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**Seth Kreeger**

# Aquinas' Attribution of Creation *Ex Nihilo* to Plato and Aristotle: The Importance of Avicenna

Aquinas tells us in *Summa Theologiae* (*ST*) I.45.1 that by the name "creation" we designate the emanation of all being from the universal cause, which is God.[1] Since what comes forth from the universal cause is all being, it is impossible that anything is presupposed to this emanation and so creation is *ex non ente quod est nihil*. Taking creation in this sense, the common consensus of scholars is that Plato and

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[1] Thomas Aquinas, *Summa Theologiae* I.45.1, in *Latin/English Edition of the Works of St. Thomas Aquinas*, Vol. 13. ed. J. Mortenson and E. Alarcon (Lander, WI: The Aquinas Institute for the Study of Sacred Doctrine, 2012). "Respondeo dicendum quod, sicut supra dictum est, non solum oportet considerare emanationem alicuius entis particularis ab aliquo particulari agente, sed etiam emanationem totius entis a causa universali, quae est Deus, et hanc quidem emanationem designamus nomine creationis. Quod autem procedit secundum emanationem particularem, non praesupponitur emanationi, sicut, si generatur homo, non fuit prius homo, sed homo fit ex non homine, et album ex non albo. Unde, si consideretur emanatio totius entis universalis a primo principio, impossibile est quod aliquod ens praesupponatur huic emanationi. Idem autem est nihil quod nullum ens. Sicut igitur generatio hominis est ex non ente quod est non homo, ita creatio, quae est emanatio totius esse, est ex non ente quod est nihil." All translations are my own.

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Aristotle did not possess such a doctrine. Yet, in two articles Mark Johnson has noted many texts where Aquinas attributes such a doctrine to Plato and Aristotle.[2] However, *ST* I.44.2, written between 1266 and 1268,[3] appears to be difficult to square with the texts and has led some scholars to deny that Aquinas attributed creation to Plato and Aristotle and has led others to conclude that when composing *ST* I.44.2, Aquinas changed his mind, now denying creation to Plato and Aristotle, before changing it back again in his commentaries on Aristotle's *Physics* and *Metaphysics*. This leaves us with several interpretive issues: Did Aquinas attribute creation proper to Plato and Aristotle or only in a secondary and looser sense? Is *ST* I.44.2 denying creation to Plato and Aristotle? If so, how can this be explained in light of ample evidence that he did attribute creation to Plato and Aristotle at other points in his career? Finally, if Plato and Aristotle do not in fact possess doctrines of creation, why does Aquinas seem to attribute one to them so freely?

It is the argument of this paper that *ST* I.44.2, taken in its immediate context, does not deny a doctrine of creation to Plato and Aristotle. Thus, Aquinas throughout the entirety of his career consistently attributed a doctrine of creation to Aristotle and from the 1260s on attributed such a doctrine to Plato as well.[4] To showcase the problem, I will first situate the problematic *ST* I.44.2 text in light of the similar *De Potentia* (*DP*) III.5. After this, I will briefly summarize the state of the secondary literature as it pertains to this issue. Third, I will argue that taken in context, *ST* I.44.2 is consistent with *DP* III.5. Finally, I will offer some reflections as to why Aquinas attributed a doctrine of cre-

[2] Mark Johnson, "Did St. Thomas Attribute a Doctrine of Creation to Aristotle?," *The New Scholasticism* 63 (1989): 129–155. Mark Johnson, "Aquinas's Changing Evaluation of Plato on Creation," *American Catholic Philosophical Quarterly* 66:1 (1992): 81–88.

[3] John Wippel, "Aquinas on Creation and the Preambles of Faith," *The Thomist* 78:1 (2014), 23.

[4] Johnson, "Aquinas's Changing Evaluation of Plato on Creation," 83.

ation to Aristotle and Plato by considering the importance of Avicenna for Aquinas' understanding of creation.

## A Tale of Two Texts

In *DP* III.5 and *ST* I.44.2, we find many similarities. Both texts come from relatively close periods of time. *De Potentia* was composed sometime between 1265–1266, with the *prima pars* coming from roughly 1266–1268.[5] Both texts deal with the question of creation. *DP* III.5 asks whether there is anything that is not created by God and *ST* I.44.2 asks whether primary matter is created by God. Furthermore, in both texts Aquinas provides a history of philosophy divided into three stages and envisions the third stage as culminating in a proper metaphysical understanding of things, considering things insofar as they have being, and ascending to a knowledge of the cause of being qua being.

In *DP* III.5, answering the question whether there is anything that is not created by God, Aquinas states that the first early philosophers held that all forms were merely accidental and that matter alone was substance. These philosophers thought that matter had no cause and did not consider the efficient cause. Later philosophers, however, began to consider substantial forms and posited certain agent causes, which they called intelligences or attraction and repulsion, which were the cause of the transmutation of matter to this or that form but which did not confer universal being on things. And so according to these philosophers, not all beings came from an efficient cause, but matter was presupposed to the action of the agent cause. Finally, according to Aquinas, Plato, Aristotle and their followers arrived at the consideration of universal being itself and posited a universal cause of all things,

[5] Wippel, "Aquinas on Creation and the Preambles of Faith," 23.

from which all things come into being (*ipsi soli posuerunt aliquam universalem causam rerum, a qua omnia alia in esse prodirent*). Aquinas then tells us that in this they agree with the Catholic faith (*Cui quidem sententiae etiam Catholica fides consentit*). Aquinas then gives three arguments for this conclusion, which he attributes to Plato, Aristotle and Avicenna.[6]

The argument of Plato:

> It is necessary that if some one thing is commonly found in many things, that it is caused in these from some one cause. For it cannot be that that which is common belongs to these in virtue of themselves since each one, according to what it is in itself, is distinguished from the other and a diver-

[6] Thomas Aquinas, *Quaestiones disputatae de potentia Dei* Q.III A.5, ed. P. Bazzi, M. Calcaterra, T. S. Centi, E. Odetto, and P. M. Pession (Turin: Marietti, 1927): "Dicendum, quod secundum ordinem cognitionis humanae processerunt antiqui in consideratione naturae rerum. Unde cum cognitio humana a sensu incipiens in intellectum perveniat priores philosophi circa sensibilia fuerunt occupati, et ex his paulatim in intelligibilia pervenerunt. Et quia accidentales formae sunt secundum se sensibiles, non autem substantiales, ideo primi philosophi omnes formas accidentia esse dixerunt, et solam materiam esse substantiam. Et quia substantia sufficit ad hoc quod sit accidentium causa, quae ex principiis substantiae causantur, inde est quod primi philosophi, praeter materiam, nullam aliam causam posuerunt; sed ex ea causari dicebant omnia quae in rebus sensibilibus provenire videntur; unde ponere cogebantur materiae causam non esse, et negare totaliter causam efficientem. Posteriores vero philosophi, substantiales formas aliquatenus considerare coeperunt; non tamen pervenerunt ad cognitionem universalium, sed tota eorum intentio circa formas speciales versabatur: et ideo posuerunt quidam aliquas causas agentes, non tamen quae universaliter rebus esse conferrent, sed quae ad hanc vel ad illam formam, materiam permutarent; sicut intellectum et amicitiam et litem, quorum actionem ponebant in segregando et congregando; et ideo etiam secundum ipsos non omnia entia a causa efficiente procedebant, sed materia actioni causae agentis praesupponebatur. Posteriores vero philosophi, ut Plato, Aristoteles et eorum sequaces, pervenerunt ad considerationem ipsius esse universalis; et ideo ipsi soli posuerunt aliquam universalem causam rerum, a qua omnia alia in esse prodirent, ut patet per Augustinum. Cui quidem sententiae etiam Catholica fides consentit."

sity of causes produces a diversity of effects. Since therefore being is found as common to all things, which according to what they are in themselves are distinct from one another, it follows of necessity that being is granted to them not from themselves but from some one cause. And this seems to be the argument of Plato, who held that before every multitude is some unity, not only according to number but also in reality.[7]

The argument of Aristotle:

The second argument is that when something is found in many things by participation in different ways it is necessary that from that in which it is found most perfectly it is granted to all others in which it is found imperfectly. For those things which are said positively according to greater or lesser, they have this in so far as they approach, some farther away and some nearer, something one. For if to each of these it belonged in virtue of itself, there is no reason why it is found more perfectly in one than in another, such as when we see that fire, which is the extreme in heat, is the principle of heat in all hot things. There is, however, one being which is more perfectly and truly a being, which was proved because there is some mover which is in every way immobile and most perfect, as the philosopher proved. It is necessary therefore that all things which are less perfect receive being from it, and this is the argument of the Philosopher.[8]

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[7] *De Potentia*, Q. III, A. 5: "Oportet enim, si aliquid unum communiter in pluribus invenitur, quod ab aliqua una causa in illis causetur; non enim potest esse quod illud commune utrique ex se ipso conveniat, cum utrumque, secundum quod ipsum est, ab altero distinguatur; et diversitas causarum diversos effectus producit. Cum ergo esse inveniatur omnibus rebus commune, quae secundum illud quod sunt, ad invicem distinctae sunt, oportet quod de necessitate eis non ex se ipsis, sed ab aliqua una causa esse attribuatur. Et ista videtur ratio Platonis, qui voluit, quod ante omnem multitudinem esset aliqua unitas non solum in numeris, sed etiam in rerum naturis."

[8] *Ibid.*: "Secunda ratio est, quia, cum aliquid invenitur a pluribus diversimode participatum oportet quod ab eo in quo perfectissime invenitur, attribuatur omnibus illis in

What is interesting here is that from both arguments Aquinas seems to be connecting his metaphysics of *esse* with Aristotle and Plato insofar as these arguments move from *esse* as common to many and participated to a source of *esse*, from which things that merely participate in *esse* receive their being. Aquinas then gives the argument of Avicenna:

> The third argument is because that which is through another is reduced to that which is per se as to its cause. Whence if there were one per se existing heat, it would be the cause of all hot things which have heat by way of participation. However, there is a being which is its own being and this was proved because it is necessary that there is some first being which is pure act and in no way composed. Whence it is necessary that all other beings, which are not their own being but have being by participation, are from that one being. And this is the argument of Avicenna. Thus, that all things are created by God is demonstrated by reason and held by faith.[9]

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quibus imperfectius invenitur. Nam ea quae positive secundum magis et minus dicuntur, hoc habent ex accessu remotiori vel propinquiori ad aliquid unum: si enim unicuique eorum ex se ipso illud conveniret, non esset ratio cur perfectius in uno quam in alio inveniretur sicut videmus quod ignis, qui est in fine caliditatis, est caloris principium in omnibus calidis. Est autem ponere unum ens, quod est perfectissimum et verissimum ens: quod ex hoc probatur, quia est aliquid movens omnino immobile et perfectissimum, ut a philosophis est probatum. Oportet ergo quod omnia alia minus perfecta ab ipso esse recipiant. Et haec est probatio philosophi."

[9] *Ibid.*: "Tertia ratio est, quia illud quod est per alterum, reducitur sicut in causam ad illud quod est per se. Unde si esset unus calor per se existens, oporteret ipsum esse causam omnium calidorum, quae per modum participationis calorem habent. Est autem ponere aliquod ens quod est ipsum suum esse: quod ex hoc probatur, quia oportet esse aliquod primum ens quod sit actus purus, in quo nulla sit compositio. Unde oportet quod ab uno illo ente omnia alia sint, quaecumque non sunt suum esse, sed habent esse per modum participationis. Haec est ratio Avicennae. Sic ergo ratione demonstratur et fide tenetur quod omnia sint a Deo creata."

Of interest for our purpose here is also Aquinas' response to the second objection where he tells us that from the fact that being (*esse*) is granted to a quiddity, not only the being but also the quiddity is said to be created since before it has being it is nothing, except perhaps in the intellect of the creator.[10] With this response in mind, given that Aquinas attributes to Plato the granting of being to the many from the one and to Aristotle the realization of the fact that all things which merely participate in being must receive being from what is perfect, we can conclude with John Wippel that Aquinas is attributing a doctrine of creation *ex nihilo* to Plato and Aristotle.[11] To Wippel's conclusion, I would further add that in this response, Aquinas uses the same verb he employed in the above arguments assigned to Plato and Aristotle, the infinitive of which is *attribuere*. This further strengthens the conclusion that he means to ascribe a doctrine of creation to Plato and Aristotle. Of course, whether they actually had such doctrines is another matter entirely.[12] Aquinas' attribution of creation to Plato and

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[10] *Ibid.*: "Ad secundum dicendum, quod ex hoc ipso quod quidditati esse attribuitur, non solum esse, sed ipsa quidditas creari dicitur: quia antequam esse habeat, nihil est, nisi forte in intellectu creantis, ubi non est creatura, sed creatrix essentia."

[11] Wippel, "Aquinas on Creation and the Preambles of Faith," 18. The response to the second objection "appears to be the key that is needed to justify the transition from proving that something receives esse to proving that it is created. It must be produced ex nihilo, that is to say, from no preexisting subject whatsoever."

[12] Gaven Kerr, *Aquinas and the Metaphysics of Creation* (Oxford University Press: Oxford: 2019), 31–36. After examining the arguments of *DP* III.5, Kerr writes of Aquinas' interpretation of Plato that "Despite all this, historically speaking it is not the case that Plato ever arrived at a consideration of what Thomas understood esse to be, i.e. the act of existence correlative to the essence of a creature. So in this context Aquinas is reading Plato in a highly sympathetic light and is even willing to attribute his own metaphysical views on esse to Plato. This would tie in with Johnson's point about the authority of Augustine leading Aquinas to reevaluate his views on Plato such that Aquinas attributes to Plato views that Plato never held yet Thomas did hold and that to his mind justified a sympathetic reading. This reading is not out of sync with the gener-

Aristotle is also corroborated by the fact that this third group of philosophers, headed by Plato and Aristotle, is in agreement with the Catholic faith. If Plato and Aristotle, according to Aquinas' mind, posited a universal cause of all things but only in the sense of using pre-existing matter, then he could hardly say they agreed with the Catholic faith or even include them in the third group of philosophers at all, as opposed to the second. Thus, we can conclude that in this text Aquinas is attributing a doctrine of creation *ex nihilo* to Plato and Aristotle.

Yet, an initial glance at *ST* I.44.2 raises some questions. Here, in the context of asking whether primary matter is created, Aquinas gives us another three-fold division of the history of philosophy. First, ancient philosophers failed to realize that anything exists besides bodies, considered them to be uncreated and regarded all change as merely accidental and in accordance with condensation, rarefaction, union and separation. Others, however, understood the distinction between matter and form and arose to the consideration of substantial change, but nevertheless considered matter to be uncreated. These philosophers posited more universal causes such as the oblique circle, according to Aristotle, or the ideas, according to Plato. However, Aquinas informs us, each of these proceeding groups considered being only under some particular consideration. Finally, *aliqui* rose to consider being insofar

al tendency of Plato's thought but is certainly historically inaccurate." Kerr, *Aquinas and the Metaphysics of Creation*, 31–32. Commenting on Aquinas' interpretation of Aristotle, he continues, "So as with the Platonic argument so too with this one, the universality of esse and its possession non-essentially, i.e. through participation, are key notions for arriving at a sound metaphysics of creation. Again, as with Plato so too with Aristotle; we see Aquinas attributing to him a metaphysical doctrine that the historical Aristotle would not have recognized: the dependence of things on esse for their being... So, again, Aquinas is reading an ancient philosopher, Aristotle, in a highly sympathetic light in order that his thinking (Aristotle's) may yield a legitimate metaphysics of creation." Kerr, *Aquinas and the Metaphysics of Creation*, 35–36.

as it is being and assigned a cause to things. Such a cause is the cause of things not only insofar as they are such beings through accidental forms, nor these particular beings through substantial forms, but is the cause of all that pertains to being in any way. Thus, concludes Aquinas, it is necessary to hold that even primary matter is created by the universal cause of being.[13]

What is interesting here is that Plato and Aristotle now appear to be classified among the second group of philosophers who considered substantial change but regarded matter as uncreated. It is then the unnamed *aliqui* who arrive at the consideration of being qua being and assigned a cause to things qua being. Has Aquinas, therefore, changed his mind from the slightly earlier *DP* III.5?

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[13] Aquinas, *Summa Theologiae* I.44.2: "Respondeo dicendum quod antiqui philosophi paulatim, et quasi pedetentim, intraverunt in cognitionem veritatis. A principio enim, quasi grossiores existentes, non existimabant esse entia nisi corpora sensibilia. Quorum qui ponebant in eis motum, non considerabant motum nisi secundum aliqua accidentia, ut puta secundum raritatem et densitatem, congregationem et segregationem. Et supponentes ipsam substantiam corporum increatam, assignabant aliquas causas huiusmodi accidentalium transmutationum, ut puta amicitiam, litem, intellectum, aut aliquid huiusmodi. Ulterius vero procedentes, distinxerunt per intellectum inter formam substantialem et materiam, quam ponebant increatam; et perceperunt transmutationem fieri in corporibus secundum formas essentiales. Quarum transmutationum quasdam causas universaliores ponebant, ut obliquum circulum, secundum Aristotelem, vel ideas, secundum Platonem. Sed considerandum est quod materia per formam contrahitur ad determinatam speciem; sicut substantia alicuius speciei per accidens ei adveniens contrahitur ad determinatum modum essendi, ut homo contrahitur per album. Utrique igitur consideraverunt ens particulari quadam consideratione, vel inquantum est hoc ens, vel inquantum est tale ens. Et sic rebus causas agentes particulares assignaverunt. Et ulterius aliqui erexerunt se ad considerandum ens inquantum est ens, et consideraverunt causam rerum, non solum secundum quod sunt haec vel talia, sed secundum quod sunt entia. Hoc igitur quod est causa rerum inquantum sunt entia, oportet esse causam rerum, non solum secundum quod sunt talia per formas accidentales, nec secundum quod sunt haec per formas substantiales, sed etiam secundum omne illud quod pertinet ad esse illorum quocumque modo. Et sic oportet ponere etiam materiam primam creatam ab universali causa entium."

## The Status of the Question in the Secondary Literature

From this text, various scholars have concluded that Aquinas did not attribute a doctrine of creation to Aristotle and Plato. Étienne Gilson, for one, argues that Aquinas never credits Aristotle "with the notion of creation."[14] Furthermore, Gilson sees *ST* I.44.2 as explicitly denying that Plato and Aristotle arrived at a creative cause and interprets *DP* III.5 as positing a universal cause of being but not necessarily a creative cause.[15] R. E. Houser seems to take a position similar to Gilson, arguing that the first two arguments of *DP* III.5 are based entirely on formal causation and so do not conclude to a cause which is an efficient cause of all being.[16] To establish an efficient cause of universal being, Houser argues that Aquinas turns to Avicenna.[17] Houser concludes:

> The Platonic and Aristotelian arguments Aquinas presents in *De Potentia* are consistent with two quite different views of creation: God making use of matter as an eternal co-principle in causing every being, and God creating even matter *from nothing*. In short, the Platonic and Aristotelian arguments conclude to the existence of a creative God, but without proving in what sense he is creative. Aquinas seems to have realized that these arguments leave the issue of creation unresolved, and therefore added the Avicennian argument, which clarifies the even stronger sense in which God is a creator, that is, the efficient cause of

[14] Étienne Gilson, *The Spirit of Medieval Philosophy*, trans. A. H. C. Downes (London: Sheed & Ward, 1950), 69.

[15] *Ibid.*, 439–44. See note 4.

[16] Rollen Edward Houser, "Avicenna, 'Aliqui,' and Thomas Aquinas's Doctrine of Creation," *Recherches de Théologie et Philosophie Médiévales*, 80:1 (2013), 31.

[17] *Ibid.*, 32–33.

> the very being (*esse*) of all creatures, apart from which a creature would be absolutely nothing.[18]

For Houser, the Platonic and Aristotelian arguments do not necessitate the conclusion that God is an efficient cause of being who produces even matter *ex nihilo*. Thus, Houser's interpretation highlights the importance of Avicenna and goes on to conclude that when Aquinas refers to the "aliqui" in *ST* I.44.2, he is implicitly referring to Avicenna.[19]

While this is perhaps an accurate interpretation of the historical Aristotle and Plato, such an interpretation of *DP* III.5 does not strike me as the most convincing interpretation, for reasons I have already indicated above. Furthermore, the characterization of God as the cause of *esse* for creatures in the Avicennian argument is also exactly what Aquinas attributes to Plato and Aristotle in *DP* III.5, i.e., a single cause of *esse* for all things. This even leads one to question whether the three arguments of *DP* III.5 are not essentially just three reformulations of the same argument. Nor does Aquinas give any indication that the first two arguments are based merely on formal participation and so stand in need of an Avicennian correction. Instead, Aquinas merely lists the three arguments as three ways of showing the consistency of the third group of philosophers with the Catholic faith (*Cui quidem sententiae etiam Catholica fides consentit*). The Catholic faith, of course, teaches that God created all things *ex nihilo*. Thus, when Aquinas writes in *DP* III.5, "Et hoc triplici ratione demonstrari potest," he means all three of these arguments to be ways of showing this consistency with the Catholic faith and so must conclude to a first cause of being which possesses being perfectly, essentially, and produces all things *ex nihilo*.

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[18] *Ibid.*, 37. Italics are mine.

[19] *Ibid.,* 47–48.

