ideas which could have been condemned are not to be found at the level of God's power in itself – where Tempier considered them to be – but at the level of God's relation with the order of creation, their source lying in the opposition between *potentia absoluta* and *potentia ordinata*. Most of the limits of God's power that Aquinas explicitly maintained were not among those condemned by Étienne Tempier. Tempier does not condemn the impossibility of God sinning and doing evil, or the impossibility of God making what is logically contradictory or the past not to have been.

This is not to say that Aquinas was not directly condemned in 1277. Aquinas could have been seen by those who formulated the condemnation as concluding from natural

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[242] See Grant, *Foundations*, 179. Aquinas explicitly criticized this position, mentioning Avicebron and "certain exponents of the Law of the Moors" who saw God's spiritual action behind all natural effects, see SCG, III, c. 69: *Propter has igitur rationes ponit Avicebron, in libro fontis vitae, quod nullum corpus est activum; sed virtus substantiae spiritualis, pertransiens per corpora, agit actiones quae per corpora fieri videntur. Quidam etiam loquentes in lege Maurorum dicuntur ad hoc rationem inducere quod etiam accidentia non sint ex actione corporum, quia accidens non transit a subiecto in subiectum. Unde reputant impossibile quod calor transeat a corpore calido in aliud corpus ab ipso calefactum: sed dicunt omnia huiusmodi accidentia creari a* Deo; and a few lines before, still in SCG, III, c. 69: *Ex hoc autem quidam occasionem errandi sumpserunt, putantes quod nulla creatura habet aliquam actionem in productione effectuum naturalium: ita scilicet quod ignis non calefacit, sed Deus causat calorem praesente igne; et similiter dicunt in omnibus aliis effectibus naturalibus*.
[243] See Edward Grant, *Foundations*, 176.

philosophy and metaphysics that something was theologically impossible, a fact which formed the core of Tempier's condemnation. However, in the places in which he discusses ideas that correspond to the condemned theses associated with him, Aquinas does not see his conclusions as direct limitations of God's power in itself. Within the universe of suppositional necessity that God's ordained power implies, Aquinas used contradiction, due to impossibility *per naturam* or *secundum philosophiam*, to describe situations of things impossible with the present order of creation, saving God from a direct limitation of his absolute power.

In consequence, one does not have to take into consideration only what was explicit in Aquinas' work but also the specific manner in which the people who formulated the condemnation interpreted the propositions that they condemned. At this level, a basic misunderstanding seems to have been present between the two parties; while Aquinas maintained the impossibility of a situation of things within the present order of creation, the theologians who enacted the condemnation stressed the fact that the necessity proper to this created order makes these things impossible for God.[244]

If God has absolute power, as the theologians who formulated the condemnation wanted to maintain, than nothing would be really impossible for him since nothing could limit his direct intervention in the created realm. They accepted an impossible *simpliciter* represented by the fact that God cannot make what is logically contradictory, a round square for example, but they refused all tendencies which went beyond this impossible *simpliciter* toward one *per naturam*, denying any possible equivalence between the first and an impossible *secundum philosophiam*.[245]

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[244] Wippel makes explicit the principle based on which this mechanism of misunderstanding functioned: "Because any multiplicity or unity of angels results not from nature but from an exercise of divine power, to say that it is impossible for two angels to belong to the same species is really to say that God could not or cannot have done this," see Wippel, "*Thomas Aquinas and the Condemnation of 1277*," 243.

[245] *Quod possibile vel impossibile simpliciter, id est, omnibus modis, est possibile vel impossibile secundum philosophiam*. See the 146/184 condemned proposition in Ibidem, 552; Mandonnet, *Siger*, 184.

The party more open toward the peripatetic ideas seems to have developed a different concept of impossible, impossible *per naturam*, which went beyond the impossible *simpliciter*. The impossible *per naturam* was constituted by postulating a regular and deterministic order and a functioning of the created order which determined what was to be considered possible and impossible within it, according to a pre-established order and functioning, based on God's preordination and foreknowledge.