This reading of *DP* III.5 can also be supported by a close reading of *Summa Contra Gentiles* (*SCG*) II.6 and II.15, written around 1261.[20] In *SCG* II.6, Aquinas argues that God is the cause of being for things other than himself.[21] Yet, Aquinas does not argue in this chapter that God is the cause of being for all things, although this may be implicit in some of his argumentation. But in *SCG* II.15, Aquinas explicitly sets about the task of showing that God is the cause of being for everything other than himself and that apart from him there is nothing.[22] Thus, we are dealing in this chapter with creation *ex nihilo* since without God there would be nothing and we can conclude that Aquinas means all his arguments in this chapter to establish this fact. Of importance for our purpose here are the third, fourth and fifth arguments given in *SCG* II.15.

The third argument starts from the fact that what is common to many must be reduced to a common cause. Being, however, is common to all (*omnibus autem commune est esse*) and so above all causes there must be a cause to which it belongs to give being (*supra omnes causas sit aliqua causa cuius sit dare esse*). This argument parallels the argument Aquinas attributes to Plato in *DP* III.5 which began from the fact that *esse inveniatur omnibus rebus commune*.

The fourth argument of *SCG* II.15 seems to parallel the second argument of *DP* III.5 which Aquinas attributed to Aristotle. Both arguments explicitly employ the term "participation" and rely upon the fact that what has being by participation must be caused by that which has being essentially, and Aquinas even employs the example of fire being

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[20] Wippel, "Aquinas on Creation and the Preambles of Faith," 7.

[21] Thomas Aquinas, *Summa Contra Gentiles* II.6, in *Latin/English Edition of the Works of St. Thomas Aquinas*, Vol. 2. (Green Bay, WI: Aquinas Institute, 2020). The Latin text of this work is taken from the 1961 Marietti edition.

[22] Aquinas, *Summa Contra Gentiles* II.15: "Oportet ulterius ostendere quod nihil praeter ipsum est nisi ab ipso."

the cause of heat in all hot things in both arguments. God, therefore, is the cause of being to all other things (*Deus igitur est causa essendi omnibus aliis*).

The fifth argument of *SCG* II.15 begins from the consideration that what is possible to be or not to be has a cause, because considered in itself it is indifferent to both, and so there must be something else which determines it to one (*oportet esse aliquod aliud quod ipsum ad unum determinet*). Since we cannot proceed to infinity, we must arrive at a necessary being. If this necessary being has its necessity from another, we must ultimately arrive at a necessary being which has its necessity of itself (*sic est devenire ad aliquid quod est per se necesse esse*). Aquinas concludes from this that everything other than God must be reduced to God as a cause of its being (*oportet igitur omne aliud ab ipso reduci in ipsum sicut in causam essendi*). This argument is clearly Avicennian since it is situated in terms of Avicenna's trademark language of the possible and the necessary, concluding to a necessary being which has its necessity of itself.

It seems then that the third, fourth and fifth arguments of *SCG* II.15 parallel the argumentation and order that Aquinas ascribes to Plato, Aristotle and Avicenna in *DP* III.5 and so can be used, I suggest, as an interpretive key for the latter arguments. Given that these arguments appear in *SCG* II.15, it follows that Aquinas meant them to establish creation *ex nihilo*. If, to Aquinas, any of these arguments did not establish creation *ex nihilo* and left room for matter as an eternal coprincipal, they ought to appear in *SCG* II.6 and not *SCG* II.15. This is further confirmed from the fact that in the next chapter, *SCG* II.16, Aquinas begins by stating that from the forgoing, i.e., *SCG* II.15, it is clear that God produces all things in *esse* from nothing preexisting (*ex hoc autem apparet quod Deus res in esse produxit ex nullo praeexistente sicut ex materia*). Thus, implicit in *SCG* II.15, and therefore in all three arguments of *DP* III.5, is creation *ex nihilo* and this means that, according to the mind of Aquinas, Plato and Aristotle had such a doctrine.

Mark Johnson and Laurence Dewan come to a different conclusion than Houser and Gilson. In two articles already mentioned, Johnson examines several texts and concludes that Aquinas did in fact attribute a doctrine of creation to Aristotle and Plato, although Aquinas denies this of Plato earlier in his career but attributes it to him later. Johnson concludes:

> St. Thomas was perfectly aware that his reading of Aristotle was new. Whereas *quidam* thought that Aristotle's God was a mover after the manner of an end only, for St. Thomas Aristotle's God is the maker of the heavenly bodies. Whereas *quidam* thought that Aristotle's God was a mover only, St. Thomas saw him as both the cause of motion and of *esse*, producing things in being. *Hoc autem creare dicimus, scilicet producere rem in esse secundum totam suam substantiam*. For the entirety of his career, St. Thomas claimed that Aristotle's God was the one upon whom the *esse omnium* depended, and on this matter he never changed his mind.[23]

As to the tricky issue of *ST* I.44.2, while Johnson concedes that Aquinas does not state explicitly that Aristotle and Plato are in the third group, he retains "the suspicion that, for St. Thomas, Aristotle is a member of this third group."[24] As Johnson interprets the text, when Aquinas mentions Aristotle's oblique circle or Plato's ideas, he is listing examples "of the kind of more universal cause assigned by those in the second group of philosophers" without actually denying that Plato and Aristotle had a doctrine of creation.[25]

Dewan, in agreement with Johnson, argues that to be a universal cause of all things, such as in *DP* III.5, is to be a creative cause since,

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[23] Johnson, "Did St. Thomas Attribute a Doctrine of Creation to Aristotle?," 154.
[24] *Ibid.*, 145.
[25] *Ibid.*, 146.

based on *ST* I.45.1, it is impossible that any being is presupposed to the emanation of universal being from the first principle.[26] John Knasas agrees that Aquinas does in fact attribute a doctrine of creation to Aristotle, but is quick to observe that this is not the position of the historical Aristotle, but "Aristotle as mediated through Aquinas' own metaphysics of being."[27] Rudi te Velde acknowledges that Aquinas never uses the word "creation" while referring to Plato and Aristotle, but holds that "Thomas does think that creation is present, at least implicitly, in the texts of Aristotle and Plato. This is not of course creation in time, but creation understood as causal dependence or, in Platonic terms, participation."[28]

Gavin Kerr and Wippel take a slightly different approach and suggest that Aquinas changed his mind after *DP* III.5, denying a doctrine

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[26] Lawrence Dewan, "Thomas Aquinas, Creation, and Two Historians," *Laval théologique et philosophique* 50 (1994): 368–369. In *ST* I.45.1, Aquinas writes: "Unde, si consideretur emanatio totius entis universalis a primo principio, impossibile est quod aliquod ens praesupponatur huic emanationi." To this, I would add that, for Aquinas, a universal cause of being is incompatible with working from pre-existent matter. In *SCG* II.15, Aquinas gives several arguments to show that God is the cause of being for all things, Aquinas then concludes by stating that from this the errors of the ancient physicists are set aside who held that certain bodies have no cause. In *SCG* II.16, Aquinas then writes: „Unaquaeque materia per formam superinductam contrahitur ad aliquam speciem. Operari ergo ex materia praeiacente superinducendo formam quocumque modo, est agentis ad aliquam determinatam speciem. Tale autem agens est agens particulare: causae enim causatis proportionales sunt. Agens igitur quod requirit ex necessitate materiam praeiacentem ex qua operetur, est agens particulare. Deus autem est agens sicut causa universalis essendi, ut supra ostensum est. Igitur ipse in sua actione materiam praeiacentem non requirit." We see here that an agent that works by introducing a form to pre-existing matter is, for Aquinas, a particular agent. Aquinas then goes on to contrast such a particular agent with God who is the universal cause of being and as such does not require preexisting matter.

[27] John Knasas, "Aquinas' Ascription of Creation to Aristotle," *Angelicum* 73:1 (1996): 489.

[28] Rudi te Velde, *Aquinas on God: The 'Divine Science' of the Summa Theologiae* (Routledge: London 2006), 142. See the fourth endnote.

of creation to Plato and Aristotle in *ST* I.44.2. Wippel writes, "the simpler solution seems to be that in the text from the *Summa Theologiae*. Thomas has changed his mind about this point, notwithstanding the relatively short period of time between this text (1266–68) and *De Potentia* (1265–66)—and apparently changed it again."[29] Kerr concurs:

> I think the safest option is the following. If Aquinas did change his mind in the *Summa Theologiae*, he quickly changed it back again, and so overall his considered opinion appears to be that Plato and Aristotle arrived at the knowledge of a cause of the *esse* of things and so at the doctrine of creation.[30]

## Taking *ST* I.44.2 in Context

*ST* I.44.2 does not look so problematic, however, if read in the context of the preceding article. In question 44, Aquinas begins his consideration of the procession of creatures from God and in the first article asks *utrum Deus sit causa efficiens omnium entium*? Furthermore, the first objection makes it clear that this is the same as the question of creation since it attempts to argue that *videtur quod non sit necessarium omne ens esse creatum a Deo*. Aquinas answers in the affirmative and states that whatever is in any way is from God (*quod necesse est dicere omne quod quocumque modo est, a Deo esse*). In the *respondeo* Aquinas writes:

> For if something is found in another by participation, it is necessary that it be caused by that to which it belongs essentially, as iron is ignited by fire. However, it was shown above when treating of the divine simplicity that God is *ipsum esse per se subsistens*. And again, it was shown

[29] Wippel, "Aquinas on Creation and the Preambles of Faith," 22–23.
[30] Kerr, *Aquinas and the Metaphysics of Creation*, 41–42.

> that *esse subsistens* must be one, as if there were a subsisting whiteness it could only be one, since whiteness is multiplied according to the things that receive it. It remains therefore that all others are not their own being but participate in being, except for God. It is necessary therefore that all things which are diversified by the diverse participation of being so that they are more or less perfect are caused by the first being, which is most perfect.[31]

Here Aquinas gives an argument based on participation in *esse* to conclude that all things that participate in *esse* and so are not their own *esse* must be caused by the first and most perfect being which is God: *ipsum esse per se subsistens*. Aquinas is of course appealing to his distinctive metaphysics of *esse* in this argument, but what is particularly interesting about this is that Aquinas goes on to connect this metaphysics of *esse* with Plato and Aristotle and writes:

> Whence Plato said that it is necessary to put a unity over every multitude. And Aristotle says in *Metaphysics* II that that which is maximally a being and true is the cause of all being and truth.[32]

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[31] Aquinas, *Summa Theologiae* I.44.1: "Respondeo dicendum quod necesse est dicere omne quod quocumque modo est, a Deo esse. Si enim aliquid invenitur in aliquo per participationem, necesse est quod causetur in ipso ab eo cui essentialiter convenit; sicut ferrum fit ignitum ab igne. Ostensum est autem supra, cum de divina simplicitate ageretur, quod Deus est ipsum esse per se subsistens. Et iterum ostensum est quod esse subsistens non potest esse nisi unum, sicut si albedo esset subsistens, non posset esse nisi una, cum albedines multiplicentur secundum recipientia. Relinquitur ergo quod omnia alia a Deo non sint suum esse, sed participant esse. Necesse est igitur omnia quae diversificantur secundum diversam participationem essendi, ut sint perfectius vel minus perfecte, causari ab uno primo ente, quod perfectissime est."

[32] *Ibid.*: "Unde et Plato dixit quod necesse est ante omnem multitudinem ponere unitatem. Et Aristoteles dicit, in II Metaphys., quod id quod est maxime ens et maxime verum, est causa omnis entis et omnis veri, sicut id quod maxime calidum est, est causa omnis caliditatis."

Thus, Aquinas sees a deep compatibility between his metaphysics of *esse*, which leads to the conclusion that God is the efficient cause of all being, and the principles found in Plato and Aristotle. With this in mind, we can see that *ST* I.44.1 is strongly reminiscent of the arguments of Plato and Aristotle in *DP* III.5 since here Aquinas cites the very principles upon which those arguments are based and again explicitly names Plato and Aristotle.[33]

What then are we to make of *ST* I.44.2? This text is a further explication of what is implicit in the conclusion of *ST* I.44.1, making clear that primary matter is also caused by God. In fact, *ST* I.44.2 concludes in much the same way as *ST* I.44.1 began—making the point that whatever is in any way is from God.[34] It is therefore implicit in *ST* I.44.1 that even primary matter is from God. Thus, it seems quite unlikely

[33] The argument Aquinas presents in the text of *ST* I.44.1 is especially close to the argument that Aquinas attributes to Aristotle in *DP* III.5. Both arguments initially employ the basic principle that what has something by participation must be caused by that to which the participated perfection belongs essentially. Both arguments employ the example of fire being the cause of heat in all things which have heat by participation. Both arguments then state that there is a perfect being. *DP* III.5 states that there is a being that is most perfect since there is an immovable and absolutely perfect mover. Thus, all other beings must derive their being from it. *ST* I.44.1 employs the earlier conclusion that in God essence and existence are identical and that God is self-subsisting being and concludes that God must be the cause of being for all things that have being by participation. Interestingly, in the *DP* III.5, Aquinas is combining the principle taken from *Metaphysics* II that what is maximally a being is the cause of being for all other things, and which is also employed in *ST* I.44.1, with Aristotle's conclusion that there must be a Prime Mover that is Pure Act. Since this Prime Mover is Pure Act and so is maximally a being, Aquinas seems to be reasoning that it must then be the cause of being for all other things.

[34] Aquinas, *Summa Theologiae* I.44.2: "Hoc igitur quod est causa rerum inquantum sunt entia, oportet esse causam rerum, non solum secundum quod sunt talia per formas accidentales, nec secundum quod sunt haec per formas substantiales, sed etiam secundum omne illud quod pertinet ad esse illorum quocumque modo. Et sic oportet ponere etiam materiam primam creatam ab universali causa entium."

that if Aquinas will connect Plato and Aristotle to his understanding of creation in *DP* III.5 and *ST* I.44.1 that he would then immediately thereafter deny this in the next article.

Wippel argues, however, that *ST* I.44.1 does not explicitly attribute a doctrine of creation to Plato or Aristotle and so is able to conclude that Aquinas denies such a doctrine to them in the next article.[35] While Aquinas does not explicitly say in this text that Aristotle and Plato had doctrines of creation, he certainly thinks that their basic metaphysical principles are consistent with his own. Thus, for Aquinas to employ these principles derived from Plato and Aristotle, nearly as conclusions of his own argument, and then deny that they even rose to a properly metaphysical consideration of things in the next article, is *inconveniens*. Further, it is especially unlikely, and I would even say impossible, that Aquinas could say of Aristotle in *ST* I.44.1 that what is maximally a being is the *causa omnis entis* and then turn around and state that Aristotle failed to consider being qua being in *ST* I.44.2. Instead, I suggest, Aquinas is moving quickly in *ST* I.44.2 (it is a short article, the *respondeo* is less than half the size of that of *DP* III.5) and used the word "aliqui" because he is moving quickly. He simply does not want to take the time to spell out who exactly the *aliqui* are, perhaps because he has dealt with this in *DP* III.5, but also because he just informed the reader in the previous article of how Aristotle and Plato are compatible with his understanding of God as the efficient cause of all being such that whatever is in any way is from God.

Why then do Aristotle and Plato get referred to as among the second group of philosophers who failed to arrive at a consideration of being qua being? In fact, they do not. With Johnson, I take Aquinas' reference to the oblique circle and the ideas (*ut obliquum circulum, secundum Aristotelem, vel ideas, secundum Platonem*) as examples of

[35] Wippel, "Aquinas on Creation and the Preambles of Faith," 19–20.

the kind of causes the second group of philosophers posited either as reported by Plato and Aristotle or as examples of a more universal cause of substantial change present in their thought that nevertheless does not fully exhaust their account of universal causality. Thus, in this one line, Aquinas is by no means giving us an exhaustive account of his interpretation of Plato and Aristotle.[36] With this interpretation then, we can present Aquinas as consistently attributing to Aristotle a doc-

[36] Johnson, "Did St. Thomas Attribute a Doctrine of Creation to Aristotle?" 146: "Could Aristotle be among these philosophers who arrived at a knowledge of being as being? Even if Gilson did incorrectly read the utrique, one cannot ignore the fact that St. Thomas uses Aristotle's elliptic circle as an example of a more universal cause of substantial being (hoc ens). Furthermore, he does not name Aristotle explicitly here as he did in the corresponding portion of the *De Potentia*. All the same, I myself do not think that Aristotle is out of the running here. My reason for this is that Aristotle's elliptic circle is cited here by St. Thomas as an example of the kind of more universal cause assigned by those in the second group of philosophers, namely those who spoke of the essential transmutations of bodies brought about by substantial forms." Johnson's conclusion could be supported by a brief consideration of Aquinas' *Commentary on the Divine Names*. In the prologue, Aquinas notes that Dionysius uses the mode of speaking of the Platonists. Aquinas then notes that the Platonists wanted to reduce all composite material things to simple, separate principles. Thus, they posited a separate per se human being, or human being itself, from which sensible human beings were derived. Here we could add that according to the Platonists, as interpreted by Aquinas, such a per se human being would not be a universal cause of being but a cause of this or that being. Aquinas, however, rejects this postulation of separate species as inconsistent with the Catholic Faith. Yet, the Platonists, says Aquinas, also posited a separate Good, Unity, and Being from which all other things which are said to be good or being are derived. And to this account of separate forms, which Aquinas interprets as being synonymous with God, Aquinas tells us that the opinion of the Platonists "is most true and in accord with the Christian Faith (*verissima est eorum opinio et fidei Christianae consona*)." Thus, the positing of separate species of material objects does not exhaust the universal causality of the Platonists. Thomas Aquinas, *In Librum Beati Dionysii De Divinis Nominibus*, proemium, ed. Fr. Ceslai Pera O.P., (Marietti: Taurini 1950). Interestingly, Aquinas ascribes this same account to Plato in *ST* I.6.4. Furthermore, as Rudi te Velde notes, "The 'oblique circle' is a reference to the ecliptic cycle of the sun—its yearly path among the stars—which, in Aristotle's view, is responsible for the natural cycle of generation and corruption on earth." Rudi te Velde, *Aquinas on God: The 'Divine Science' of the*

trine of creation throughout the entirety of his career and consistently attributing one to Plato from the 1260s on.[37] Finally, while I do not believe that we should read ST I.44.2 as excluding Plato and Aristotle from the *aliqui*, Houser's insight that Avicenna is included in the *aliqui* is a good one since, as we shall see, Avicenna is indispensable for Aquinas' philosophical account of creation.

## The Importance of Avicenna

Because Plato and Aristotle do not have doctrines of creation *ex nihilo*, they cannot really be sources, or at least the main sources, for Aquinas' thought on this matter. Instead, I suggest, Aquinas reads his

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*Summa Theologiae*, 135. Yet, it seems, the oblique circle does not exhaust the universal causality that Aquinas will attribute to Aristotle.

[37] If we remember that creation is the emanation of all being from the universal first cause, which is God, we can see Aquinas again attributes a doctrine of creation to Plato and Aristotle in *On Separate Substances* IX: Sed ultra hunc modum fiendi necesse est, secundum sententiam Platonis et Aristotelis, ponere alium altiorem. Cum enim necesse sit primum principium simplicissimum esse, necesse est quod non hoc modo esse ponatur quasi esse participans, sed quasi ipsum esse existens. Quia vero esse subsistens non potest esse nisi unum, sicut supra habitum est, necesse est omnia alia quae sub ipso sunt, sic esse quasi esse participantia. Oportet igitur  ncreat quamdam resolutionem in omnibus huiusmodi fieri, secundum quod unumquodque eorum intellectu resolvitur in id quod est, et in suum esse. Oportet igitur supra modum fiendi quo aliquid fit, forma materiae adveniente, praeintelligere aliam rerum originem, secundum quod esse attribuitur toti universitati rerum a primo ente, quod est suum esse. Aquinas then concludes chapter: Non ergo aestimandum est quod Plato et Aristoteles, propter hoc quod posuerunt substantias immateriales seu etiam caelestia corpora semper fuisse, eis subtraxerunt causam essendi. Non enim in hoc a sententia Catholicae fidei deviarunt, quod huiusmodi posuerunt  ncreate, sed quia posuerunt ea semper fuisse, cuius contrarium fides Catholica tenet." Thomas Aquinas, *On Separate Substance* IX, in Opuscula I in *Latin/English Edition of the Works of St. Thomas Aquinas*, Vol. 55 (Aquinas Institute: Green Bay WI 2020). The Latin text of this work is taken from The Leonine Edition, Vol. 40D (1968).

doctrine of creation, which he takes from Avicenna, into Plato and Aristotle. To see this, we must first examine the importance of Avicenna for Aquinas' doctrine of creation.

In *Scriptum Super Sententiis* II d.1.q.1 a.1–5, Aquinas presents one of his earliest and most substantial treatments of creation and, as Luis Xavier Lopez-Farjeat has observed, in these articles Aquinas, while arriving at a novel understanding of creation, relied on Avicenna.[38] In the first article, Aquinas asks *utrum sit tantum unum primum principium*? He gives three arguments to the affirmative but only the second directly concerns us here. There we find:

> In another way, this appears from the nature of things. For in all things is found the nature of being, in some it is more noble and in others less so. Nevertheless, the natures of the things themselves are not the being itself that they have. Otherwise being would pertain to the understanding of every quiddity, which is false since the quiddity of any given thing is able to be understood without understanding whether the thing is. Therefore it is necessary that they have being from something else and arrive at something whose nature is its own being, otherwise we would proceed into infinity. And that which gives being to all things can only be one since the nature of being is one notion in all things according to analogy, for the unity in what is caused requires unity in the per se cause, and this is the way of Avicenna.[39]

We see here that for Aquinas it is in fact Avicenna who is the source of his famous doctrine of the distinction between essence and exis-

[38] Luis Xavier Lopez-Farjeat, "Avicenna's Influence on Aquinas' Early Doctrine of Creation in 'In II Sent.' D.1, Q.1, A.2," *Recherches de Théologie et Philosophie Médiévales* 79:2 (2012), 307–337.

[39] Thomas Aquinas, *Scriptum super libros Sententiarum* II d.1.1.1, ed. P. Mandonnet and M. Moos (Paris, 1929–1947): "Aliter apparet ex ipsa rerum natura. Invenitur enim

tence and his argumentation for God's existence based on this distinction. Concerning the importance of Avicenna for Aquinas' doctrine of the real distinction, Houser writes:

> It was Avicenna, not Aristotle, who had seen that being (esse) is an ontological principle distinct from quiddity (res) in a way which makes esse the most universal of traits and the cause of esse the most universal of all causes.[40]

This argument begins with the fact that things possess being to varying degrees, are not identical to the being they possess, and so do not have being in virtue of their own quiddities. It follows from this that such things must have being from something else and we must ultimately arrive at something whose very nature it is to be and such a reality can only be one. Speaking of God, the Necessary Existent, in *The Metaphysics of the Healing* VIII.3, Avicenna writes:

> everything other than Him, if considered in itself, [is found to be] possible in its existence and hence caused, and it is seen that, [in the chain of things] being caused, [the caused existents] necessarily terminate with Him. Therefore, everything, with the exception of the One who in His essence is one and the existent who in His essence is an existent, acquires existence from another, becoming through it an existent, being

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in omnibus rebus natura entitatis, in quibusdam magis nobilis, et in quibusdam minus; ita tamen quod ipsarum rerum naturae non sunt hoc ipsum esse quod habent: alias esse esset de intellectu cujuslibet quidditatis, quod falsum est, cum quidditas cujuslibet rei possit intelligi esse non intelligendo de ea an sit. Ergo oportet quod ab aliquo esse habeant, et oportet devenire ad aliquid cujus natura sit ipsum suum esse; alias in infinitum procederetur; et hoc est quod dat esse omnibus, nec potest esse nisi unum, cum natura entitatis sit unius rationis in omnibus secundum analogiam; unitas enim causati requirit unitatem in causa per se; et haec est via Avicennae."

[40] Houser, "Avicenna, 'Aliqui, and Thomas Aquinas's Doctrine of Creation," 48.

> in itself a nonexistent. This is the meaning of a thing's being created-that is, attaining existence from another. It has absolute nonexistence which it deserves in terms of itself; it is deserving of non-existence not only in terms of its form without its matter, or in terms of its matter without its form, but in its entirety. Hence, if its entirety is not connected with the necessitation of the being that brings about its existence, and it is reckoned as being dissociated from it, then in its entirety its nonexistence becomes necessary. Hence, its coming into being at the hands of what brings about its existence is in its entirety.[41]

Everything other than the Necessary Existent is, considered in itself, a possible being or nonexistent since it does not have existence in virtue of its own nature. As such, everything other than the Necessary Existent, who in its essence is an existent and exists by its very nature, must be caused by the Necessary Existent since in itself it has absolute nonexistence, not only with regard to its matter or form, but in its entirety.

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[41] Avicenna, *The Metaphysics of the Healing*, trans. and ed. Michael E. Marmura (Brigham Young University Press: Provo UT 2005), 272. For the sake of clarity of translation, I cite Marmura's translation from the Arabic. However, note the Latin text of Avicenna which was available to Aquinas: "Unde quicquid aliud est ab illo, cum consideratur per se, est possibile in suo esse, et ideo est causatum et paene innotuit quod in causalitate sine dubio pervenitur ad ipsum. Unde quicquid est, excepto uno quod est sibi ipsi unum et ente quod est sibi ipsi ens, est acquirens esse ab alio a se, per quod est sibi esse, non per se. *Et haec est intentio de hoc quod res est creata, scilicet quod est recipiens esse ab alio a se et habet privationem quae certificatur ei in sua essentia absolute, non quod certificetur ei privatio propter suam formam absque sua materia, vel propter suam materiam absque sua forma, sed per suam totalitatem*. Igitur si sua totalitas non fuerit simul cum debito essendi datorem esse, tunc, si posueris ipsum remotum ab ea, debebit esse privatio eius cum sua totalitate; quod est oppositum ad ipsam esse a datore essendi ipsam cum sua totalitate." Avicenna Latinus, *Liber De Philosophia Prima Sive Scientia Divina* V–X, VIII.4 Édition critique de la traduction latine médiévale, par S. van Riet (E. J. Brill: Leiden 1980), 396. Italics are mine.

Thus, while Aquinas' argumentation for God's existence based on the distinction between essence and existence has its philosophical origination in the thought of Avicenna, Aquinas also follows Avicenna when he explicates the nature of creation. In the second article, Aquinas asks *utrum aliquid possit exire ab eo per creationem*?[42] In the *respondeo*, Aquinas tells us that creation is not only held on faith but can be demonstrated by reason since everything that is imperfect in some genus arises from that in which the nature of the genus is realized primarily and perfectly, as heat in things that are hot comes forth from fire. In a similar way, for all those things that participate in being, it is necessary that all that is in them comes from the first and perfect being (*oportet quod omnis res, secundum totum id quod in ea est, a primo et perfecto ente oriatur*). Aquinas concludes that this is creation, i.e., the production of a thing in being according to its whole substance: "Hoc autem creare dicimus, scilicet producere rem in esse secundum totam suam substantiam."

Aquinas then explains that creation involves two things. First, creation presupposes nothing in the thing that is said to be created and so is unlike generation and accidental change which presuppose some subject. Thus, creation is from nothing. Secondly, in the created thing, non-being is prior to being not by a priority of time but a priority of nature such that if the created thing were left to itself it would revert to non-being. If these two senses of "from nothing" suffice for the notion of creation, Aquinas concludes that creation can be demonstrated. However, if a third sense of "from nothing" is added so that what is created has non-being before it with respect to duration and time, such that it comes after nothing in time, then creation cannot be demonstrated, but must be held on faith.

This second article also bears the essential notes of Avicenna's doctrine of creation. As we have seen, according to Avicenna, for the

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[42] Thomas Aquinas, *Scriptum super libros Sententiarum*, II d.1.1.2.

Necessary Existent to create is to produce its effect in being according to its entirety, without which the effect would be nothing. Aquinas follows Avicenna here by holding that to create is to produce a thing in being according to its whole substance. Aquinas also draws on Avicenna's *Metaphysics of the Healing* VIII.3 for his position that creation *ex nihilo* does not indicate a temporal priority of creator to creatures but an essential priority. As Avicenna writes of the priority of nonexistence to the posteriority of existence in creatures:

> the posteriority here is essential posteriority. For, the state of affairs that a thing possesses from itself precedes that which it has from another. If it has existence and necessity from another, then from itself it has nonexistence and possibility. Its nonexistence was prior to its existence, and its existence is posterior to nonexistence, [involving] a priority and posteriority in essence. Hence, in the case of everything other than the First, the One, its existence comes about after not having been —[a nonbeing] that it itself deserves.[43]

Thus we see that Aquinas' account of creation draws on Avicenna in four essential ways: 1) the fact that creatures do not possess existence in virtue of their natures leads to a cause of existence which exists in virtue of its own nature and such a reality can only be one, 2) creation is to produce a thing in being according to its entirety or whole substance, 3) creation is from nothing in the sense that it pre-

[43] Avicenna, *The Metaphysics of the Healing*, 272–273. Again, note the Latin text available to Aquinas: "Igitur post quod est hic est post quod est per essentiam, quia id quod est rei ex se ipsa prius est eo quod est ei ex alio a se; postquam autem est ei ex alio esse et debitum essendi, tunc habet ex se privationem et possibilitatem, et fuit eius privatio ante esse eius «et esse eius» post privationem eius prioritate et posterioritate per essentiam. Igitur omnis res, excepto primo, est postquam non fuit ens, quantum in se est." Avicenna Latinus, *Liber De Philosophia Prima Sive Scientia Divina* V–X, VIII. 4, 397.

supposes nothing in the created thing (Avicenna is clear that in terms of itself the creature deserves nonexistence with respect to both its matter and form), 4) in the created thing nonbeing is prior to being not necessarily by a temporal priority but by an essential priority. Aquinas then confirms his agreement with Avicenna in the response to the second objection to the contrary in the fifth article:

> Avicenna responds in his *Metaphysics*, for he says that all things have been created by God and that creation is from nothing or that it has its being after nothing. But this can be understood in two ways. Either as designating the order of duration, and thus according to him it is false. Or as designating the order of nature, and in this way it is true. For according to its nature, what belongs to each thing from itself is prior to what belongs to it from another. But everything besides God has being from another. And therefore it is necessary that according to its nature it has non-being, except that it has being from God. Gregory also says that all things would fall into nothingness except that his omnipotent hands uphold them. And thus the non-being that it has from itself naturally is prior to the being which it has from another, even if not by duration. And in this way the philosophers conceded that they were made and created by God.[44]

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[44] Thomas Aquinas, *Scriptum super libros Sententiarum* II d.1.1.5 ad 2c: "Ad secundum respondet Avicenna in sua metaphysica: dicit enim omnes res a Deo creatas esse, et quod creatio est ex nihilo, vel ejus quod habet esse post nihil. Sed hoc potest intelligi dupliciter: vel quod designetur ordo durationis, et sic secundum eum falsum est; aut quod designetur ordo naturae, et sic verum est. Unicuique enim est prius secundum naturam illud quod est ei ex se, quam id quod est ei ab alio. Quaelibet autem res praeter Deum habet esse ab alio. Ergo oportet quod secundum naturam suam esset non ens, nisi a Deo esse haberet; sicut etiam dicit Gregorius quod omnia in nihilum deciderent, nisi ea manus omnipotentis contineret: et ita non esse quod ex se habet naturaliter, est prius quam esse quod ab alio habet, etsi non duratione; et per hunc modum conceduntur a philosophis res a Deo creatae et factae."

Here we see Aquinas is clearly in agreement with Avicenna regarding the way in which creation is from nothing, which he earlier adopted as his own understanding of *ex nihilo*. The key difference, however, is that for Aquinas, the temporal beginning of the universe is true but can only be held on faith, while Avicenna holds that the universe is in fact eternally ontologically dependent on the Necessary Being (Aquinas will also object to the Avicennian view that God creates the world necessarily, but this issue would take us too far afield).

Before moving on to a final consideration of Plato and Aristotle, it is worth mentioning Aquinas' employment of Avicenna's distinction between the natural agent cause that acts through motion and the divine agent cause which is a cause of being. In *Scriptum super Sententiis* II d. I. q.1. a.2 ad 1, Aquinas writes:

> According to Avicenna, there are two kinds of agent: a certain natural one, which acts through motion, and a divine one, which gives being, as was said. And similarly, we must take what has been acted upon or what has been made in two ways. One through the motion of a natural agent. And in every such coming to be, not only active potency but also passive potency must precede in time, because motion is the act of what exists in potency. The other is made insofar as it receives being from the divine agent without motion.[45]

In this text, Aquinas even uses the very same terminology of the Latin Avicenna's *Metaphysics of the Healing* VIII.3, since Aquinas

[45] Aquinas, *Scriptum super libros Sententiarum* II d.1.1.2 ad 1. "Ad primum ergo dicendum, quod secundum Avicennam, duplex est agens: quoddam naturale quod est agens per motum, et quoddam divinum quod est dans esse, ut dictum est. Et similiter oportet accipere duplex actum vel factum: quoddam per motum agentis naturalis; et omne tale fieri oportet quod praecedat tempore potentia non tantum activa, sed etiam passiva: quia motus est actus existentis in potentia. Quoddam vero est factum, inquantum recipit esse ab agente divino sine motu."

speaks of the creature as *recipit esse* from the divine agent, while the Latin Avicenna referred to the creature as *recipiens esse*. Furthermore, this distinction between the divine and natural agent cause is drawn from Avicenna's *Metaphysics of the Healing* VI.1. Avicenna writes:

> the metaphysical philosophers do not mean by "agent" only the principle of motion, as the naturalists mean, but the principle and giver of existence, as in the case of God with respect to the world. As for the natural efficient cause, it does not bestow any existence other than motion in one of the forms of motion. Thus, in the natural sciences, that which bestows existence is a principle of motion.[46]

With this Avicennian background in mind, and especially the understanding that the eternity of the universe does not preclude its being created *ex nihilo*, we can then see that Aquinas reads this distinction between the natural agent cause, which acts through motion, and the divine agent cause, which is its own *esse*, into Plato and Aristotle. In *De Substantis Separatis* (*DSS*) IX, a much later work dating to 1271,[47] Aquinas tells us that those who first began to philosophize considered all change to be merely alteration and considered matter to be the uncreated substance of things. Others came along who were able to see that certain corporeal substances had a cause of their being and reduced corporeal substances to corporeal principles, such as the combination and separation of certain bodies. Later still, philosophers resolved sensible sub-

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[46] Avicenna, *The Metaphysics of the Healing*, 195. In the Latin we find: "divini philosophi non intelligunt per agentem principium motionis tantum, sicut intelligunt naturales, sed principium essendi et datorem eius, sicut creator mundi; causa vero agens naturalis non acquirit esse rei nisi motionem aliquam ex modis motionum; igitur acquirens esse naturalibus est principium motus." Avicenna Latinus, *Liber De Philosophia Prima Sive Scientia Divina* V–X, VI.1, 292.

[47] Wippel, "Aquinas on Creation and the Preambles of Faith," 25.

stances into their essential parts of matter and form and grasped that matter is subject to diverse forms. In short, this group had arrived at knowledge of substantial change. Finally, Aquinas tells us, according to the teaching of Plato and Aristotle, it is necessary to posit a still higher way of coming into being (*sed ultra hunc modum fiendi necesse est, secundum sententiam Platonis et Aristotelis, ponere alium altiorem*) and that above the mode of coming to be by which form comes to matter, is presupposed another origin of things according to which esse is granted to the total universe of things from the first being which is its own being (*oportet igitur supra modum fiendi quo aliquid fit, forma materiae adveniente, praeintelligere aliam rerum originem, secundum quod esse attribuitur toti universitati rerum a primo ente, quod est suum esse*).[48]

From the preceding examination, we can gauge the importance of Avicenna for some of Aquinas' most important doctrines pertaining to his metaphysics of *esse* and understanding of creation. Houser is correct to point out that Avicenna is the core influence behind Aquinas' metaphysics of *esse* and doctrine of creation. Nevertheless, I suggest that the principles Aquinas appeals to in *ST* I.44.1—that according to Plato it is necessary to put before every multitude a unity and according to Aristotle that what is maximally a being is the cause of all being as the maximum in heat is the cause of all heat—become occasions for him to interpret Aristotle and Plato in light of his own Avicennian metaphysics of *esse*. Aquinas, thus, attributes a deep compatibility to Plato and Aristotle on this issue, often referring to them both in the same text, such as in *DP* III.5, *ST* I44.1 and *DSS* IX—a unique interpretation of Plato and Aristotle that was certainly not adopted by all in Aquinas' own time.[49] Nevertheless, while Aquinas draws heavily on

[48] Note that Aquinas again employs the verb *attribuere* just as he had previously done three times in *DP* III.5.

[49] Another text where Aquinas seems to do this, but this time connecting Aristotle to the "Platonists," is his commentary on the third proposition of the *Liber De Causis*.

Avicenna, from his histories of philosophy we can conclude that he regards Plato and Aristotle as the founders of the philosophical tradition that arrives at the consideration of being qua being and posits a universal cause of being. And, I suggest, Aquinas saw himself very much as the inheritor of this classical tradition.

## Conclusion

In conclusion, for the entirety of his career, Aquinas attributed a doctrine of creation to Aristotle and, from the 1260s on, attributes one to Plato as well. Nor does *ST* I.44.2 present a challenge to this fact. Since, however, Plato and Aristotle do not actually possess doctrines of creation *ex nihilo*, Aquinas reads his own metaphysics of *esse* and creation into Plato and Aristotle through the Platonic principle that above every multitude there must be a unity and the Aristotelian principle that what is maximally *ens* is the *causa omnis entis*. Yet, to fully appreciate Aquinas' doctrine of creation, we have had to examine the influence of key Avicennian elements on Aquinas, especially in the *Scriptum super Sententiis*, namely that creation is ontological dependence in *esse*, without which the creature would be nothing, and as such does not neces-

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There we find: "The Platonists maintained that being itself is the cause of existing for all things, while life itself is the cause of living for everything [that lives], and intelligence itself is the cause of understanding for everything [that understands]. So Proclus says in Proposition 18 of his book: 'Everything that dispenses being to others is itself originally that which it gives to the recipients of the dispensation.' Aristotle agrees with this opinion when he says in Book 2 of the *Metaphysics* that what is first and a being to the greatest degree is the cause of subsequent beings. So, according to what was previously said, we should understand that the soul's very essence was created by the first cause, which is its very own being." Thomas Aquinas, *Commentary on the Book of Causes*, trans. Vincent A. Guagliardo, Charles R. Hess, and Richard C. Taylor (Catholic University of America Press: Washington D.C. 1996), 24.

sarily entail a temporal beginning of the universe. With such an understanding of creation, attributing such a position to Aristotle becomes much less problematic, if albeit not completely satisfactory from the standpoint of the Christian faith. While a more complete analysis of Aquinas' understanding of creation (which this paper did not claim to attempt) would necessarily require an examination of the many important ways in which Aquinas' account differs from that of Avicenna, as well as the other sources Aquinas draws on, especially the *Liber de Causis* and Pseudo-Dionysius, we can see that Avicenna is an indispensable source for Aquinas' unique understanding of creation.

## Aquinas' Attribution of Creation *Ex Nihilo* to Plato and Aristotle: The Importance of Avicenna

SUMMARY

There is some debate among interpreters of Aquinas as to whether he attributed a doctrine of creation to Plato and Aristotle. Mark Johnson has noted many texts where Aquinas does appear to attribute to Plato and Aristotle an understanding of creation. Yet, an initial glance at *Summa Theologiae* I.44.2 would suggest he did not. This paper first examines what various interpreters of Aquinas have had to say on the matter. Secondly, it argues that *Summa Theologiae* I.44.2, taken in context with the proceeding article and *De Potentia* III.5, need not be read as denying such a doctrine to Plato and Aristotle. Thirdly, this paper concludes that because Plato and Aristotle do not actually possess doctrines of creation, they cannot be the chief sources for Aquinas' own thought on this matter. Instead, to attribute creation to Plato and Aristotle, Aquinas interprets them through Avicenna. Thus, Avicenna is the chief source for Aquinas' understanding of creation.

**Keywords:** Aquinas, Creation, Aristotle, Plato, Avicenna

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**Robert T. Ptaszek**

# The Need and Opportunities for Philosophical Studies on Religions and Religious Movements

## Introductory remarks

In over 30 years of philosophical research on religions, I have observed that contemporary academic studies on religions are dominated by sociology, the science of religion, and the history of religion. Not many researchers are philosophers. One can therefore say that philosophy (called the "queen of sciences" for a reason) is on the periphery of those studies.

Of course, I appreciate and respect the achievements that social sciences, especially sociology, bring to the study of religions and new (or, according to the terminology I use, alternative) religious movements. As a philosopher, however, I believe that to understand religions and religious movements, even the most precise descriptions of particular communities, their functioning, and their impact on individuals and society are not enough.

And this is what social sciences do, treating religious communities as one of many social groups. However, this position loses sight of the

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specificity of such communities, which is their aspiration to be religions.

Now, aspiring to be a religion requires doctrines to be proclaimed, and their rational premises to be formulated for people to make up their minds and join the particular religion. This is why an analysis of the doctrine, as well as rational evaluation of its content, are important not only for the researcher but also for the person who wants to be a part of a particular religious community. So, in order to learn why people join these communities, it is also necessary to examine their doctrines.

Until now the issue of religious doctrines has been predominantly the domain of theological disputes. This kind of research in religion, however, has been raising serious accusations: theology was deemed unscientific, and theologians—not impartial.

In contrast to theology, a philosopher is able to carry out research into doctrinal aspects of religions, religious movements, and spiritual communities without running the risk of raising objections similar to those held against theologians.

Therefore, I intend to show how philosophy can broaden the area of research on religions and religious movements. However, since the issues concerning the possibilities and results of philosophical research of religious doctrines are extensive and complicated, I will refine what I am going to talk about.

First of all, I will show what philosophy is used in this research. This is important because not every current of contemporary philosophy allows for conducting such studies. In my view, the best platform for explaining and understanding the phenomena of new religions and new spirituality is something I call "the realistic philosophy of being."[1] This philosophical current has roots that go back to ancient Greece, and to the achievements of such philosophers as Aristotle and St.

[1] This way of philosophizing has also been called 'Thomism' or 'neo-Thomism.' Its main goal is to answer the question about constitutive factors of the existing reality that

Thomas Aquinas. In Poland, it has been creatively developed since the mid-20th century by the so-called Lublin Philosophical School.

The particular relevance of realistic philosophy to research on teachings (doctrines) of religious communities dwells upon the fact that this philosophy takes into consideration a variety of aspects of reality, including those which transcend empirical knowledge. That's why this philosophy has at its disposal a set of proper intellectual tools and procedures not only for delivering a description, but also for a rational and critical evaluation of the doctrines of religious communities.

For this reason, I will limit my presentation to showing what can be said about religious doctrines using the realistic philosophy of religion created and developed at the Lublin Philosophical School by Zofia Józefa Zdybicka and her students, one of whom I have the honor to be.