Each determination of the way in which the created order functioned, at the level of *potentia ordinata*, implied the impossibility of the opposite. If fire, in its natural and unimpeded condition, goes up, according to one of the basic principles of Aristotelian physics, than its downward movement is impossible, as far as one thinks within an Aristotelian universe. This implied the emergence of a domain of the impossible which produced, beyond the already accepted limits inherent to the divine nature – such as the one according to which God cannot sin or cannot make a thing which involve a contradiction – the definition of new limits to God's power, which formed the basis of that *quod deus non potest*, condemned by Tempier.

While the theologians who formulated the condemnation maintained that the acceptance of the metaphysical and natural principles which formed the laws of created things were obstacles against faith, since they imply limits of God's power, the theologians-natural philosophers maintained the contrary: this was not against faith, being something accepted and made possible by God himself. The party who formulated the condemnation did not take into account the existence of essential features of things, at the level of *potentia ordinata*, manifest in a certain independence of the created order made possible by God himself; the ones condemned did not consider that their conclusions limited God's power, even if only indirectly, by not accepting the contingency of the created order, its immediate

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dependence on God, and by maintaining the existence of an order of creation that was not to be essentially changed by God's interventions, due to God's previous decisions for it.

Tempier and the commission that he assembled were probably not so preoccupied with subtle philosophical distinctions, because they generally opposed the use of arguments from natural philosophy or metaphysics in theology. From their perspective, and also due to the hurry with which their condemnation was formulated, various philosophical distinctions could have been either misinterpreted – intentionally or not – or simply not accepted due to various theological considerations. That is why Aquinas might have been directly condemned for ideas that he did not maintain exactly in the form in which they were condemned if his position could have been interpreted in such a way.

For the conservative theologians who formulated the condemnation, such as the Augustinian Henry of Ghent, the laws of creation were direct exercises of divine power, with no autonomy or independence; any impossibility present in the order of creation was directly imputable to its creator, implying that God could not have done it.[246] This remained true even had the impossibility been formulated, on the basis of the power distinction, as a self-limitation enacted by God himself; for Aquinas, God's impossibility of doing something is due either to the impossibility of that thing in itself or to the decisions manifested by his will in the order of creation.

The acceptance of this impossibility was actually based on a specific view of the order and functioning of creation, also present in Aquinas' formulation of the power distinction. Aquinas developed God's *potentia ordinata* implying the existence of some impossibility inherent in the order of creation, not accepted by the theologians who formulated the condemnation, who saw it as direct limitation of God's absolute power. While for Aquinas God could not make two intelligences of the same species since this was contradictory, being

[246] Ibidem, 243. Wippel notes the deliberate acceptance of this lack of distinction by the conservative theologians.

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impossible in itself, for the theologians who enacted the condemnation this implied a direct limitation of God's power, by the use of an impossible *per naturam*.

An idea accepted by both Aquinas and by those who selected the sentences which formed Tempier's condemnation is that God cannot make what is logically contradictory, which formed the common universe within which their positions were developed. Aquinas and the ones who formulated the condemnation, together with most of the other parties of this period, would have agreed that an action which involves a contradiction is impossible in itself and that God cannot do it.[247]

But within the universe of the things and actions which do not involve a contradiction, and which God could have done, one can find a difference between Aquinas' position and the one implied by the condemnation. The difference is eventually due to the fact that, beyond the acceptance of this *impossibile simpliciter* – the impossibility of a contradiction – Tempier seems not to have admitted the existence of any necessity which would have been due to the physical or metaphysical principles of the created order.

The position implied by the condemnation emphasized God's absolute power, maintaining that there could be no necessary situation in the order of creation whose contrary could not be realized based on God's absolute power. The same position also implies the contingency of the created order, since a regular and consistent order would limit God's power due to the necessities it presupposes.[248] In consequence, stressing God's absolute power also implied the contingency of creation.