The second clarification concerns the subject of research. The issue on which I will concentrate in this presentation of philosophical research on religious doctrines can be expressed as a question: Are there objective, rational grounds for choices between religions?

It seems that the most important basis for such a choice—as with other ideas that people follow in life—should be the veracity of religion. This is supported by two arguments:

(1) Every religious movement maintains that it is the one that best understands and expresses the revelation coming from God, so it is its doctrine that is true and shows man the most reliable way to self-fulfillment (usually understood as salvation or liberation).

(2) People voluntarily enter a particular religious community and become involved in its activities when they consider what its doctrine preaches to be true. Therefore, all religious communities formulate

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make it such as it really is. See: Mieczysław Albert Krąpiec, Andrzej Maryniarczyk, *The Lublin Philosophical School* (PTTA: Lublin 2010); Andrzej Maryniarczyk, *The Realistic Interpretation of Reality* (PTTA: Lublin 2015); Idem, *Rationality and Finality of the World of Persons and Things* (PTTA: Lublin 2016).

arguments to justify their aspirations for trueness. The knowledge of the doctrines of these communities therefore also includes an assessment of the value of these arguments.

However, the question of criteria affecting the rationality of religious choices is proving to be much more complicated. Let us see to what extent a realistic philosophy of religion can be useful in examining them.

## What philosophy can say about the veracity of a religious doctrine

By undertaking research on the veracity of religious doctrines, the philosopher already sees a significant limitation at the starting point. In a strictly rational way, "it is impossible to justify the trueness of what is known only by faith."[2]

Although this is a serious problem, the philosopher "can speak objectively about religious truths in a certain aspect, e.g., by stating their internal consistency or inconsistency with scientific data."[3] It turns out, therefore, that the study of religious doctrines conducted from the perspective of philosophy cannot directly concern the issue of their veracity. It must be limited to assessing their weaker attribute, which is rationality. The way in which the rationality of religious doctrine is understood and the methods by which it can be verified by a philosopher must therefore be defined more precisely.

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[2] Piotr Moskal, *Traktat o religii* [A Treatise on Religion] (Lublin: RW KUL, 2014), 219.

[3] Andrzej Bronk, *Podstawy nauk o religii* [The Foundations of the Study of Religion] (TN KUL: Lublin 2003), 339.

In my studies, I adopt the definition of the rational character of a religion formulated by Andrzej Bronk in his work *Podstawy nauk o religii* [Foundations of the Study of Religion]. He states:

> [...] a religion is rational when:
> (1) its propositions (the so-called truths of faith) are reasonable and true, i.e., they refer to a transcendent world that actually exists, and
> (2) ... they are non-contradictory, and
> (3) make up a consistent system of statements.[4]

From the philosophical point of view, research on the first of the elements constituting such a rationality, which is the reference of the claims of a given religion to the transcendental world, can be carried out only to a limited extent. For they are the subject of quite a specific philosophical discipline, which is the philosophy of God.[5] The specificity of this discipline comes from the fact that it examines a Being which by its nature cannot be the subject of empirical cognition. Therefore, the philosophy of God does not use empirical methods, but a rational-intuitive method. Its starting point is the really existing and cognizable, material and spiritual world (especially the human psyche). By analyzing these empirical facts, realistic philosophy ultimately comes to God as the necessary rationale for the existence of a contingent (unnecessary) world.

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[4] Bronk, *Podstawy nauk o religii* [The Foundations of the Study of Religion], 375. Bronk elucidated this issue from a wider perspective in his article: Andrzej Bronk, "Teologia i nauki przyrodnicze. (Uwagi na marginesie) [Theology and natural sciences (remarks on the margins)]." *Roczniki Filozoficzne* [Philosophical Annals] 39/40, no. 2 (1991/1992): 5–38.

[5] It is a "philosophical science that speaks about the existence and nature of God based on the human mind, searching for the ultimate cause of the existing world." Stanisław Kowalczyk, *Filozofia Boga* [Philosophy of God] (RW KUL: Lublin 2001), 10.

Although the issues that the philosophy of God addresses include both His existence and nature/essence, it focuses on the former, because there is relatively little to say about the nature of God,[6] while in philosophy it is possible to formulate rational arguments to indicate His existence.

In any case, a realistic philosophy of being can be applied in a greater degree to the task of verification of the other two criteria for assessing the rationality of religious doctrine. The doctrines of different religious communities may be the subject of such research. I apply the method presented in this paper primarily to the study of doctrines of alternative Christian religious movements referring to the Bible. The best-known religious movements in this category are Jehovah's Witnesses, The Church of Jesus Christ of Latter-day Saints (Mormons), and the Seventh-Day Adventists.

## Philosophical method of studying religious doctrines

My studies of religious doctrines based on the Bible, carried out within the framework of a realistic philosophy of being, cover four stages:

(1) The identification and characterization of the main sources of doctrines of individual religious communities, as well as the most important works containing their fullest possible presentations. This is important for several reasons. The first is the existence of differences between the declared and actual sources of these doctrines. For example, Mormons officially declare that the source of their doctrine, in

[6] This is because the philosophy of God tries to define an infinite Being (and thus a Being completely different from all beings known to man) by concepts formed on the basis of those well-known beings. The only way to say anything about the essence of God in a meaningful way is to use analogical language.

addition to the *Book of Mormon*, is the Bible. However, reading the texts that present the doctrine of the movement,[7] we find that it is based primarily on the *Book of Mormon* and the revelations of the Mormons' founder, Joseph Smith, collected in two volumes: *Doctrine and Covenants* and *Pearl of Great Price*. The Bible, on the other hand, is merely a source of quotations, often taken out of context, to support Joseph Smith's controversial views, which are inconsistent with Christian teaching.

Analyzing the way religious movements referring to the Bible use its content, one can also see that they make significant interpretation errors. I will mention just the two most important ones. The first error is that "they undermine the human aspect of Scripture, which leads to a literal translation of the Bible without taking into account its literary genres."[8] The second major mistake is that some movements attempt to discover the esoteric message of the Bible. These movements "proclaim that they have... a key that enables the hidden (spiritual) meaning of the Bible to be read."[9]

It should also be remembered that the available publications often do not contain a final, comprehensive presentation of the doctrines of the communities studied. This is because the doctrines of many of them can (and indeed do) undergo constant modification. For the important source of these doctrines are the revelations that God is said to give continuously to these communities.

Moreover, despite the diversity of form and content, many texts presenting the doctrines of religious movements also have an apolo-

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[7] For Mormons, the main such text is *Gospel Principles* available on the Internet at: https://www.churchofjesuschrist.org/bc/content/shared/content/english/pdf/language-materials/06195_eng.pdf

[8] Paweł Szuppe, *Nowe ruchy religijne z perspektywy teologiczno-duszpasterskiej Kościoła katolickiego* [New Religious Movements in the Theological and Pastoral Perspective of the Catholic Church] (Wydawnictwo Polihymnia: Lublin 2017), 209.

[9] Szuppe, *Nowe ruchy religijne*, 211.

getic purpose. They are published with the aim of gaining new members for the movement. Therefore, there are various types of falsehoods in them. Doubts are especially raised by the information resulting from the common (not only among religious movements) tendency to emphasize their own achievements. For example, it causes the descriptions of the lives and activities of the founders of particular movements to often take the form of hagiographies, rather than the actual presentation of a person and his or her achievements.

(2) The reconstruction of the main theses that make up the doctrines of specific movements and the moral principles that apply to them, as well as the forms of activity of these movements that are the practical realization of these principles. This task is not easy. Although there are usually texts available which present their basic principles of faith, the detailed interpretations of these principles contained in the various publications of each community often differ. If we add to this the ongoing evolution of their doctrines, we can see how many problems have to be overcome by making such reconstructions.

(3) The determination, with the help of philosophy, of what image of God, man and their relations transpires in the doctrines of individual religious movements. At this stage of research, however, it is necessary to remember that the founders of particular communities usually did not have a philosophical education. Therefore, it must be assumed that usually they were not aware of the philosophical implications of the teachings they preached. Such a reservation is necessary, because otherwise, instead of limiting oneself to indicating the real philosophical conditions of particular doctrines, one can find such references of theirs which did not actually take place.

(4) The evaluation of the aspirations to veracity of particular doctrines. As I have already shown, it comes down in practice to verifying their rationality. The initial, most elementary stage of verifying the rationality of the doctrines of religious movements is to determine their non-contradictory status. The first step is to examine whether the

doctrines of individual movements meet the condition of internal non-contradiction (consistency). This stage of research is complemented by the verification of the external non-contradiction of these doctrines. To this end, it is necessary to establish that they do not contain statements contradictory to the knowledge of the world provided by the particular sciences. At this stage of research, inconsistent and unreasonable doctrines can be identified. Such a doctrine is, for example, that of The Church of Jesus Christ of Latter-day Saints (Mormons). Their concept of God does not meet the criterion of coherence,[10] and the view that the world has existed for only about 6000 years contradicts the basic knowledge provided by science concerning the Earth.

Realistic philosophy also allows for a more accurate verification of the doctrines studied. For this philosophy contains a rational and, at the same time, holistic concept of the world and man, as well as the image of God, whose revelation is contained in the Bible. It also explains what is the religious relationship of man with God thus understood and what are the foundations and consequences of such a relationship. The realistic philosophy of religion therefore makes it possible to check whether the doctrines of individual religious movements, which not only refer to the Bible, but also consider themselves Christian denominations, are built on such an image of God, man and their relationship. The failure of the religious movement to meet these conditions allows for a negative assessment of its aspirations to be such a denomination.

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[10] The first of *The Articles of Faith of The Church of Jesus Christ of Latter-Day Saints* is: "We believe in God, the Eternal Father, and in His Son, Jesus Christ, and in the Holy Ghost." Such wording suggests that Mormons profess a Trinitarian faith (one God in three persons). But a closer analysis of their texts shows that those are three divine beings separate from one another.

## Conclusion

In conclusion, let us get back to the issue described in the title of this paper. Is it really worthwhile to use the results provided by the philosophical analysis of religious doctrines in the research of the contemporary world of religions, which is mostly carried out by sociologists today? After all, the main premise of this research is well-characterized by the declaration of famous American religious sociologists, Rodney Stark and William Bainbridge:

> Although we find no reason to suggest that supernatural reality does not exist, we also have no need to postulate in our theory the existence of the supernatural world... Furthermore, when we contrast many faiths and seek human causes for variations among them, we at least imply that none possesses the revealed truth.[11]

This declaration shows that scholars who conduct research on religion today are not interested in the question of the veracity of religious doctrines. The starting point of their research is pluralistic: they put traditional religions (such as Christianity, which has been shaping Western culture for two thousand years) and alternative religious movements, most of which originated in the 19th and 20th centuries, on the same plane, and treat them in the same manner. Such an attitude is justified by the unproven thesis that

> all differences between religions are of an apparent nature and are the result of differences in the cultural training that their followers have

[11] Rodney Stark, William Bainbridge, *Teoria religii* [Theory of Religion], trans. Tomasz Kunz (Zakład Wydawniczy Nomos: Kraków 2000), 38.

> undergone. It is therefore unacceptable to consider that some religion is more true than others.[12]

So it seems that scholars studying religions recognise the pluralism of religions as a value in itself. From this perspective, a critical analysis of religious doctrines may be seen as a threat to (or even a limitation of) pluralism and religious freedom. In fact, it is precisely religious freedom, considered today to be an overriding value, that enables the emergence and functioning of a "free market for religious services" in which individual religious and spiritual communities can compete and attract believers without any restrictions.

However, such a vision of a "free market of religion" raises serious doubts in someone who, like me, deals with philosophy. Such a person sees the difficulties and problems that have to be reckoned with when trying to draw the line of demarcation between rational religious doctrine and a substitute that does not meet the criteria of rationality. He believes, however, that it is necessary to indicate such a line, because

> the democratising trend towards equal treatment of all religions and forms of religiousness does not seem right. Taken literally, it would mean approving of any form of religiousness (pseudo-religiousness?): criminal religions, justifying terrorism... or inciting the collective suicide of their members.[13]

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[12] Bartłomiej Dobroczyński, "Duchowość w kontekście Ruchu Nowej Ery [Spirituality in the Context of the New Age Movement]," in *New Age – nowe oświecenie* [New Age: A New Enlightenment], ed. A. Brzezińska, K. Bondyra and J. Wycisk (Wydawnictwo Fundacji Humaniora: Poznań 1999), 35.

[13] Bronk, *Podstawy nauk o religii* [The Foundations of the Study of Religion], 306.

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It is for this reason that the veracity (or, as I have shown, verifiable rationality) of the doctrines preached by religious communities to their followers is important. And it is not just about the supernatural aspect of these doctrines, that is, the possibility of achieving salvation described in them. After all, religious doctrine also influences the behavior of people in their earthly lives. Furthermore, it is the main source of ideas that shape the vision of the world and the overall standard of behavior of the person who accepts it. So it is worth knowing what a particular religious doctrine says both about man and the world. And what actions it proposes.

Therefore, I consider it valuable that, thanks to philosophy, that is, in a rational way and without entering into the field of theological interpretations of any revelation, it is not only possible to study religious doctrines, but also to point out important differences between them. In this way, philosophy shows that not all the "offers" available today on the "free market of religious services" are of the same value. I think that such knowledge can also be helpful in religious studies. Because thanks to it, the functioning of the contemporary world of religion and spirituality can be described in a more precise way.

## The Need and Opportunities for Philosophical Studies on Religions and Religious Movements

SUMMARY

Today, academic studies on religions are dominated by sociology, the science of religion, and the history of religion. Not many researchers are philosophers. One can therefore say that philosophy is on the periphery of those studies.

However, to understand religions, even the most precise descriptions of particular communities, their functioning, and their impact on individuals and

society, are not enough. In order to learn why people join them, it is also necessary to examine their doctrines. Although theologians have long studied them, their research has met with serious accusations: theology was deemed unscientific, and theologians—not impartial. On the other hand, a philosopher can study religious doctrines without fear of such charges, as philosophy limits itself to rational considerations, does not refer to revealed truths, and does not proclaim any concept of salvation.

In this text, I show what results the philosophical research of religious doctrines leads to, taking as an example doctrines of religious movements, which—in the opinion of their creators—constitute an alternative to Christianity. With the help of philosophy, the criteria for distinguishing religion/Christianity from a religious movement can be narrowed down to the inconsistencies in the doctrines of these movements and their general, irrational nature. This can be verified by pointing out serious errors, which are mostly the result of the founders' own interpretation of biblical texts.

**Keywords:** philosophy of religion, religions, religious movements, religious doctrines, veracity of doctrines, rationality of doctrines

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# Power Relations in the Network Society. A Sociological Approach

The concepts of network, networkingness, connectivity, and the network society are nowadays frequently invoked in alternative theoretical approaches.[1] It seems a difficult task to outline a precise theoretical horizon that could provide indisputable epistemological tools to break the civilizational code belonging to the network order. The operational field of the network society is very broad and difficult to operationalize, especially in the social sciences. Information and communication technology does invade the human body, not only in remotely steered spaces. Contemporary societies have been turning into an

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[1] Janusz Golinowski, "Społeczeństwa sieci w warunkach erozji dotychczasowego ładu politycznego i gospodarczego," [Network societies in the conditions of the erosion of current political and economic order], *Transformacje* [Transformations] 1–2, 96–97 (2018), 68–88; Magdalena Szpunar, "Narcystyczna kultura. O kondycji człowieka ponowoczesnego w kulturze zdominowanej przez narcyzm," [A narcissistic culture. On the condition of postmodern man in a culture dominated by narcissism] *Zarządzanie mediami* [Media management] 3 (2020), 183–199; Lech W. Zacher, "Reconfigurations in the World System—Between the Old Driving Forces and New Networks," *Transformacje* [Transformations] 3–4, 78–79 (2013): 182–198.

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interactive net of relations reenacted in hybrid realities. The process of networking is defined in universal terms.[2] Networking is becoming a characteristic feature of modern civilization, whose distinguishing mark is the indisputable and multidimensional interconnection of the social and technological worlds. The greatest visionaries of the past decade believed in the power of information and communication technologies, as well as social networks. The practical implications and the theoretical consequences of the scenarios grounded in that belief was the ambition of creating a sustainable and interconnected society driven by technological innovation.

Rapid technological development has also led to the widespread fear of losing control over structures responsible for maintaining social order or natural order of societies.[3] Disruption of the longue durée structures, axiological micro-revolutions, the increased importance of technological principles in social life, the collapse of previously recognized authorities and hierarchies are but a few consequences of the network revolution. There looms a threat of the onset of a mega-cyberpanopticon.[4] Assessing the positives and negatives of the future development of network technologies entails methodological confusion. The semantic key to understanding ongoing social transformations seems to be the notion of multifaceted power relations, which take different forms: social, economic, political, cultural, ecological, and axiological. The concept appears to

[2] Filipe Wiltgen, "Challenge of Balancing Analog Human (Real Life) with Digital Human (Artificial Life)," *Transformacje* [Transformations] 3, 110 (2021): 17–33.

[3] Shoshana Zuboff, "The Age of Surveillance Capitalism. The Fight for a Human Future at the New Frontier of Power." (New York 2019); Evgeny Morozov, "To save everything, click here. The Folly of Technological Solutionism." (New York 2013); J. Hughes, "Citizen Cyborg: Why Democratic Societies Must Respond To The Redesigned Human Of The Future," (Basic Books, 2004).

[4] Alina Betlej, "Peril and Promise of Internet Technology for Future Social Order," *Technology, Society and Sustainability*, ed. Lech W. Zacher (Springer: Cham, Switzerland 2017).

play a special role in disenchanting technically mediated and controlled transformations.[5] This thread of problematic issues is also controversial as it refers to the most elusive and immeasurable plane of studying influences, pressures, domination, surveillance and control.[6] Social analysis does not have adequate tools for cognitive control of the sphere of feedback between non-material powers, which are raised by intuitive argumentation to the role of factors and products of social change.

Questions arise about the role of the humanistic element in the network society and the power of the impact of the technicalized structures on the social world. What potential does the network hold? How do certain power relations emerge and disappear in a network society? Finding the answers is of fundamental importance, as it should facilitate the unmasking of key networked power fields affecting important civilizational processes related to the production of technological and social rules, social patterns, institutionalization of certain standards and procedures of action, and areas of inclusion and exclusion from the dominant networked order. Understanding the essence of these transformations taking place under the influence of powerful hidden forces related to the dynamics of the development of network society will also lead to the foundations of the overarching concept of networkingness.

## Network perspective

The concept of the network society, despite its numerous weak points and shortcomings, provides interesting tools for analyzing the social

[5] Janusz Golinowski, "Polityczność mainstreamowej ekonomii," [The politicality of mainstream economy] *Studia politologiczne* [Politological studies] vol. 37 (2019): 146–173.

[6] Shoshana Zuboff, "Big Other: Surveillance Capitalism and the Prospects of an Information Civilization," *Journal of Information Technology* 30 (2015): 75–89.

world. It is an exceptionally extensive template showing the relations between various types of theoretic reflections. Thinking about the future requires constant references to the categories of the potential for change. Jan van Dijk and Manuel Castells were the first to develop methodologically coherent concepts of a new social formation.[7] Manuel Castells is better known as a sociologist for his famous trilogy on network society theory.[8] His concept includes references to technological, network, digital and media indicators intervening in structural transformations. Castells makes the case for beginning a new historical epoch, characterized by a specific form of network.[9] A society defined as a network can be analyzed by two essential features. The first of these is the ability to reproduce and institutionalize networks.[10] The second feature is its technological mediation and dependence on the operation of network-creating technologies applied in the process of information and knowledge production.[11] In the network society, traditionally understood causality and continuity disappear. The greatest value and at the same time the source of the most significant values is the network itself. Among the main pillars of the network society, Castells mentions production, experience and power.[12]

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[7] Manuel Castells, "Materials for an Exploratory Theory of the Network Society," *British Journal of Sociology* no. 1, vol. 51 (2000): 5–24; J. van Dijk, "Network Society. Social Aspects of the New Media." Second edition (London 2006).

[8] Manuel Castells, *Społeczeństwo sieci* [Network Society] (Wydawnictwo Naukowe PWN: Warszawa 2010).

[9] Felix Stalder, *Manuel Castells and the Theory of the Network Society* (Polity Press: Oxford 2006).

[10] Manuel Castells, "Introduction to the Workshop: The Promise of Network Theory," *International Journal of Communication* no. 5 (2011): 794–795.

[11] Manuel Castells, *Communication power* (Oxford University Press: Oxford/New York 2009).

[12] Castells, *Społeczeństwo sieci.*

Technology is the element that most strongly influences the dynamism of growth and the productivity of the economy in a translocal dimension. Network technology affects a number of elementary processes such as temporal-spatial compression, deterritorialization, decentralization and control, and social interactivity. The space of flows is crucial for socio-economic development. Deliberate collective action within a specific cultural and biological framework creates new social movements (they seem to be examples of ideal types) which, within the second pillar of experience, influence the transformation of society's values and institutions. In the network society, there is a transformation of power relations.[13] Labelling societies and setting development trends based on the observation of trends in technical progress is not a *novelty* in social thought. Castells, however, happened to capture important perspectives on social changes. In a sense, it must be acknowledged that no other contemporary perspective referring to technical categories is so epistemologically extensive. Considering changes with classes of subjectified processes (digitization, virtualization, networking, hyperconnectivity) opens up space for the analysis of universal, typically human and humanistic issues.

The changes accompanying the network breakthrough are not obvious. Formalized categorization of all intermediary variables and assigning gradual pressure forces to them would resemble classical utopias.[14] The network concept finds its empirical translation into a research strategy for selected, operationalized factors of change. Therefore, limiting the analysis to an arbitrarily limited set of relationships between the performative powers of technology and man operat-

[13] Alina Betlej, "Non-Knowledge, Risk and Technology in Networked World—towards the Future," *Transformacje* [Transformations] 3–4, 82–83 (2014): 2–17.

[14] Alina Betlej, *Społeczeństwo sieciowe – potencjały zmian i ambiwalentne efekty* [Network society—the potential for changes and ambivalent effects] (Wydawnictwo KUL: Lublin 2019).

ing in the network seems legitimate. Researchers display a somewhat understandable view that the freedom of access to information and online resources is the highest benefit that must be defended.[15] The adopted theoretical point of view will be of key importance in exposing previously undescribed dependencies. Contextual references to the issues of power, control and supervision in social communities occurred during exploration, displaying properties emphasized in the concept under consideration.[16] Pure determinism certainly does not apply to the network analytical grid. The potentials for change are built into morphology, *techne* being at the same time key resources for the entities involved. Network development leads to many structural, hybrid, design, and ideological forms.

## Power relations

The effects of the impact exerted by structural, communication, cultural, symbolic and knowledge systems cause changes in the system of local, regional, national, and global powers. This perspective is close to the understanding of power, control, and coercion.[17] Power is much less visible and not always associated with the argument of strength or classic persuasion. The social engineering of these connections is more

[15] John Cheney-Lippold, *We Are Data: Algorithms and the Making of Our Digital Selves* (New York 2017); Marek Chlebuś, "Świat bez władz," [The world without authorities] *Transformacje* [Transformations] no. 1, vol. 108 (2021): 42–85.

[16] Viktorija Aleksejeva et. al., "Analysis of Disparities in the Use of Information and Communication Technology (ICT) in the EU countries," *Entrepreneurship and Sustainability Issues* 9 no. 2 (2021), 332–345.

[17] Janusy Golinowski, "Neoliberalny panoptykon biopolityki – pomiędzy ekspansją i społeczną terapią," [The neoliberal panoptikon of biopolitics—between expansion and social therapy] *Teoria polityki* [Theory of politics] No. 5 (2021): 103–126.

subtle and focused on the symbolic transfer.[18] Assigning meanings, constructing and disseminating interpretation schemes, coding communication, and producing new semiotics are inseparable elements of the logical map of the network world. The concept of power is synonymous with the definition of government and is sometimes translated through it. This is particularly visible in the political arena, where old conflicts acquire new meanings. The issues of influence are involuntarily shifted to the considerations of softer areas of impact, which, however, bring severe global consequences. The network perspective has set a certain trend of thinking about the power of the network, which in practice manifests itself differently in individual economic systems.[19] Network technologies should be considered as significant causative factors of change in the general balance of power, which influence the structure of new fields of governing resources.

These areas of influence were previously analyzed by, among others, Michel Foucault.[20] The author did not formulate a systematic theory of power, but he did describe its essential mechanisms. Strategic knowledge about selected fields of power will have a more relational and interpretative character in this concept.[21] There are various kinds of forces in social relations. They result in narrative and ideological social conflicts. Therefore, power is not axiologically neutral. These explorations allow for exposing the civilization forces which destabi-

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[18] Alina Betlej, "Designing Robots for Elderly from the Perspective of Potential End-Users: A Sociological Approach." *International Journal of Environmental Research and Public Health* 19 (2022), no. 6: 3630.

[19] Brian Alleyne, *Narrative Networks: Storied Approaches in a Digital Age (*Goldsmiths, University of London 2015, SAGE Publications Ltd.); Jamie Bartlett, *The Dark Net: Inside the Digital Underworld* (Brooklyn NY 2016).

[20] Michel Foucault. *Porządek dyskursu* [The order of discourse], transl. M. Kozłowski (Gdańsk 2002).

[21] Michel Foucault, *Nadzorować i karać. Narodziny więzienia* [To oversee and punish. The birth of prison], translated by T. Komendant (Warszawa 1993).

lize the existing social order, leading to its change. Social networks and ties should be treated as special cases of power fields.[22] Invisible forces may be revealed in the process of deconstructing these areas. The subjects and actors of influence are not only people, but also the products of their activities. The area of knowledge is an intriguing example.[23] If rationality is treated as a product of the domination of certain power structures, power relations will become both a powerful source and a controllable net effect. The accusation of tyranny against global discourses also affects technicized spaces.

This relational dimension of power and the manners of its operation seem to prove themselves especially in the network model. Interpreting the process of defining social realities as an example of domination manifesting themselves with different strengths appears in many studies.[24] Social relations are increasingly often cited as examples of new laboratories for the causative forces of change. Their omnipresence and multifaceted nature cause this power to acquire the features of heterogeneity. The synaptic regime of the new power is maximized in fluid structures. How can this area of influence be explored? An analysis of specific social practices should reveal the process of generating power relations in networks. Treating power as a dependency is of key methodological importance because it allows for assuming the importance of the position occupied by actors in a

[22] Jan van Dijk, *The Deepening Divide: Inequality in the Information Society* (London–New Delhi 2005).

[23] Manuel Castells, *Networks of Outrage and Hope. Social Movements in the Internet Age* (Polity Press: Cambridge MA 2012 b); Andrew Chadwick, *The Hybrid Media System. Politics and Power* (Oxford 2013).

[24] Włodzimierz Chojnacki, "Elity polityczne w perspektywie logosu, etosu i profesjonalizacji," [Political elites in the perspective of logos, ethos and professionalization] *Transformacje* [Transformations] no. 1, vol. 108 (2021): 116–137; Pavol Dancák, "The Fundamental Issue in Education and the Problem of Responsibility," *Journal of Critical Realism* (2021).

particular balance of power. The key mechanism of the power of relationship will be exclusion.

## Potentials for change

So, what is the "regime of truth" like in the network society? Power relations become the fields of generating and constituting the narratives of everyday life. It is in their framework and through their intermediary that social practices, relations and activities are institutionalized. Social exclusion mechanisms are based on creating knowledge about an individual, recording their activity and also on controlling.[25] The multiplicity of the prevailing balance of power and power relations in society makes the task of isolating the center of superior power impossible. Analysis can be only reduced to examining indicated strategic situations. Power cannot be treated as a phenomenon detached from reality *a priori*.[26] In the network approach, the structure (layout, pressure forces, communication) seems to play a special role in the configuration of influences.

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[25] Olga Lavrinenko et al., "Mobile Internet in the EU: Problems and Perspectives," *Entrepreneurship and Sustainability Issues* no. 9, vol. 3 (2022), 369–383; Anna Maj, "Powłoka, ciało i kod jako przedmiot hackingu. Nowe oblicza wyobraźni i kreatywności w dobie UBICOMP," [A covering, the body and code as a subject of hacking. New faces of imagination and creativity in the era of the UBICOMP] *Transformacje* [Transformations] no. 1–2, vol. 104–105 (2020): 188–205; Jan van Dijk, "Digital Divide Research, Achievements and Shortcomings," *Poetics* no. 34 (2006): 221–235.

[26] Natalia Gondek, "Methodological Foundations of the Language of Metaphysics," *Filozofija. Socjologija* no. 33, vol. 3 (2020), 242–249; Pavol Dancák, "Concreteness of Life as the Context of Thinking in the Philosophy of Józef Tischner," *European Journal of Science and Theology* 12 (2016), 2: 213–221; Paweł Gondek, "Subjective Basis for Elucidating Communication in the Personalistic Perspective," *Res Rhetorica* no. 7 vol. 1 (2020): 72–85.

Structural determinisms continue to present themselves as important factors of social change. However, the findings so far lead to the conclusion that the relational dimension (influence) of network systems is an underestimated field of exploration. The explanations of such complex connections are of a metatheoretical character. A systemic-mechanistic strategy is often impossible to implement, and the only thing left is metaphorical reference to the sociological imagination and transferring the research to a sphere located somewhere beyond the limits of current scientific cognition. Regardless of the controversy, intuition suggests that the relations of power accompanying social changes in the hyperconnective era co-format almost every social form. Do technical powers produce new algorithmic codes for the—after all—performative society?

The observed pace of techno-social changes has its social origins. New technologies are provided by technoscience, which has its own creators, researchers, ideologists and entrepreneurs. *Techne* has at its disposal its own knowledge elite functioning in particular political, economic and social contexts. The common production of technology and values associated therewith is a subject to multiple determinisms. The ideology of technical efficiency can be treated as a factor of social change comparable to the creation of a new machine (a computer, a telephone). There are plenty of examples that require a redefinition of the issues of knowledge, awareness and, first of all, education in a society interpreted in such a way. If power is embedded into the essence of modern technology and has the potential to transform the world with every act of its use, social security considerations would speak in favor of technological desertion from an autonomous balance of power. It can be argued that in the network society, the logic of power changes dramatically.[27]

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[27] Jeremy Heimans, Henry Timms, *New Power. Why outsiders are winning, institutions are failing, and how the rest of us can keep up in the age of mass participation* (London 2019).

The conjunctions of influences co-format the processes constituting the symbolic shift of increasingly numerous borders: local, state and national.[28] The research into communication provides interpretative codes. Its impact on the process of imposing the network rules of the game should be subjected to an in-depth consideration. Conversational forms of social activity have an impact on the form of the balance of power. The ability to create particular visions of reality is an essential competence (a human factor, a social factor). In social sciences, an interesting example of the power of interpretation defined in this way is the discourse about technological risk.

According to Castells:

> Power is something more than communication and communication is something more than power. However, power is based on the control of communication, just as the foundation of counter-power is to overthrow this control. Mass communication, which potentially reaches all society members, is shaped and governed by power relations rooted in media business and state politics. The power of communication is at the centre of social structures and social dynamics.[29]

The geopolitics of network technologies also covers areas of the world that are often overlooked. Structural gaps begin to function as new sub-group in a hyper-connected worldwide order. The global influence of capitalism is not stable, as demonstrated by the systematically emerging crises.[30] In this technical substrate (treated in a strongly reductionist manner in this analysis), the processes of interaction

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[28] Jan van Dijk, *The Network Society* (third edition, University of Twenty, 2012, SAGE Publication Ltd, 2012).

[29] Castells, *Communication power*, 15.

[30] Marlen Komorowski et al., "Joining the Dots—Understanding the Value Generation of Creative Networks for Sustainability in Local Creative Ecosystems,"

between various factors of social change, which, however, are significant in the framework of global development trends, actually take place. A frequently cited example is the transformation of the nation-state institution. Modifications of state power and business in Castells' concept are treated as the main fields of transformations of the causative power.[31] Networks have the greatest impact on power relations when they decentralize power. The outcome of such impacts is new forms of *dominum*, a sophisticated symbolic violence, the expression of which is the imposition of the semantics of the narrative through privileged networks of knowledge. Technological rules already described are also products of inter-structural friction. A distinguishing feature of the transformation of power relations seems to be the increasing role of flexible structures imposing the rules of the game upon the formal power hierarchies. In new systems, old functions lose the recognized factors of influence, such as state institutions. Exchange processes in the space of flows (information, knowledge, symbolic codes) also transform power potentials.

Manuel Castells states that:

> The new power lies in information codes and images of representations around which societies organise their institutions and around which people build their lives and decide about their behaviour. The location of such power is in human minds.[32]

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*Sustainability* 13 (2021): 12352; Alina Betlej, Tomas Kačerauskas, "Urban Creative Sustainability: The Case of Lublin," *Sustainability* 13 (2021): 4072.

[31] Philip N. Howard, *Castells and the Media* (Cambridge 2011); Manuel Castells, *Aftermath: the Cultures of the Economic Crisis* (Oxford University Press: Oxford UK 2012 a).

[32] Manuel Castells, *Siła tożsamości* [The power of identity], trans. by Sebastian Szymański (Warszawa 2008), 384.

The construction of boundaries and the scope of power is therefore of a social nature and takes place within a network. Its features will determine the negotiating form of power, which will take the form of rivalry, conflict, agreeing on interests or cooperation under a symbolic contract. Cultural bridges allow for negotiating meanings between different axionormative orders of networked spaces. "Becoming a society" is possible thanks to the permanent reproduction, reconstruction and confirmation of meanings. Communicative dissonance becomes a source of social conflicts.[33] A change in the power balance results in the breakdown of communication structures, their degradation, as well as potential exclusion. The logic of communication is related to symbolic power. The lack of a sharing culture poses the threat of the domination of global networks devoid of social control. The causative powers have their communication source. New technologies act as information and knowledge agents. The networks of mind and power are in this sense personalized. The ability to shape the human mind is an example of the influence field of performative factors in the network society. This process has a global reach. Communication programming comprises the entirety of human activities.

## Conclusions

Media, such as the Internet, play an important role in structuring variable power relations as a source of information. Network power relies to an even greater extent on the control of access to the news and the possibility of creating and distributing messages. Mass communication is shaped by power relations. The network space is subject to control,

[33] Taylor Owen, *Disruptive power. The Crisis of the State in the Digital Era* (Oxford 2015); Eugenia Siapera, *Understanding New Media* (Dublin 2012).

manipulation, propaganda, and indoctrination. The freedom of the social process of imparting meaning becomes more and more limited. The instrument of communication power is the media which, by means of framing, create narratives of reality. The attribute of power in the network is not only coercion, but also covert symbolic manipulation. The relationships between power and communication are also programmable. Therefore, it should not come as a surprise that power relations are of extra-social character. The processes of technological influence, taking into account network properties, are not rooted in objective points of reference. These driving forces have their own non-political meaning. There are no universal, unquestionable centers and sources of power in the network society.

The performativity of new technologies has its functional limitations. Defining technological tools, techno-science, social elites (and so on) as fields of mobilizing the resources of causative forces, leads again to the question of the purposefulness of the development interpreted in such a way, which to an even greater extent begins to resemble the design of society (social, marketing, social engineering, market, organizational) rather than real collectivity. Coordination and organization of social activities in network concepts is "exercised" through defined mechanisms. The normative, narrative and cultural conditions for reproducing the social order are network-mediated. The technologically acquired power relations will therefore cause specific effects in the reconfiguration of the social order. The currently dominant trends are of ambivalent character. They lead to the dispersion of power being at the disposal of various social actors, making the connected world an environment suitable for revealing the causative forces in action. At the opposite extreme, there are deepening tendencies for further centralization and control of network structures. The permanent foundations of the changes which took place in the 20th and 21st centuries are currently under discussion. Power relations still remain an undiscovered field in the exploration of network programs for social development. This theoretical model has

not yet been implemented into an empirical strategy for sociological research. It can be assumed that in the near future, technology valuation will be extended to this area of issues.

## Power Relations in the Network Society. A Sociological Approach

SUMMARY

This paper focuses on the sociological analysis of power relations in terms of the concept of the network society. It starts with a discussion on the network approach and its understanding in social sciences. The author analyzes several mediating notions such as social network, power, structure, language, and collectivity grounded in the sociological approach. Further analysis leads to the discussion of power relations in technologically developed societies. The author searches for answers to many fundamental questions to open up avenues for building a coherent network theory. To achieve these goals, she uses a sociological approach that is based mainly on the criticism of writing and the analytical and synthetic methods.

**Keywords:** network society, power relations, social network, new technologies

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**Mark K. Spencer**

# The Flexibility of Thomistic Metaphysical Principles: Byzantine Thomists, Personalist Thomists, and Jacques Maritain

Challenges to Thomistic metaphysics' ability to adequately account for the full range of human experience have arisen from many quarters, from St. Thomas' own day to our own. As we will see in this paper, these challenges have included the objections that Thomas' metaphysical principles are inconsistent with the best accounts of our experience of divine action in our lives and of our own subjectivity. Those committed to defending and using Thomistic metaphysics have generally responded to such objections in one of two ways. First, some have regarded defending the letter of Thomas' texts as a primary mark of what it is to be a Thomist.[1] Those who take this line generally argue that the metaphysical principles that Thomas posits, as he describes them, are adequate to account for the phenomena under discussion. Second, others have

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[1] On this trend, see Jorge J.E. Gracia, "Thomas, Thomists, and the Nature of Metaphysics: A Response to Delfino," in *What are We to Understand Gracia to Mean*, ed. Robert Delfino (Amsterdam: Rodopi, 2006), 89.

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argued that, while drawing principles and inspiration from Thomas, we should be willing to revise or augment his claims in order to remain true to his fundamental *realist* bent—that is, in order to primarily remain committed to accounting for real being in its entirety.[2]

In this paper, I consider the contemporary relevance of two schools of Thomism which take the latter approach. 'Byzantine Thomism' names a group of Greek thinkers of the fourteenth and fifteenth centuries who looked to both Thomas Aquinas and Gregory Palamas as authorities. 'Personalist Thomism' names some Catholic thinkers of the last century who seek to synthesize traditional Thomism with phenomenological personalism. Both present us with an opportunity for reflecting on how much the Thomist should be willing to revise Thomistic claims in order to account for real being as well as possible. While I endorse the view of both schools that the Thomist should be willing to revise or augment Thomas' claims, I also argue here that several of Thomas' metaphysical principles already have "flexibility" built into them, such that they can accommodate ways that reality is given in experience, which Thomas did not consider. Thomas leaves his account of metaphysical principles general enough that this account can be made more precise in ways that he may not have anticipated, but which he did not positively exclude.[3]

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[2] On this trend, see, e.g., Christiaan Kappes, "The Latin Sources of the Palamite Theology of George[i]Gennadius Scholarius," in *When East Met West: The Reception of Latin Theological and Philosophical Thought in Late Byzantium: Acts of the Institute of Classical Studies International Byzantine Colloquium, London, 11–12 June 2012*. eds. John A. Demetracopoulos and Charalambos Dendrinos (2013): 72–74; Jacques Maritain, *The Degrees of Knowledge*, trans. Gerald B. Phelan (Notre Dame: University of Notre Dame Press, 1995), 76; Karol Wojtyła, "Subjectivity and the Irreducible in the Human Being," in *Person and Community: Selected Essays*, trans. Theresa Sandok (New York: Peter Lang, 1993), 209–217.

[3] This paper builds on the account that I developed and defended in Mark K. Spencer, "The Flexibility of Divine Simplicity: Aquinas, Scotus, Palamas,"

I first present two interrelated challenges to the claims of traditional Thomism. I then consider how Byzantine and Personalist Thomists solved these challenges, focusing especially on their commitment to realism and on the metaphysical principles that they introduce in support of that commitment. In support of those schools' claims, and to advance my contention that Thomistic principles already have the flexibility required to be open to the claims of other realist schools of thought, I close by drawing some lessons from Jacques Maritain. If Thomism is to have a larger impact on contemporary thought, it would do well to learn from these schools' realist commitments and desire to synthesize Thomism with the claims of other schools of thought. This paper is not an original piece of scholarship on any of the historical figures mentioned in it. Rather, I show how these thinkers' claims can be synthesized in support of seeing the flexibility and openness of Thomistic metaphysics.

## Two Challenges to Thomistic Metaphysics

The challenges to Thomistic metaphysics with which I am interested here mostly have to do with the principles involved in divine and human spiritual—that is, intellectual and volitional—acts, and with our experience of those acts. First, there is the challenge, often raised by thinkers in the Byzantine tradition, of showing how divine simplicity is consistent with divine free action. According to Thomas, God is

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*International Philosophical Quarterly* 57 (2017): 123–139; and in *The Irreducibility of the Human Person: A Catholic Synthesis* (Washington: Catholic University of America Press, 2022). cf. James Dominic Rooney, "Classical Theists Are Committed to the Palamite Essence–Energies Distinction," in *Classical Theism: New Essays on the Metaphysics of God*, eds. Robert Koons and Jonathan Fuqua (New York: Routledge, 2022).

simple—everything that can be ascribed to Him is really identical to the pure, necessary actuality that He is. God is the ultimate cause and explanation for all things, and so is causally and explanatorily prior to all other things. For this reason, God must contain all perfections found in creatures, such that he lacks all imperfection, so that he can cause perfections in others. God must also lack any composition, internal distinctions, or potentiality that would require explanation or actualization by a prior unity, perfection, or actuality, since nothing is prior to God. This excludes from God composition out of form and matter, essence and existence, substance and accident, and so on, since each of these involve composition *out of* parts that are prior to the whole that they compose, and each of these involve the composed subject having a principle (like matter) that requires actualization by some higher principle, neither of which can be in God, the first principle of all things.[4]

But in this view, God also freely performs contingent acts of willing when He creates this contingent world.[5] The challenge goes as follows.[6] If those acts are identical to God's pure simple necessary actuality, then they too would be necessary; hence, they would not be free. But, if they are not identical to the pure actuality that He is, then either they add an accident to God or they are entirely outside Him. If they are accidents, then God is not simple, but has multiple actualities in Himself. If they are entirely outside of Him—for example, if His acts of knowing and willing creatures are actually relations inhering in creatures—then it is hard to see how they make any difference to

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[4] Thomas Aquinas, *Summa theologiae* (hereafter, *ST*) I q. 2. All works of Aquinas are cited from www.corpusthomisticum.org.

[5] Thomas Aquinas, I q. 19.

[6] This challenge is best summed up by David Bradshaw, *Aristotle East and West: Metaphysics and the Division of Christendom* (Cambridge: Cambridge University Press, 2007), 221–262.