Aquinas rejected both the contingency and the necessity of created order if based on God's direct intervention in the created world. He acknowledged that some attributed the

[247] This position is in the same time typical for the thirteenth century, and different of that which can be found in Peter Damian's famous treatise on God's omnipotence – written in the eleventh century – in which the author claimed that God could make, based on his absolute power, things which would involve a contradiction.
[248] The discussions of God's omnipotence were related with the contingency of temporal events already from Peter Damian's treatise on this topic. See the study of William Courtenay, "The Dialectic of the Omnipotence in

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immutability of the divine order to the things which are subject to this order, considering them necessary and God as unable to do other things except what he does; he also admits that others deduced a mutability of divine providence based on the mutability of things, considering that God is mutable in his will.[249] But he sees these two conceptions as being due to the ignorance of the distinction between God's absolute and ordained power, the last always influenced by an order of creation.

An example of the manner in which Aquinas maintains a certain distance between God and the world – while God remains the first cause and the source of being of all things[250] – can be found in his differentiation of the higher, divine causes of things from their lower, proximate ones. He admits that God can produce immediately the effects usually produced through the intermediary of secondary causes, but he claims that if the effects present at the level of creation would be judged exclusively on the basis of higher causes, in a direct reference to God, then everything will become necessary since all things are possible for God.[251] He considers this position absurd since it judges the possibility or the impossibility of each thing or situation based on a direct relation to God, ignoring the causality proper to created things.[252]

Aquinas admits the existence of a possible double causality– in relation to the one who judges – regarding each thing; that is why there are two sciences and two manners of considering the things' existence, in relation to the causes that each science considers. The

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the High and Late Middle Ages" in *Divine Omniscience and Omnipotence in Medieval Philosophy*, ed. Rudavsky Tamar (Dordrecht: D. Reidel Publishing Company, 1985), 244.

[249] See *SCG*, III, 98: *Quidam autem, e converso, mutabilitatem rerum quae divinae providentiae subiiciuntur, in mutabilitatem divinae providentiae transtulerunt, de eo carnaliter sapientes quod Deus, ad modum carnalis hominis, sit in sua voluntate mutabilis*.

[250] Despite this position God remains the origin and the aim of the whole creation and the things are permanently preserved in their being by God, see: *De Potentia*, q. V, a. 1.; SCG, II, c. 6 and *SCG*, III, c. 65-66.

[251] God's omnipotence, however, does not imply the necessity or the impossibility of things, see: *ST*, Ia, q. 25, a. 3: "So it is clear that the omnipotence of God does not take from things their impossibility and necessity."

[252] See *De Potentia*, q. I, a. 4. This position is also rejected in *SCG*, III, c. 96: *Contra rationem sapientiae est ut sit aliquid frustra in operibus sapientis. Si autem res creatae nullo modo operarentur ad effectus producendos, sed solus Deus operaretur omnia immediate, frustra essent adhibitae ab ipso aliae res ad producendos effectus. Repugnat igitur praedicta positio divinae sapientiae*.

lower causes of things themselves caused are taken into consideration by philosophy, while the higher, divine causes are taken into consideration by theology.[253]

However, if the judgment is made in relation to the nature of the thing in question, the parallelism between lower and higher causes and the two sciences – philosophy and theology – which consider each – is seen as secondary. In relation to the nature of a thing, one should always judge based on the thing's proximate causes, which determine the effects of remote causes.[254] The proximate causes can determine the possibility or the impossibility, the contingency or necessity, of a thing.

While the situation of the higher things is clear since they can be produced only by God, being impossible on the basis of secondary causes, the status of the lower things must be determined since they are possible on the basis of both higher and lower causes. The distinction between higher and lower causes in relation to the nature of the lower things becomes necessary since this is the only manner in which a proper judgment can be made.

The things impossible to lower causes are not to be considered impossible for God, who still has the greatest influence on the effect – but this effect is determined and specified by the proximate causes, and the causality present at this level is not to be attributed directly to divine power.[255] By communicating his likeness to the created things through the action of giving them being, God also communicates his perfection and goodness, manifested in their own power of action. Since things are able to act on their own, as a consequence of the perfection, goodness, and beauty of the created order, God's direct action through them becomes superfluous.[256]