God's *conscious experience*. To say that a being has conscious experience is to say that there is something that it is like subjectively (or from the first-person point of view) to be the subject of that experience, and that the subject of experience has awareness of some intentional object. It is not to imply that the subject undergoes changes or gains new information in having an experience.[7] Conscious acts belong, in some way, to the ones who perform or experience them. God would seem, in that view, to be exactly the same—and, so, it would seem to follow, He would have the same conscious experience—whether He creates or not. It is difficult to see how, in that view, he really, literally *loves* or *knows* you or me, since to love or to know, on any coherent understanding of those terms, involve first-personal awareness of the known or loved object.. Hence, God really, consciously performing free acts towards His creatures—and the experience of God's presence to us that seems to result from those acts, which people frequently have, as attested to, for example, in Scripture—seems incompatible with the Thomistic account of divine simplicity.

Traditional Thomists—who, in addition to holding other metaphysical positions, take act and potency to be the fundamental metaphysical principles, and hold that all creatures fit into the ten Aristotelian categories—have attempted to solve this problem in a range of ways.[8] Some, like Thomas Cajetan, posited variable features of God's pure actuality, which he called "free perfections."[9] In this view, when God wills or knows creatures, new perfections which are neither accidental

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[7] 'Experience' is used here in a more contemporary sense; it should not be taken to be equivalent to Thomas' '*experimentum*'. See Thomas Aquinas, *Expositio libri Posteriorum Analyticorum*, lib. 2, lect. 20, n. 11.

[8] These positions are exemplified, for example, in the 24 Theses put out in 1914 by the Vatican's Sacred Congregation of Studies.

[9] Thomas de Vio Cajetan, *Commentaria in summa theologiae*, v. 4, q. 19, a. 2–3 (Rome: S. C. de Propaganda Fide, 1888), 233–237.

actualizations nor extrinsic to God's pure actuality are added to Him. This was almost universally rejected by other Thomists as inconsistent with the claim that everything in God is identical to the one necessary, pure actuality He is. If God takes on contingent "free" perfections, then it would seem that God must have potencies that can be actualized in distinct, contingent ways—and, so, God would not be simple. Other Thomists held a range of views on divine action.[10] For most Thomists, the being of divine activities is identical to God. But everything variable and contingent in free divine actions that intend actual creatures, like the variable features of knowing or willing this or that actual creature, is real only in creatures. In God. the variable, contingent features of divine actions regarding actual creatures are only relations of reason—relations posited by our minds, but not really existing in Him, though they have a foundation in His being, which is identical to his power and his eternal act of knowing and willing Himself, features of God generally taken by Thomists to ground his acts intending creatures.[11] But, as already argued, this seems inconsistent with holding that He consciously knows or wills creatures, in any sense analogous to the acts we perform. Cajetan's view seems inconsistent with straightforward Aristotelian metaphysics; other Thomist views seem inconsistent with the Christian tradition's account of God as consciously involved in creatures' lives.

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[10] For a complete survey of Thomistic views on divine action, in which at least five distinct views held by different Thomists are distinguished, see my paper with W. Matthews Grant, "Activity, Identity, and God: A Tension in Aquinas and His Interpreters," *Studia Neoaristotelica* 12 (2015): 5–61.

[11] Thomas Aquinas, *ST* I, q. 13, a. 7; q. 14, a. 5–6. For versions of the majority Thomistic views, see, e.g, John of St. Thomas, *Cursus theologicus*, v. 2, *In Primam partem D. Thomae*, q. 19, d. 4, a. 4, n. 16 (Lyon: Borde, Arnaud, Borde, and Barbier, 1673), 122; Salmanticenses, *Cursus theologicus*, v. 2, *De voluntate dei*, d. 7, dub. 1, s. 1, (Paris: Victor Palmé, 1876), 102–103.

A second challenge focuses on whether Thomistic metaphysics can account for *our* subjective interiority or irreducible first-person awareness of ourselves; since this is a directly given feature of reality, a realist metaphysics should be able to account for it. Some philosophers in the Byzantine tradition, like Christos Yannaras, have argued that Thomistic metaphysics reduces all human acts to aspects that can be defined objectively or in third-person terms, but lacks a place for subjective experiences of participating *as persons* in the cosmos and in God.[12] Similarly, many Western Personalists, even Thomistic ones like Karol Wojtyła, have objected to Thomists' tendencies to seek a rational definition or description and objective categorization for all features of reality. They contend that subjective interiority is accessible only from a first-person point of view. As such, it is real but cannot be defined objectively—that is, it cannot be defined in such a way that the definition would allow us to grasp *what* subjective interiority *is* from a purely third-person, exterior, or public point of view. Rather, in either view, Thomistic metaphysics must be amended or expanded to include categories (that is, fundamental kinds) of being that are exclusively accessible from the first-person point of view.[13]

Thomists who have sought to find a place for subjectivity in Thomistic metaphysics, like Therese Cory, have pointed to Thomas' account of how spiritual acts are "self-present" and "reflexive." They both intend an extrinsic object and turn back upon themselves, which leads to self-awareness.[14] But while this is an attempt to account for subjective interiority, it still explains self-awareness precisely in terms of objectively definable categories, like relations. As with the tradi-

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[12] Christos Yannaras, *Person and Eros*, trans. Norman Russell (Brookline: Holy Cross Orthodox Press, 2007), 194, 210–20.

[13] Wojtyła, "Subjectivity and the Irreducible in the Human Being," 209–217.

[14] Therese Scarpelli Cory, *Aquinas on Human Self-Knowledge* (Cambridge: Cambridge University Press, 2014).

tional response to the first problem, directly given features of the phenomenon that need explaining are actually left out of this account, in an attempt to fit the phenomenon into traditional metaphysical categories.

## The Response of Byzantine Thomism

Having presented these challenges and the potential deficiencies with traditional Thomistic answers to them, I now turn to the Byzantine Thomist solution to the first challenge. First, I must say a bit about this school in itself. Byzantine Thomism arose in the fourteenth century in connection with controversies over the metaphysical theology of St. Gregory Palamas. Some medieval Byzantine Thomists, like Demetrios and Prochoros Kydones, used the texts of St. Thomas to argue against Palamas. But others, like Theophanes of Nicaea, Manuel Palaiologos, and especially George Gennadios Scholarios, synthesized Palamite and Thomistic claims. When I refer to Byzantine Thomism, I mean this latter, synthetic school, to which attention has been called recently, for example, by John Demetracopoulos, Christiaan Kappes, and Marcus Plested.[15]

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[15] My account of Byzantine Thomism and of these figures' views is drawn from: John Demetracopoulos, "Palamas Transformed. Palamite Interpretations of the Distinction between God's 'Essence' and 'Energies' in Late Byzantium," in *Greeks, Latins, and Intellectual History* 1204–1500, eds. Martin Hinterberger and Chris Schabel (Leuven: Peeters, 2011), 263–372; Christiaan Kappes, "Latin Sources of the Palamite Theology of George-Gennadius Scholarius"; Christiaan Kappes, "A Provisional Definition of Byzantine Theology *Contra* "Pillars of Orthodoxy"?" *Nicolaus: Rivista di Teologia Ecumenico-Patristica* 40 (2013): 187–202; Christiaan Kappes, J. Isaac Goff, and T. Alexander Giltner, "Palamas Among the Scholastics," *Logos: A Journal of Eastern Christian Studies* 55 (2014): 175–220; Marcus Plested, *Orthodox Readings of Aquinas* (Oxford: Oxford University Press, 2012), 63–126.

In Palamas' view, all beings, just insofar as they are beings, manifest themselves as the kinds of beings that they are. In each being, there is a distinction between that which is manifested when the being manifests itself—its essence (*ousia*)—and the manifestations of that essence—its activities (*energeiai*).[16] *Energeiai* manifest *ousia*; each being has *energeiai* typical of the kind of being it is in virtue of its *ousia*. The distinction between *ousia* and *energeiai* is justified, for example, by experiences of beings, including God and human beings, manifesting themselves, and by experiences of being able to experientially participate in other beings' activities, for example, when we share in God's charity. When we experience a being manifesting itself, or when we share in another being's activities, that being does not exhaust itself in manifesting or sharing itself. Rather, even as we experience the other being, it also transcends itself; it really manifests itself to us, and it really continues to exist beyond that manifestation. The former is accounted for by its *energeiai*, the latter by its *ousia*. Both belong to what it is to be a being. As the supreme being, and as one in Whom we can participate experientially (that is, in a first-person or subjectively aware way), God too includes both *ousia* and *energeia* in the one simple (i.e., non-composite) being that He is. Beings are not composed from *ousia* and *energeiai*. For a being to be composed is for there to be parts in that being out of which it is made, such that they are causally or explanatorily prior to that being.[17] But *ousia* and *energeia* are not parts and are

[16] My account of Palamas' metaphysics is drawn from his texts: *The Triads*, trans. Nicholas Gendle (Mahwah: Paulist Press, 1983), 80–107; "Topics of Natural and Theological Science and on the Moral and Ascetic Life: 150 Texts," in *The Philokalia*, v. 4, ed. G. E. H. Palmer, et al. (London: Faber and Faber, 1995), 378–417; *Dialogue between an Orthodox and a Barlaamite*, trans. Rein Ferwerda (Binghamton: Episteme, 1999); "On Divine and Deifying Participation," trans. Kirsten H. Anderson, *Analogia: The Pemptousia Journal for Theological Studies* 4 (2017–2018): 5–26. See also Bradshaw, *Aristotle East and West*, c. 8–10; Yannaras, *Person and Eros*.

[17] See Thomas Aquinas, *Sentencia libri Metaphysicae*, lib. 5, lect. 7.

not prior to their being; rather, they belong to the structure of being as such. A being's *ousia* is what it is; a being's *energeia* is its manifestation. Every being has content that explains what it is, and every being manifests itself and manifests what it is.

Hence, as Palamas and his followers affirm, God is entirely simple, yet this is consistent with God having distinct *ousia* and *energeiai*.[18] We grasp that God has *energeiai* by coming to be aware of how we share in His life and how He reveals Himself to us. We grasp that God has *ousia* by being aware that, as with any being, there is something that it is to be God, in virtue of which all His acts are divine. Furthermore, since we have good reason to think that God is a free being, some of His *energeiai* must be free and, so, contingent.

Byzantine Thomists seek to meet the first challenge, the one regarding contingent divine action, by bringing together Thomistic and Palamite metaphysical accounts of God. (The Palamite account of *energeiai* may be able to help solve the second, Personalist objection too, since, as we saw in the last section, contemporary Palamites, like Yannaras, argue that at least some *energeiai* cannot be rationally or objectively defined, but must be grasped by experiencing them from within.) If every being as such intrinsically includes both *ousia* and *energeia*, then God can be both simple and free. He is simple because He is not composite and because He is identical to a single actuality or act of being, which intrinsically includes variable acts or manifestations. He is free because He is a spiritual being and so intrinsically includes contingent activities; these manifestations of what God is do not become necessary merely because the *ousia* with which they are

[18] Georgios Mantzaridis, "Simplicity of God According to St. Gregory Palamas," in *Triune God: Incomprehensible but Knowable—The Philosophical and Theological Significance of St Gregory Palamas for Contemporary Philosophy and Theology*, ed. Constantinos Athanasopoulos (Newcastle-Upon-Tyne: Cambridge Scholars, 2016), 19–27.

one in being, and which they make manifest, is necessary. Neither are they mere relations of reason—that is, relations just posited by human minds to explain things. Rather, they are manifestations of divine *ousia*, and they really and "internally"—and, so, consciously—belong to God. They are not accidents, in the sense of being additional beings or additional perfections over and above the pure perfection that He is; rather, they belong to the very structure of His being as such, and are manifestations of His pure perfection. Finally, they do not involve trying to squeeze variability in God into a metaphysical system which admits only act and potency as the fundamental metaphysical divisions of reality, as Cajetan does with his *ad hoc* positing of "free perfections."

Rather, in the Byzantine Thomist view, the distinction between *ousia* and *energeiai* is just as foundational to metaphysics as that between act and potency, though the two distinctions are not reducible to each other. For a being to take on *energeiai* is not, *ipso facto*, for that being to take on an accidental operation or actualization. Rather, to take on contingent *energeiai* is just to be made manifest; this only involves accidental actualization if it involves taking on a new perfection, as operations generally do in us. Since God cannot take on new perfections, God's contingent *energeiai* only involve his perfection being manifested in a new way, not his taking on an accident. *Energeiai* are posited in God as just the divine case of a metaphysical item belonging to being as such.

In addition to holding these Palamite views, the Byzantine Thomists also adopt various claims from Thomas, which they think provide an opening for adding the Palamite claims to his metaphysics. For example, the Byzantine Thomists accept from Thomas the view that predicates ascribed to God are not synonymous and so there is some foundation in God for the distinctions we make among His attribute and acts.[19] Palamas fills in the details as to what that foundation is: while all

[19] Aquinas, *ST* I, q. 13, a. 4.

divine attributes are one in being or actuality with each other, they are distinct ways God manifests Himself, and so are to be understood as distinct *energeiai*. Thomas affirms that all the perfections found in creatures are pre-contained in God's unified actuality.[20] Again, Byzantine Thomism sees Palamas' distinction as fleshing out how that pre-containment works: those perfections are all one in being with God, but are the many ways in which He shares Himself with creatures as available to be participated, that is, they are many *energeiai*. Finally, Thomas holds that real distinctions, such as the distinction among the Trinitarian Persons, are compatible with divine simplicity, since they do not add additional, absolute (or non-relational) perfections to God.[21] Byzantine Thomists just affirm another (in some interpretations, real) distinction, that between *ousia* and *energeiai*, as compatible with simplicity.

But some Byzantine Thomists, like Scholarios, use other scholastics' work to bridge the potential metaphysical gap between Thomas and Palamas. Scholarios, in the interpretation of some modern scholars, sees Thomistic divine simplicity as incompatible in itself (that is, as it is literally expressed by Thomas) with the Palamite *ousia–energeia* distinction. He uses John Duns Scotus' and Herveaus Natalis' use of the *formal distinction*—a distinction that is more real than a conceptual distinction, but does not amount to a full real distinction (that is, one involving separability or difference in perfection among the *differentia*)—to account for how one real being can contain, in itself, multiple aspects.[22]

Each of these accounts is a potential solution to the first problem; each one accounts for more features of given reality than the traditional Thomistic view does. But each joining of Western scholastic and Palamite claims presented so far is not clearly a coherent, synthesized

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[20] Aquinas, *ST* I, q. 4, a. 2.

[21] *Ibid*., q. 28, a. 3.

[22] See the sources cited in note 16 above.

view, but a somewhat *ad hoc* and eclectic view, juxtaposing aspects of views without giving a fully principled, metaphysical synthesis. Their affirmation of all these claims is motivated by their thoroughgoing *realism*, their desire to account for all aspects of reality as it appears to us. But with the introduction of these novel kinds of distinction, one might worry that we have moved away from any grounding in the principles of Thomism—and so that the resulting view is not clearly one the *Thomist* could take up.

## The Response of Personalist Thomism

This absence of a fully worked-out synthesis remains if we turn to the way the second challenge has been solved by Personalist Thomism. Personalism emphasizes the irreducibility of persons to anything non-personal, focusing on the importance of subjective or first-person experiences for grasping that irreducibility and for understanding what it is to be a person. They focus not on acts or passions considered objectively as actualities or potentialities inhering in a substance, but on the first-person subjective experience of performing acts, undergoing feelings, and acting with others.[23] Personalist *Thomists* have joined Thomistic and Personalist claims. A representative of such thinkers is Karol Wojtyła. Following traditional Thomism, Wojtyła affirms the foundational status of act, potency, and the ten categories of being.

[23] With its emphasis on personal, subjective *energeiai* in an experiential, not rationalistically definable way, Palamism anticipates some of the claims of Personalism. On possible similarities between Personalism and Palamism, see Hans Urs von Balthasar, *Theo-Drama: Theological Dramatic Theory*, v. 5, *The Last Act*, trans. Graham Harrison (San Francisco: Ignatius Press, 1998), 408; John Zizioulas, *Being as Communion: Studies in Personhood and the Church* (Crestwood: St. Vladimir's Seminary Press, 1997).

But, in response to the second challenge, Wojtyła seems to posit a new category of being: lived experience. Following the Personalists, he argues that lived or subjective interior experience cannot be objectively defined, as act, potency, and the ten traditional categories are. What it is can and must be grasped only from within. In order to fully grasp all aspects of reality—in order to be truly *realist* philosophers—we must "pause at the irreducible," at subjective or lived interiority, and account for it in a way distinct from other aspects of being.[24]

Unlike traditional Thomism, which would account for first-person subjective awareness through an objective account of human spiritual acts, noting that these acts aim both at some object and, reflexively, at themselves, this Personalist Thomist account offers a solution to the second challenge that does not deny the very thing it seeks to explain. Subjective experience is not accounted for in terms of objective features of beings. Rather, it is explained as a kind of being in its own right, one that is indefinable and can only be grasped in itself. But while this provides a metaphysical solution to the second challenge, it does so (as with the Palamite solution to the first problem) in a way that will appear to the strict Thomist to be *ad hoc*, merely tacking a new principle onto Thomistic metaphysics, without accounting for how this new category is united to the others.

## Jacques Maritain on the Interiority of Metaphysical Principles

We have now seen that Byzantine and Personalist Thomism fit well with Thomism's *realism*: their attention is on reality as it is given to us, and they posit metaphysical principles to explain that reality. Those

[24] Wojtyła, "Subjectivity and the Irreducible in the Human Being," 213.

principles, however, do not fit as well as possible with traditional Thomistic metaphysics. What is needed is an interpretation of Thomistic metaphysics that allows the items posited by Byzantine and Personalist Thomism—*energeiai*, formal distinctions, irreducible subjectivity, and so forth—to be coherently integrated into it. We need to more fully see that Thomistic metaphysical principles, considered in themselves, have the flexibility to accommodate the additions suggested by these later schools of Thomism. Only then will we have a fully integrated, realist, properly Thomistic metaphysics, as opposed to an eclectic juxtaposition of claims from various metaphysics. We find the basis for such an interpretation of Thomistic metaphysical principles at least implicitly in the work of Jacques Maritain, as will be seen from the following three examples.

The first example is found in Maritain's development of Thomas' definition of "person" as an individual substance of a rational nature or an incommunicable existent of an intellectual nature.[25] But Maritain shows that to fulfill these definitions is to have certain subjective aspects. To be incommunicable is not just (as Thomas' texts have it) to be unable to be given over to another as a part is given to a larger whole or a universal to a particular. Rather, as an *intellectual* being who is unable to be given over to another, a person possesses him or herself as that kind of being, that is, as a thinking, reflexive being—in other words, for a person to be incommunicable is to possess oneself *subjectively*. To be intellectual is not just to have a potentiality for objectively definable acts of knowing and willing. Rather, it is to be

[25] *ST* I, q. 29, a. 3; *Scriptum super Sententiis*, lib. 3, d. 5, q. 2, a. 1, ad 2. For this account of personhood from Maritain, see *The Person and the Common Good*, trans. John Fitzgerald, (New York: Charles Scribner's Sons, 1947), chapters 3 and 4. The argument in this paragraph develops the account that I gave in Mark K. Spencer, "Aristotelian Substance and Personalistic Subjectivity," *International Philosophical Quarterly* 55 (2015): 145–164.

subjectively oriented to give oneself thorough knowledge and love out of that spiritual center of existence wherein one possesses oneself. Thomas' own definitions of "person" cannot be fully grasped from without, in the manner of a definition; their full meaning can only be grasped from within, from the first-person standpoint of engaging in acts of possessing and giving oneself. We can draw from Maritain's fleshing out of Aquinas' account of personhood the observation that Thomas' metaphysical principles themselves, fully understood, have not only an exterior, objective, rationally definable side, but also an interior aspect, graspable and describable only from within. Personhood in Thomas' account already has the flexibility to accommodate, within itself, many of the concerns put forward by the Personalist Thomists.

A second, similar example is in Maritain's account of the mystical life. Thomistic metaphysics, which Maritain endorses, explains the acts of love whereby we are united to God in spiritual marriage in terms of acts of our power of will, the intentional relation they bear to their object, and the way in which lover and beloved are in one another by intentional being, as opposed to entitative, real being. To be in another by entitative being is to be actually absorbed into another, that is, to be made a part or property of another. To be in another by intentional being is have one's form or likeness in the other as known or as loved, but to continue existing apart from that other as well. This is an objective account of the relations between the creature and God. But Maritain integrates to this objective, third-person account, an often metaphorical but correct description of our transformation into God from the interior, first-person point of view, based on the claims of the great mystics, such as John of the Cross and Teresa of Avila.[26] Once again, the metaphysical items posited by the scholastics have, in them-

[26] Maritain, *Degrees of Knowledge*, 392–408.

selves, an "outside" and an "inside," an exterior aspect that can be defined objectively and in the terms of traditional metaphysics, and an interior, conscious aspect that cannot be reduced to the objectively-definable side, but that is not really distinct from it either.

A third example is found in Maritain's aesthetics.[27] In Aquinas' view, the human intellect includes the power known as the "agent intellect."[28] When I grasp things through the senses, I take in forms or likenesses of those things, and hold those forms in my internal sense powers; these forms are known as "phantasms." Through these forms, I am aware of sensible things as particulars. To become aware of things intellectually, as having essences and as falling under universal concepts, I must be able to draw out and actually grasp the potentially intelligible features of sensible things. The power to do this is the "agent intellect," which illumines and bestows intelligible being on phantasms whose content is to be known, and thereby produces concepts and words by which those phantasms and the sensible beings they represent are actually known. This process can be portrayed in the objective terms of describing the causal processes posited by Thomistic rational psychology. The reflexivity of our intellectual acts, described above, belongs to this level of description. But Maritain adds to this an account of what we discover and are enabled to express by an interior exploration of these acts. When we consider the act of rendering what we have sensed intelligible, we discover a whole interior world of the unconscious. Included in the "light" of the agent intellect—the power to render any sensible form intelligible—are many unconsciously grasped forms. Our unconscious potential grasp on all possible sensible forms affects how our phantasms are rendered intel-

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[27] Maritain, *Creative Intuition in Poetry and Art* (New York: Pantheon, 1953), chapters 3, 4, and 7.