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[253] See *SCG*, II, c. 4.
[254] *De Potentia*, q. I, a. 4: *Si autem consideretur istud iudicium quantum ad naturam eius de quo iudicatur, sic patet quod effectus debent iudicari possibiles secundum causas proximas, cum actio causarum remotarum, secundum causas proximas determinetur, quas praecipue effectus imitantur: et ideo secundum eas praecipue iudicium de effectibus sumitur*.
[255] See *SCG*, III, c. 69: *Non ergo causalitas effectuum inferiorum est ita attribuenda divinae virtuti quod subtrahatur causalitas inferiorum agentium*.
[256] Ibidem, III, c. 69: *Si igitur communicavit aliis similitudinem suam quantum ad esse, inquantum res in esse produxit, consequens est quod communicaverit eis similitudinem suam quantum ad agere, ut etiam res creatae*

The stress on the importance of the lower causes and the accent on the action proper to the things within a created order is explicitly related by Aquinas to the possibility of the existence of natural science: if an action proper to things does not exist, if God directly produces their action, then natural science cannot exist. This is due to the fact that the demonstrations of natural science are based on the effects of things, while the effects do not manifest the power and the nature of their causes unless the things themselves have their own actions.[257] Eventually, Aquinas accepts both the fact that created things have their own actions and that God is an agent who works in all of them, attributing the natural effects both to God and to natural agents.[258]

Aquinas' description of God's omnipotence turns in a certain sense against God himself, as was also the case in the relation between God's nature and his possibility of doing evil: since God was essentially good, he was considered unable to do evil. The same type of argument is now applied to the relation between God and the order of created things: being created by God, the world keeps something from the necessity of divine decisions. Under these conditions, if God would essential transform it he would enter in a contradiction with his previous actions, manifested in the created order.

To any necessity *per naturam* which would characterize the order of creation, and which he considered a direct limitation of God's power, Tempier opposed a unique idea: that God's power cannot be limited. In proposition 147/17 this thesis appears in its purest form, since it condemns the fact that God is considered unable to do what is absolutely impossible,

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habeant proprias actions… Detrahere ergo perfectioni creaturarum est detrahere perfectioni divinae virtutis. Sed si nulla creatura habet aliquam actionem ad aliquem effectum producendum, multum detrahitur perfectioni creaturae … Sic igitur Deus rebus creatis suam bonitatem communicavit ut una res, quod accepit, possit in aliam transfundere. Detrahere ergo actiones proprias rebus, est divinae bonitati derogare.

[257] See *SCG*, III, c. 69: *Si igitur res creatae non habeant actiones ad producendos effectus, sequetur quod nunquam natura alicuius rei creatae poterit cognosci per effectum. Et sic subtrahitur nobis omnis cognitio scientiae naturalis, in qua praecipue demonstrationes per effectum sumuntur*.

[258] Ibidem, III, c. 69: *Non igitur auferimus proprias actiones rebus creatis, quamvis omnes effectus rerum creatarum Deo attribuamus quasi in omnibus operanti*. In *SCG*, c. III, 70 one can find the idea that the effect of a lower agent results not only from its action but also from that of all its higher agents: *Oportet ergo quod actio*

as long as this absolute impossible is understood as an *impossibile per naturam*.[259] Another proposition that bans a similar issue is 146/184 which condemns the same idea of impossibility by relating it to an *impossibile secundum philosophiam*.[260]

According to Tempier's condemnation, within the universe formed by what is not logically contradictory, things which would be impossible for God – brought under an *impossibile simpliciter* – should be understood neither as impossible *per naturam*, nor as impossible *secundum philosophiam*. Beyond the limitation of God's power by what is logically contradictory – which is not an actual limitation since these things are impossible and so it is not the case that God cannot do them – God's power should not be limited, according to Tempier, by establishing an impossible based on philosophical principles. Tempier condemns the use of an impossible *per naturam*, established *secundum philosophiam*, refusing any impossibility present in the order of creation which could not have been made otherwise by God.

Aquinas, however, accepts a new dimension of things, within the universe of what is not logically contradictory. Beyond the impossible *simpliciter* Aquinas would have probably also admitted the existence of some impossibility *per naturam*. However, he would have accepted this type of impossibility only as an implication of God's *potentia ordinata*, within the universe of suppositional necessity implied by it, and not as something directed against God's absolute power.[261]

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inferioris agentis non solum sit ab eo per virtutem propriam, sed per virtutem omnium superiorum agentium: agit enim in virtute omnium.