[28] This account is summarized from Aquinas, *Sentencia libri De anima*, book 3, lectios 7–10.

ligible and understood. The varying, subjectively grasped ways in which different persons render phantasms intelligible can be expressed in artworks. Yet again, the objectively, causally, rationally describable metaphysical aspects of us—such as the power and acts of the agent intellect—are themselves intrinsically subjective, with an interior aspect accessible only from a first-person point of view.

## The Flexibility of Metaphysical Principles

Maritain's way of presenting the interior and the exterior aspects of human acts, powers, and substance opens up a new way of thinking about the principles posited by Thomistic metaphysics. Those principles are, we might say, *flexible*: we can come to see that those principles themselves, the very principles identified and described by Thomas, include aspects that he and other Thomists did not fully grasp. The fact that Thomism has picked out a feature of reality using a certain principle—say, act or potency—and has historically defined or described that principle in a certain objective way, does not *ipso facto* preclude that very same principle from being described in another, subjective way. St. Thomas did not describe the agent intellect as having a subjectively unconscious aspect—but the given reality that he described with the notion of the agent intellect admits of such a description. He did not describe metaphysical personhood as intrinsically involving subjective self-possession or self-gift, but the description of personhood as *incommunicable* and *intellectual* is flexible enough to be open to being further elucidated in this way.

My claim that Maritain shows the *flexibility* of Thomistic principles, if correct, opens up a way to integrate the Byzantine and Personalist metaphysical claims into traditional Thomistic metaphysics in a more coherently synthesizing way than the members of those school integrated them. This way also allows these schools to be

further developed. The examples drawn from Maritain already show how to integrate the Personalist idea of lived experience into the Thomistic account of being: lived experience is not a distinct category of accident in human persons, but the interior aspect of personhood and of accidents (like powers and acts) inhering in human substances and belonging to the nine traditional Aristotelian categories of accidents. Lived experience or subjectivity is really identical to members of categories posited by traditional Thomists, but a distinct aspect of those beings. The Thomist can salvage the Personalist idea of "pausing at the irreducible" without positing a distinct category of being awkwardly joined to the traditional ten. The Thomist can do this because those traditional categories are not bound to just those aspects that have been traditionally described in them, but they are flexible enough to include a subjective aspect.

In a similar way, the Thomist can integrate Palamite claims into Thomistic metaphysics. Thomas explicates what it is to be a *being as such* in terms of the notions of actuality and the transcendentals (like unity, truth, and goodness).[29] He does not explicitly posit the idea of many formally distinct aspects or many *energeiai* in a being, one in being with it, but neither does he deny this possibility.[30] Rather, he just affirms that everything ascribable to being as such is really identical to it and conceptually distinct from it. That is consistent with aspects of being also being formally distinct or distinct in other ways. Thomas just does not address the possibility of items being distinct from one another in those ways. I contend that, given that he does not exclude the possibility and given his realist orientation, his account of being should be regarded as flexible enough to be open to this addition, if

[29] For example, at *Quaestiones disputatae de veritate* (hereafter, *DV*), q. 1, a. 1.

[30] The Palamite distinction is not exactly the formal distinction, since when a being, in Duns Scotus' view, has many formalities in itself, they are all necessary for that being to exist, but many *energeiai* in beings are contingent.

this addition is warranted by the way reality is given, or by the need to solve challenges left unsolved in other metaphysics.

As we saw in considering Byzantine Thomism's account of God above, Thomas holds that many of the distinctions we conceptually make about beings are grounded in facts about those beings in themselves. He also shows, by the variations in the lists of the transcendentals that he posits, that his account of being is meant to be open to the possibility that there are more aspects of being that he has not explicitly posited. For example, at times he includes just unity, truth, and goodness on this list;[31] at other times, he includes properties like *res* and *aliquid* on lists of properties belonging to all beings;[32] and in still other places, he suggests that beauty or multitude are transcendentals or properties of all beings.[33] Since, on his view, every being is true and good—that is, it is apt to be known and desired, apt to come together (*convenire*) with minds and wills[34]—it follows that, on his view, every being manifests itself and is active. The Palamite distinction between *ousia* and *energeia* can be understood as an elaboration on the internal structure of being insofar as it has these transcendentals. Each being has an essence and includes events or activities of self-manifestation, in which it manifests itself to other beings' intellects and wills as the kind of being it is. While Thomas understands the transcendentals truth and goodness to be relations of reason,[35] this must be rightly understood. A *relation of reason* is, fundamentally, a relation that does not involve real dependence on another and does not add any perfection or accidental actuality to the related being, whereas a real relation involves dependence on another.[36]

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[31] Aquinas, *DV*, q. 21, a. 1.
[32] *Ibid*., q. 1, a. 1.
[33] Aquinas, *ST* I, q. 5, a. 4, ad. 1; q. 30, a. 3.
[34] Aquinas, *DV*, q. 1, a. 1.
[35] *Ibid*., q. 21, a. 1.
[36] See Aquinas, *ST* I, q. 13, a. 7; q. 45, a. 3.

But on this account, the category of "relation of reason" is flexible enough to include relations that make a real difference to their foundation, so long as they do not involve any real dependence on another being or any increase in their foundation's perfection. A divine *energeia*, like an act of freely willing a creature to exist, would count as a "relation of reason" on this account, even though it makes a real difference to God's conscious experience.[37]

I propose that, as the Byzantine Thomists hinted but did not adequately show, the Palamite distinction between *ousia* and *energeiai* just adds further details to this account of the internal structure of being.[38] To be a being is to include acts of self-manifestation, in accord with the kind of thing one is. But this is to say that to be a being is to include multiple *energeiai*. Each of the *energeiai* in a being are one in being with that being. As in the dialogue with the Personalists, there is no need to add a new principle beyond those posited by Thomism; what the Palamites provide is just more detail on the internal structure of being or actuality as such. God is pure act, but being pure act includes, internally, *ousia* and free *energeiai*. These are not new perfections in God, over and above the pure act that he is, unlike on Cajetan's view,

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[37] Several philosophers in the Jesuit tradition have seen that "relation of reason" is a category flexible enough to include intentional relations and relations of conscious awareness of others, so long as this does not imply any change to God in which He would take on dependence on another or take on new perfections. See Norris Clarke, "A New Look at the Immutability of God," in *Explorations in Metaphysics: Being-God-Person* (Notre Dame: University of Notre Dame Press, 1994), 183–210; Pedro da Fonseca, *In libros metaphysicrum Aristotelis Stagirita*, c. 8, q. 5, s. 4–5 (Frankfurt: Schanuuertteri, 1599), v. 2, 382–386.

[38] As Byzantine Thomists like Scholarios point out, in Thomas' view, God's one being is identical to multiple distinct real relations—the Persons of the Trinity—and so Thomas' notion of being is actually flexible enough to include an internal structure involving multiple real relations and real distinctions, another reason to think it can include *energeiai*.

but are aspects of His one, pure actuality. God's *ousia* and *energeiai* are God; they are identical to him, that is, one in being with him.

Byzantine and Personalist Thomism set a fine model for contemporary Thomists in their unswerving commitment to realism. They rightly draw on non-Thomistic schools of thought when these are beneficial for describing aspects of reality. Thomists would do well to emulate their example in this regard. But as Maritain's example shows, there is no need to take these schools to be positing entirely new metaphysical principles, beyond those already posited by Thomism. Rather, they can and should be understood as exploring the flexible internal structure of the already posited Thomistic principles. Because Thomism has this flexibility, we can, through this exchange, see the extraordinary realism already present in the Thomistic principles themselves: the framers of these ideas, as it were, wrought better than they knew, and described the objective features of reality so well, that they left the door open for a description of the subjective and *energeiai* features of those same realities. The Thomistic realist should integrate as much as possible from other schools of thought, if those schools give an advantage for explaining all of reality, but he or she should be confident that the Thomistic system already has what it takes to coherently integrate these new ideas.[39]

[39] An earlier version of this paper was presented at the 2020 conference of the American Maritain Association. I am grateful to Matthew Minerd for inviting me to give that talk, and to those who discussed this paper with me there, especially John Crosby, Jim Hanink, and Fr. Christiaan Kappes. I am also grateful to David Bradshaw and Fr. Matthew Kirby for correspondence on the topics of this paper, and to Mary Lemmons and an anonymous referee for comments on an earlier draft of this paper.

## The Flexibility of Thomistic Metaphysical Principles: Byzantine Thomists, Personalist Thomists, and Jacques Maritain

SUMMARY

Thomistic metaphysics has been challenged on the grounds that its principles are inconsistent with our experiences of divine action and of our own subjectivity. Challenges of this sort have been raised by Eastern Christian thinkers in the school of Gregory Palamas and by contemporary Personalists; they propose alternative metaphysics to explain these experiences. Against these objections and against those Thomists who hold that Thomas Aquinas' claims exclude Byzantine and Personalist metaphysics, I argue that Thomas' metaphysical principles already have "flexibility" built into them, such that they can accommodate ways that reality is given in experience, which Thomas did not consider. I argue for this claim using the work of Byzantine and Personalist Thomists, and especially of Jacques Maritain, who outlines several ways in which Thomistic metaphysical principles can be expanded to explain experiences that he did not consider.

**Keywords**: thomism, Thomas Aquinas, Gregory Palamas, Karol Wojtyła, Jacques Maritain, divine action, divine simplicity, essence-energies distinction, subjectivity, personalism, metaphysics, real and rational distinctions

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# *Disputatio* on the Distinction between the Human Person and Other Animals: the Human Person as Gardener

## I

The question of human uniqueness is a matter of much contemporary debate in scientific, philosophical, and theological circles.[1] Constructive dialogue around the complexities of this question, especially in light of the findings of modern science and philosophy, is important because differentiating human beings from other animals is essential for understanding the nature and purpose of human life and

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[1] See, for example: Marc Bekoff, Collin Allen, & Gordon Burghardt, eds., *The Cognitive Animal* (Cambridge, Massachusetts: MIT Press, 2002); Maciej Henneberg & Arthur Saniotis, *The Dynamic Human* (Sharjah, UAE: Bentham Science Publishers, 2016); Tetsuro Matsuzawa, *Primate Origins of Human Cognition and Behavior* (New York: Springer, 2001); Leon R. Kass, *Toward a More Natural Science: Biology and Human Affairs* (New York: The Free Press, 1985); Alasdair McIntyre, *Dependent Rational Animal* (Chicago, IL: Carus Publishing Company, 1999); Josep Call,

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the specific role of the human person in nature. The literature is replete with studies examining human uniqueness in light of particular physiological or intellectual capacities such as brain size, skeletal structure, language, empathy or moral judgment.[2] In this article, we consider an attribute of human beings that is unexplored in the literature about human uniqueness – namely, the human capacity to garden. Following Aquinas's model of *disputatio* in order to engage in robust dialogue around the question of human uniqueness, we aim to show that the human capacity to garden is unique and distinctive among all natural beings. Specifically, we argue that humans garden in a way that no

"Descartes' two errors: Reason and reflection in the great apes," in *Rational Animals?*, ed. Susan Hurley & Matthew Nudds (Oxford: Oxford University Press, 2006); Larry Azar, *Man: Computer, Ape, or Angel* (Hanover, Mass.: The Christopher Publishing House, 1989); Mortimer Adler, *The Difference of Man and the Difference It Makes* (NY: Fordham University Press, 1993); Marie George, "Thomas Aquinas Meets Nim Chimpski: On the Debate about Human Nature and the Nature of Other Animals," *Aquinas Review* 10 (2003): 1–50; Celia E. Deane-Drummond and David Clough, eds., *Creaturely Theology: Of God, Humans and Other Animals* (London: SCM Press, 2009); and many others.

[2] See, for example: Ajit Varki, Daniel H. Geschwind, & Evan E. Eichler, "Explaining human uniqueness: genome interactions with environment, behavior, and culture," *National Review of Genetics* 9, no. 10: 749–763 (2008); Kim Hill, Michael Barton, & Ana Magdalena Hurtado, "The Emergence of Human Uniqueness: Characters Underlying Behavioral Modernity," *Evolutionary Anthropology* 18: 187–200 (2009); Philip Lieberman, "Human Language and Human Uniqueness," *Language & Communication* 14, no. 1: 87–95 (1994); Jordan Zlatev, "Human uniqueness, bodily mimesis and the evolution of language," *Humana. Mente Journal of Philosophical Studies* 27: 197–219 (2014); James R. Hurford, "Human uniqueness, learned symbols and recursive thought," *European Review* 12, no. 4: 551–565 (2004); Shigeru Watanabe, "Evolutionary origins of empathy" in Douglas F. Watt & Jaak Panksepp, eds. *Psychology of Emotions, Motivations and Actions: Psychology and Neurobiology of Empathy*, 37–61 (Nova Biomedical Books, 2016; Francisco J. Ayala, "The difference of being human: Morality," *Proceedings of the National Academy of Sciences* (*PNAS*) 107, suppl. 2: 9015–9022 (2010); Jean Decety, "The Neurodevelopment of Empathy in Humans," *Developmental Neuroscience* 32: 257–267 (2010); and many others.

other creature does and that this unique human capacity can help elucidate critically important aspects of the nature and role of humans in the natural world.[3]

Gardening holds a special place in the history of humanity, beginning with the earliest cultivation of food, as the transition from hunter-gatherer to farmer was a signal one in human evolution and laid the foundation for changes in health and culture, including the development of civilization as we know it.[4] Prior to the advent of agriculture at the start of the Neolithic Revolution approximately ten to twelve thousand years ago, humans were primarily hunter-gatherers. The shift from foraging to farming precipitated revolutionary changes in diet and social organization that allowed for dramatic increases in popula-

[3] As will be seen, we understand human gardening as a unique second order capacity, which is a habit made possible by the first order animal and rational capacities.

[4] History.com editors. "Neolithic Revolution" (updated August 23, 2019), https://www.history.com/topics/pre-history/neolithic-revolution/: Michael Balter, "The Seeds of Civilization" (May 2005), https://www.smithsonianmag.com/history/the-seeds-of-civilization-78015429/; Bruce Smith, *The Emergence of Agriculture*, Scientific American Library Series (New York: W.H. Freeman & Company, 1999); Peter H. Thrall, James D. Bever, & Jeremy J. Burdon, "Evolutionary change in agriculture: the past, present, and future," *Evolutionary Applications* 3: 405–408 (2010), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3352499/David Rindos, *The Origins of Agriculture: An Evolutionary Perspective* (San Diego: Academic Press, 1984); Timothy M. Ryan and Colin N. Shaw, "Gracility of the modern Homo sapiens skeleton is the result of decreased biomechanical loading," *Proceedings of the National Academy of Sciences* (*PNAS*) 112, no. 2 (13 January 2015): 372–377; Habiba Chirchir, Tracy Kivell, Christopher Ruff, Jean-Jacques Hublin, Kristian Carlson, Bernhard Zipfel, and Brian Richmond "Recent origin of low trabecular bone density in modern humans," *Proceedings of the National Academy of Sciences* (*PNAS*) 112 no. 2 (2015): 366–371; Clark Spencer Larsen, "Agriculture's Impact on Human Evolution," lecture at *The Evolution of Human Nutrition* event, (Dec 7, 2012), University of California-San Diego, https://carta.anthropogeny.org/events/sessions/agricultures-impact-human-evolution; John Hawks, "Evolution of human genes and the origin of agriculture," YouTube video posted June 24, 2014, from https://www.youtube.com/watch?v=9SnmmSZGV88.

tion size as well as the formation of settlements. More settled lifestyles and changes in workload laid the foundation for the development of technology and other forms of technical innovation related to food production. The surplus in food that comes with the advancement of farming gave rise to not only to the division of labor and new technologies for the amelioration of human suffering, but also the freedom of leisure time, which enabled human beings to pursue theoretical inquiry (knowledge for its own sake) in the arts and sciences.[5] In short, the transition to agriculture was the "crucible of evolutionary change" that initiated "enormously profound" impacts on human evolution and paved the way for the formation of human society as we know it today.[6]

The capacity to garden, thus, holds a unique significance for human evolution and history. Superimposed on this from a Christian standpoint is the Biblical call in Genesis for humans to garden and utilize plants and animals for their sustenance.[7] While philosophers have tended to emphasize human acts of reason and language as demonstrations of human uniqueness, the order of scripture suggests—since Adam was given the role of steward prior to naming the creatures—that a more appropriate starting point is with man acting as gardener. For these reasons, and because the distinctiveness of human farming is underexplored in the literature, we believe a focus on this particular attribute can make a unique contribution to ongoing debates about human uniqueness.

Indeed, focusing on the distinctiveness of human farming is especially important in the face of contemporary scientific research that has demonstrated that a number of nonhuman creatures also possess the

[5] A fact first noted by Aristotle regarding the founding of the mathematical arts by the priest class of Ancient Egypt. See *Metaphysics* 1.1 (981b22–24).

[6] Thrall, Bever, & Burdon, "Evolutionary Change in Agriculture," 405.

[7] See Genesis 1:27–30 and 2:15.

capacity to farm. These findings have bolstered the assertion in certain scientific circles that the gap between humans and other animals is not as wide as was once thought and that, in fact, humans are not significantly different from other animals. The philosophical underpinnings of this view can be found in accounts by modern philosophers such as David Hume, which have tended to conflate human and animal acts of intelligence to a single kind. Further, the widespread acceptance of nominalism, which rejects the reality of universal conceptions as signifying common natures and functional capacities possessed by individuals, has brought the foundation of this inquiry into the distinct meaning of human existence into question.[8] With the advent of modern science and evolutionary theory as first proposed by Charles Darwin, it seems that the problem has only been compounded.

How does one navigate in this entangled landscape? There is a need, not only for new images of the human person in nature (one of which, as we propose here, is supplied by the notion of the human person as gardener), but also for a new and "creative apologetics,"[9] if you

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[8] On Hume, see the "Degree vs. Kind" objection below, and footnote 13. Nominalism denies the existence of what Aristotle called secondary being/substance (οὐσία/*ousia*) in *Categories* 5, i.e., genus, species, and difference, and that these terms can be univocally predicated of individuals in acts of defining. Roscelin, Peter of Abelard, and—most famously—William of Ockham were nominalists in the medieval period. Virtually every modern thinker beginning with Descartes adopted this view, as John Deely has shown in his "Modern Epistemology and Solipsisms," in *The New Catholic Encyclopedia Supplement: Ethics and Philosophy* (2012–2013), eds. Robert L. Fastiggi, Joseph W. Koterski, Trevor Lipscombe, Victor Salas, and Brendan Sweetman, in association with the Catholic University of America (Gale: Farmington Hills, 2013). More will be said regarding this nominalist position below, in the objections and response.

[9] In relation to the encounter between faith, reason and the sciences in the New Evangelization, Giuseppe Tanzella-Nitti emphasizes the need for a "creative apologetics," in "Some Reflections of the Influence and Role of Scientific Thought in the Context of the New Evangelization," in *The Vatican Observatory, Castel Gandolfo: 80th*

will, in order to address the question of human uniqueness in a meaningful and substantive way. Since Vatican II, the Catholic Church has advocated for renewed approaches to apologetics, not with the goal of winning arguments, but rather, in order to engage in a robust and charitable dialogue with the culture.[10]

Historically, one of the most effective approaches to apologetics in the Christian tradition has been the practice of *disputatio*, which was made famous by medieval philosophers such as St. Albert the Great and St. Thomas Aquinas. They brilliantly employed *disputatio* to engage with secular Aristotelian thinking about perennial questions of meaning, as in St. Thomas' *Summa Theologiae*.[11] In our contemporary setting, defined as it is by the secular scientific culture, this method could be helpful in fostering a much-needed, robust dialogue between philosophy and theology and the natural sciences.

In this spirit, this article utilizes the method of *disputatio* to bring modern scientific philosophies that deny human uniqueness into dialogue with those that uphold human uniqueness. Aside from being the best way to seek the truth of the matter on this issue (or any other), this method is an excellent pedagogical tool for practicing the integration

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*Anniversary Celebration*, eds. Gabriele Gionti, S.J. and Jean-Baptiste Kikwaya Eluo, S.J., Astrophysics and Space Science Proceedings 51 (Cham, Switzerland: Springer International Publishing AG, 2018), 235–244, https://doi.org/10.1007/978-3-319-67205-2_17.

[10] See, for example: Avery Dulles, "The Rebirth of Apologetics" in *First Things* (May 2004): 19–23 and a good review in Glenn B. Siniscalchi, "Catholic Apologetics and the New Evangelization," *Church Life Journal* (September 26, 2016), https://churchlifejournal.nd.edu/articles/catholic-apologetics-and-the-new-evangelization/#_ednref26.