[259] See proposition 147/17: *Quod impossibile simpliciter non potest fieri a Deo, vel ab agente alio. — Error, si de impossibili secundum naturam intelligatur*, in H. Denifle and E. Châtelain, ed., *Chartularium Universitatis Parisiensis*, vol. 1, 552; see Mandonnet, *Siger*, 178.

[260] See proposition 146/184*: Quod possibile vel impossibile simpliciter, id est, omnibus modis, est possibile vel impossibile secundum philosophiam*, in Ibidem, 552; see Mandonnet, *Siger*, 189.

[261] See *SCG*, II, c. 25: *Et ideo omnes istae locutiones, Deus non potest facere contraria his quae disposuit facere, et quaecumque similiter dicuntur, intelliguntur composite: sic enim implicant suppositionem divinae voluntatis de opposito. Si autem intelliguntur divise, sunt falsae: quia respiciunt potentiam et voluntatem Dei absolute*.

Due to these considerations the limitation of God's power that Tempier condemned is not developed within the same universe of understanding as Aquinas' position regarding it. Aquinas would never have considered the suppositional necessity implied by God's *potentia ordinata* a limit of God's power, since this suppositional necessity was actually the product of the decrees of God's will. God himself chose to ordain – and to limit his power indirectly – by producing an order of creation with definite features which cannot be changed essentially after their realization, without involving a self-contradiction by God. The existence of God's power, however, is not seen by Aquinas as limited by these considerations since it remains absolute in God himself. [262]

According to him, absolutely speaking, God's power cannot be limited by anything. But God's absolute power is always to be found only in God himself and not in any order of creation. Once an order of things is created based on God's decision, God's power will always be ordained in relation to it. In consequence, Aquinas "limits" God's power only indirectly, on the basis of God's own decision about an order of creation, a situation which implies a related supposition of necessity and a self-limitation of God in relation with it.

The suppositional necessity involved in this action works out to be the difference between Aquinas' position and that implied by Tempier's condemnation, a difference which could have led to Aquinas' condemnation in 1277. Tempier brings God's absolute power closer to the world, within the order of creation, questioning everything considered to be regular and necessary, part of God's *potentia ordinata – secundum philosophiam* – dissolving the natural consistency of the created order. Unlike Tempier, Aquinas keeps God's absolute power out of the order of creation, at the level of the divine essence. God has absolute power, but only judged in himself; this power is always ordained within a created order of things

[262] Ibidem, II, c. 25: *Pari igitur ratione non potest facere quae se facturum non praescivit, aut dimittere quae se facturum praescivit, qua non potest facere quae facere non vult, aut dimittere quae vult. Et eodem modo conceditur et negatur utrumque: ut scilicet praedicta non posse dicatur, non quidem absolute, sed sub conditione vel ex suppositione.*

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once God chooses it, implying the existence of suppositional necessity. The miraculous interventions of God in the world, accepted by Aquinas, do not change its main features essentially, because they were established by God himself. Things can be made better by God, and God can even make other things and other orders of things, but within this order of creation they cannot be changed in essence without destroying the proportion of order proper to it.[263]

In these conditions, Aquinas' acceptance of God's absolute power does not directly involve the contingency of creation, as Tempier's condemnation implied, since the essential features of the created order are maintained. Aquinas' idea of suppositional necessity makes it possible to accept general and necessary features of the world, as things that God cannot do otherwise within the created order, which are not considered direct limitations of God's power. Within the universe of suppositional necessity that he accepts Aquinas directs the decrees of God's will against the understanding of God's power as absolute, without any qualification, which he considers absurd.[264]

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[263] *ST*, Ia, q. 25, a. 6.
[264] See *SCG*, II, c. 30: *Licet autem omnia ex Dei voluntate dependeant sicut ex prima causa, quae in operando necessitatem non habet nisi ex sui propositi suppositione, non tamen propter hoc absoluta necessitas a rebus excluditur, ut sit necessarium nos fateri omnia contingentia esse*.

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