[11] The medieval practice of *disputatio*, with its origin in the work of Boethius, is a systematic perfection of the dialectical method practiced by Socrates and Plato. See, for example, Plato's *Phaedo*, where Socrates argues for the immortality of the soul, taking into account the major objections to his position.

of faith and reason—or to use Pope Emeritus Benedict's term, "expanded reason"[12]—in contemporary educational settings. In the face of the complexities of questions surrounding the nature and uniqueness of humans in nature, such tools are especially vital for contemporary discourse, in order to create meaningful dialogue where there appears to be a conflict between modern scientific or philosophical positions and established principles of philosophy or theology.

The method of *disputatio* involves proposing a fundamental question and articulating key positions on both sides of the issue, beginning with the strongest objections to the position the master teacher intends to support. After citing important and relevant expert authority in favor of his position "but against" (*Sed contra*) the objections, the master then says "I respond that" (*Respondeo*) and articulates his/her answer to the question, drawing upon a wide range of sources, both sacred and secular. Finally, having offered his *Respondeo*, the master returns to the objections and answers them one by one. The method is inherently dialogical, as well as knowledgeable and respectful of alternative viewpoints, while at the same time resolving itself in a commitment to the truth in relation to a particular issue.

We consider the five most formidable scientific and philosophical objections to our position that the capacity to garden makes humans distinct. (i) Contemporary science shows that other animals, such as certain species of ants, beetles, snails, fish and crabs, have the capacity to garden, so that this capacity is not unique to human beings.

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[12] See Pope Benedict XVI's lecture at the University of Regensburg, *Faith, Reason and the University*: *Memories and Reflections*; September 6, 2006; https://w2.vatican.va/content/benedict-xvi/en/speeches/2006/september/documents/hf_ben-xvi_spe_20060912_university-regensburg.html#_ftn3. Expanded reason is reason that is not restricted solely to empirical reality but is open to the transcendent, to the pursuit of metaphysical realities and universal, integrative truths. Pope Benedict emphasized the urgent need to practice this kind of "widening reason."

(ii) The difference between humans and other animals is properly explained in evolutionary biology as one of degree and not kind. (iii) Modern genetics and genome mapping show that humans share DNA with all life on earth, so that they are not significantly distinct from other creatures. (iv) As nominalism shows, universal conceptions by which human beings could be distinguished from other animals in terms of kind do not exist. (v) Finally, we should not seek to show a difference in kind between humans and other animals, as such an anthropocentric approach is detrimental to ecological and environmental progress.

We respond (*Respondemus*), taking a cue from Aristotle and St. Thomas Aquinas on the method of distinction of kinds in synthesis with the findings of modern and contemporary science and philosophy. Analysis of the human activity of gardening will show that human beings, in fact, must possess species-specific capacities in order to garden, setting humans apart from other animals not merely in degree, but also in kind. Engaging with various branches of ecological, evolutionary, and anthropological science, we demonstrate that human capacities and modes of gardening are not simply incrementally different, but also fundamentally different in kind, from those of nonhuman creatures. In effect, with human gardening, humans have crossed a tipping point or threshold into a new domain of being or existence. Philosophically, we utilize the power-object model of division or definition along with Aristotle's categorization of knowledge to rigorously express the difference in kind between human beings and other animals. Human gardening is distinct from that of other animals as human beings must utilize powers or capacities distinguished in relation to their proper objects or ends in order to garden, and these powers, generally speaking, have being and abstract universal conceptual meaning as their object. In essence, the action of human gardening is not an arbitrary or extraneous capacity; it is constitutive of a proper act of the human organism. These responses allow us to set aside each major objection.

Allow us to imagine a new article in Question 75 of St. Thomas Aquinas's *Prima Pars*: *Treatise on the Human Being*, following article 1 (whether the soul is the body), and preceding articles 2 (whether the human soul is subsistent) and 3 (whether the animal soul is something subsistent). This article will be entitled "On the Distinction Between the Human Person and Other Animals: Whether the capacity to garden makes the human person distinct from other animals?" Given the lack of attention to human gardening in the literature, along with its significance for human evolution and Christian understanding, we believe that St. Thomas would find this inquiry most appropriate, especially in a contemporary context like ours where the very uniqueness of the human being in relation to the rest of creation has been called into question.

## II

*On the Distinction Between the Human Person and Other Animals. Article 1: Whether the Capacity to Garden Makes the Human Person Distinct from Other Animals? Objection 1: Biological Argument*. It would seem that the capacity to garden does not make humans distinct from other animals, since contemporary science shows us that other animals, such as leaf-cutter ants, termites, ambrosia beetles, marsh snails, farmer ants, *Melissotarsus* ants, damselfish, spotted jellyfish, and the *Yeti* crab, also have the capacity to garden.[13] And while the advent of human cultivation was about 10,000–12,000 years ago after

[13] These cases are well-documented in the scientific literature. For select summaries of the scientific findings regarding animals that farm, see: Daniel Cossins, "Humans aren't alone in farming crops and meat" (January 2, 2015), from http://www.bbc.com/earth/story/20150105-animals-that-grow-their-own-food; Bryan Nelson, "Animals that Know How to Farm" (November 29, 2010), https://www.mnn.com/earth-matters/animals/photos/7-animals-that-know-how-to-farm/agricultural-animals; Bob Holmes,

the retreat of the last glaciers, these animals began farming long before that, even as long as millions of years ago.

The earth's first known farmers, and probably the most advanced in the nonhuman animal kingdom, are the leaf-cutter ants from Central and South America and the southern United States. They began growing their own food about 10 million years ago and have coevolved with fungi in an elaborate farming relationship: Specialized workers in the ant colony called "mediae" forage for plant material, cutting off pieces of leaf and bringing them back to the nest. There, another kind of specialized worker ant called a "minim" chews them up and composts them around fungi that are being cultivated in the nest. The ants then eat the fungi. So, rather than eating the leaves, as was long believed, it is now known that the ants collect the leaves to use as manure to fertilize their underground fungal farms.

Ambrosia beetles, marsh snails, and termites also cultivate fungus for food. Ambrosia beetles are bark borers, but they do not eat the bark as was once thought. Rather, they carve tunnels into decaying tree trunks, removing the sawdust and building chambers into which they deposit fungal spores stored in special receptacles on their bodies. In these chambers, the beetles carefully tend their fungal crop, which serves as food for larvae and adults. Marsh snails, living in the southeastern Unities States, eat fungus that they grow on grooves in cordgrass leaves; they cut the grooves with their tongue-like radula and fertilize these fungus fields by defecating into the grooves. Many termite species are fungus gardeners, their large mounds serving as incubators maintained at the perfect temperature for growing fungal food.

Some creatures cultivate algae or bacteria for food. Damselfish grow a species of algae that they eat and vigorously protect from potential predators. Spotted jellyfish grow algae inside their own tis-

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"Zoologger: The first nonhuman meat farmers" (June 30, 2011), https://www.newscientist.com/article/dn20630-zoologger-the-first-nonhuman-meat-farmers/.

sues and orient themselves toward the sun to maximize photosynthetic production of the algae. *Yeti* crabs grow bacterial food on their arms, swaying their claws in the water to bring nutrients to feed the bacteria.

There also seem to be cases of "domestication" in the insect world. For example, farmer ants herd aphids, caring for them and training the aphids not to release their rich honeydew until they are stroked and "milked" by the ants. The ants will also carry their aphids to new locations and protect them from predators, even clipping the wings of their "domesticated" aphids to prevent them from flying away upon reaching maturity. *Melissotarsus* ants of continental Africa and Madagascar apparently raise insects for meat, and it is thought that they have "domesticated" these insects by selecting the easier-to-digest ones without hard, inedible scales.

These species show clearly that human beings are not the only animals that farm, and science may well uncover more instances of nonhuman farming in the future.

*Objection 2: Darwinian Argument: Degree vs. Kind*. It would seem that any differences between the ways that humans and animals garden are only "of degree" and not "of kind." The progression toward this position in modern thought began in the comparisons of human and nonhuman animals by the philosopher David Hume (1711–1776). With respect to knowledge of nature and practical agency, Hume held explicitly that 'reason' was merely a matter of calculating to obtain what one instinctually desires, based on associative inference from one's past experience of repeatedly connected events ("matters of fact"). However, other animals also possess this capacity, though to a lesser extent, as is clear from observation of their behavior. Therefore, the difference is one of degree, not kind.[14]

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[14] The conflation of human and animal reason is incipient in the materialist philosophy of Thomas Hobbes (1588–1679). See *Leviathan*, Part 1, Ch. 6, ed. John Charles Addison Gaskin (Oxford: Oxford University Press, 1996). Hume develops the approach

Charles Darwin (1809–1882), the modern founder of evolutionary biology, extended Hume's approach, completely denying the difference in kind between humans and other animals.[15] As he developed his theory of natural selection and the notion that slow incremental changes (of degree) gradually accumulate to create new species, he applied the same concept to the evolution of human beings. In his book, *The Descent of Man*, written later in life, he asserted famously that "the difference in mind between man and the higher animals, great as it is, certainly is one of degree and not of kind."[16]

Many prominent researchers in comparative cognitive psychology and the biology of behavior have followed this line of thinking, which

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in *An Enquiry Concerning Human Understanding*, § 9 ("Of the Reason of Animals"), ed. Tom L. Beauchamp (New York: Oxford University Press, 2000), and also in *A Treatise of Human Nature*, reprinted from the Original Edition in three volumes and edited, with an analytical index, by Lewis Amherst Selby-Bigge, M. A. (Oxford: Clarendon Press, 1896), section 16 ("Of the reason of animals"), where he states that "…no truth appears to me more evident, than that beasts are endow'd with thought and reason as well as men." Hume does *profess* an in-kind difference with respect to human abstract demonstrative reason and moral judgment. However, his nominalism and his conflation of imagination and intellect (*Enquiry*, § 12), would commit him to a denial of in-kind difference. Regarding Hume's in-kind and in-degree treatment of the difference between humans and nonhuman animals, see, Tom L. Beauchamp, "Hume on the Nonhuman Animal," *The Journal of Medicine and Philosophy: A Forum for Bioethics and Philosophy of Medicine* 24, no. 4 (1999): 322–335.

[15] In the century after his death, Hume was widely influential in scientific circles. He influenced Darwin through contemporaries like geologist Charles Lyell (1797–1895) and astronomer John Herschel (1792–1871). See William B. Huntley, "David Hume and Charles Darwin," *Journal of the History of Ideas* 33, no. 3, Festschrift for Philip P. Wiener (Jul.–Sep., 1972): 457–470. Further, Darwin expresses that he read Hume in published and unpublished writings. Hume influenced and engaged Darwin with respect to his theory of causation and epistemology (empirical methodology) and, most relevant here, "on reason in animals." Sometime after the beginning of 1889, Darwin explicitly referenced Hume's treatment "On the Reason of Animals" in section IX of the *Enquiry*.

[16] Charles Darwin, *The Descent of Man*, p. 85 of e-book, https://charles-darwin.classic-literature.co.uk/the-descent-of-man/ebook-page-85.asp

distinguishes humans from animals only in degree and not in kind.[17] While they do not refer to the particular case of gardening, many researchers point to the fact that behaviors once thought to be unique to humans have now been observed in other animals. These include tool use, social and kinesthetic (or bodily) intelligence, language, and cognitively sophisticated behaviors like deception, self-control, decision-making, mourning, preplanning and ingenuity.[18] Even the roots of morality can be found in nonhuman species.[19]

Some of these researchers (though not all) acknowledge that the special capacities of other animals in these areas does not necessarily

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[17] See footnotes 1 and 2.

[18] *Ibid*. See also: Karline R. L. Janmaat, Leo Polansky, Simone Dagui Ban, & Christophe Boesch, "Wild chimpanzees plan their breakfast time, type, and location," *Proceedings of the National Academy of Sciences* (*PNAS*) 111, no. 46 (November 18, 2014): 16343–16348; Josep Call, "Representing Space and Objects in Monkeys and Apes," *Cognitive Science* 24: no. 3 (2000): 397–422; Josep Call, "Three ingredients for becoming a creative tool user. Chimpanzees plan their tool use," in *Tool Use in Animals. Cognition and Ecology*, ed. Crickette M. Sanz, Josep Call, and Christophe Boesch (Cambridge, UK: Cambridge University Press, 2013), 3–20; David DeGrazia, *Taking Animals Seriously. Mental Life and Moral Status* (Cambridge: Cambridge University Press, 1996); Frans B. M. de Wall, & Peter L. Tyack, *Animal Social Complexity: Intelligence, Culture and Individualized Societies* (Boston, MA: Harvard University Press, 2003); Donald R. Griffin, *Animal Minds: Beyond Cognition to Consciousness* (Chicago: University of Chicago Press, 2001); Mary Midgley, *Animals and Why They Matter: A Journey around the Species Barrier* (Middlesex: Penguin Books Ltd., 1983); Nicola S. Clayton, Timothy J. Bussey, & Anthony Dickinson, "Can animals recall the past and plan for the future?" *Nature Reviews Neuroscience* 4, no. 8 (2003): 685–691; Luke Rendell, & Hal Whitehead, "Culture in whales and dolphins," *Behavioral and Brain Sciences* 24 (2001): 309–382; Sue Savage-Rumbaugh, Stuart G. Shanker, & Talbot J. Taylor, *Apes, Language, and the Human Mind* (Oxford: Oxford University Press, 1998); Peter Singer, *Animal Liberation*. (London: HarperCollins, 1975).

[19] Melissa Hogenboom, "Part I: Humans are nowhere near as special as we like to think" (July 3, 2015), http://www.bbc.com/earth/story/20150706-humans-are-not-unique-or-special; Sarah F. Brosnan & Frans B. M. de Waal, "Monkeys reject unequal pay," *Nature* 425, no. 6954 (18 September 2003): 297–299.

mean that human cognition is not more advanced, only that these animals were precursors to humans in the evolutionary sequence. For example, in relation to tool use, we now know that the actual origin of tool use within the hominin lineage—as primitive as it was—dates back to long before humans, originating with a common ancestor between 12 and 23 million years ago.[20] The central argument of these scholars is encapsulated in the words of Dr. Irene Pepperberg, a researcher in the field of animal cognition at Harvard University: "For over 35 years, researchers have been demonstrating through tests both in the field and in the laboratory that the capacities of nonhuman animals to solve complex problems form a continuum with those of humans."[21] Such conclusions from contemporary empirical research have served to verify the rejection of the difference in kind between animals and humans commenced by Hume and culminating in Darwin.

Others argue that, even if there is a cognitive gap between humans and their closest evolutionary relatives (the chimpanzees and bonobos), there is also a huge gap between chimps and other animals like ants or fish. How can one of these be a gap "in kind" and the other a gap only "in degree"? Further, if the difference between humans and apes is a difference of kind, when did the jump occur? On the contrary, evolutionary theory supports a slow, incremental transition from nonhuman to human in which cognitive complexity accumulated gradually by degrees over very long periods of time. This same reasoning

[20] David B. Morgan and Crickette M. Sanz, "Ecological and social correlates of chimpanzee tool use," *Philosophical Transactions of the Royal Society* 368, no. 1630 (Nov. 2013): 20120416, doi: 10.1098/rstb.2012.0416; Morgan & Sanz, "New insights into chimpanzees, tools, and termites from the Congo Basin," *The American Naturalist* 64, no. 5 (2004): 567–581; Bijal Trivedi, "Chimps Shown Using Not Just a Tool but a 'Tool Kit'" (October 6, 2004), https://news.nationalgeographic.com/news/2004/10/1006_041006_chimps

[21] Irene M. Pepperberg, "Intelligence and rationality in parrots," in *Rational Animals?*, 269.

would hold for the development of complex human farming practices from more rudimentary ones in nonhuman animals and insects.

*Objection 3: Genetic Argument*. In a broader sense, modern genetics and the genome mapping project have shown that human persons share DNA with all life on earth. For example, mice and humans share virtually the same set of genes, and it appears that neither the mouse nor the human genome has undergone major changes since they shared a common ancestor 80–100 million years ago.[22] As reported by the National Human Genome Research Institute: "Of the approximately 4,000 genes that have been studied, less than 10 are found in one species but not in the other [mouse and human]… On average, the protein coding regions of the mouse and human genomes are 85% identical."[23] Humans share as much as 98.8% of their DNA with chimpanzees and bonobos, their closest relatives, from whom they diverged 4–7 million years ago.[24] (In comparison, humans generally share 99.9% of their DNA with other humans.)

Modern genetics thus reinforces that humans are more a part of nature than they are distinct from it. Humans are animals, and while they are different from other animal species (as are all species from one another), they are also biologically related to them and in continuity with them in a fundamental way.

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[22] Richard J. Mural, Mark D. Adams, Eugene W. Myers, et.al, "A Comparison of Whole-Genome Shotgun-Derived Mouse Chromosome 16 and the Human Genome," *Science* 296, no. 5573 (2002): 1661–1671.

[23] National Human Genome Research Institute, "Why Mouse Matters" (2010), https://www.genome.gov/10001345/importance-of-mouse-genome

[24] Ann Gibbons, "Bonobos Join Chimps as Closest Human Relatives," *Science* (June 13, 2012), http://www.sciencemag.org/news/2012/06/bonobos-join-chimps-closest-human-relatives; Galina V. Glazko & Masatoshi Nei, "Estimation of Divergence Times for Major Lineages of Primate Species," *Molecular Biology & Evolution* 20, no. 3 (2003): 424–434; The Chimpanzee Sequencing and Analysis Consortium, "Initial sequencing of the chimpanzee genome and comparison with the human genome," *Nature* 437 (1 September 2005): 69–87.

*Objection 4: Nominalist Argument*. From a philosophical standpoint, it would seem, even prior to any considerations particular to modern science, that the human being cannot be defined as there are no universal conceptions signifying the common natures or essences of particular individuals in the world. As Ockham's nominalism has taught us, rather, all that is common to a given set of individuals in the world is the name (the term 'nominalism' derives from the Latin word for name, *nomen*). This is because there is no principle of identity between one individual nature/essence and another and the conceptual meanings that we form of them in the intellect. To say that we can define the common nature of human beings requires that what is common and universal in the mind (as predicable of many) also not be common and universal but individual; and, vice versa, what is individual will be common and universal in the mind. This, however, is a manifest contradiction, and cannot be held.[25] Therefore, human beings cannot be defined as distinct from other animals in relation to gardening or any particular capacity.

*Objection 5: Ecological Argument*. An ecological issue arises when humans are viewed as fundamentally distinct from other animals in kind rather than in degree. Distinctiveness in kind reinforces the perception that human beings are separate from, and somehow dominant or superior to, the rest of the natural world.[26] Contemporary ecological and agricultural efforts would benefit greatly if humans understood

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[25] For treatments of Abelard and Ockham, see Julius R. Weinburg, *A Short History of Medieval Philosophy* (Princeton, NJ: Princeton University Press, 1964), 72–91 and 235–266. At *Summa logicae* 1, ch. 64, in *Opera philosophica* 1, 195, Ockham denies a common human nature and corresponding definition.

[26] The classic article, which has been widely cited since its publication in 1967, is one by Lynn White in which he rejects what he calls the "human-nature dualism" and unbalanced anthropocentrism that he argues is inherent in the Western worldview. See: Lynn White Jr., "The historical roots of our ecologic crisis," *Science* 155 (1967): 1203–1207.

themselves as related to other animals, along a continuum of cognitive complexity, rather than as distinct from them. This self-understanding could help human beings develop a sense of humility in relation to their place in the world, as well as encourage them to use their cognitive capacities to manage food and other natural resources in more responsible and respectful ways.[27]

## III

*On the Contrary (Sed Contra): Biological Argument for Human Uniqueness*. In recent decades, many scholars in different branches of the natural and social sciences have noted the exceptional cognitive capacities of human beings, as well as their unique capacity for complex language, linguistic communication, advanced culture, and innovation.[28] They argue that there is a qualitative difference—a fundamental discontinuity—between humans and other animals. While they do not refer to the practice of gardening or agriculture, scientific publications by researchers working in multiple disciplines have substan-

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[27] This view is prominent in such contemporary environmental movements as deep ecology (see the writings of Arne Næss, George Sessions, and Bill Devall), the writings of some preservationists like Aldo Leopold or Edward O. Wilson, as well as more recently in certain sustainability literature. See also the work of environmental philosopher Kathleen Dean Moore, for example: "Leaping Lisards! What Might It Mean to Recognize the Rights of Nature?" in *Minding Nature* 7, vol. 7, no. 2 (Spring 2014): 12–17.

[28] See, for example: J. Henrich, *The Secret of our Success: How Culture is Driving Human Evolution, Domesticating our Species, and Making Us Smarter*. Princeton: Princeton University Press, 2015); P. Richerson & R. Boyd, *Not By Genes Alone: How Culture Transformed Human Evolution* (Chicago: University of Chicago Press, 2005); M. Tomasello, *The Cultural Origins of Human Cognition* (Cambridge, MA: Harvard University Press, 1999); E. Jablonka & M. J. Lamb, *Evolution in four dimensions: genetic, epigenetic, behavioral and symbolic variation in the history of life* (Cambridge, MA: MIT Press, 2005).

tiated such distinctive human qualities as higher-order cognition, cumulative culture, sociocultural niche construction, and imagination.[29] In "Darwin's Mistake", for example, the authors argue that "Darwin was mistaken: the profound biological *continuity* between human and nonhuman animals masks an equally profound *discontinuity* between human and nonhuman minds."[30] They propose that, although there are striking similarities between how human and nonhuman animals' learn and act, there is "compelling evidence of an absence" of higher-order cognition (such as generalizing, making analogies, abstracting concepts, or postulating hypotheses of cause and effect) in nonhuman animals. Other researchers propose that humans have a unique capacity for cumulative culture that surpasses those of nonhuman animals in terms of the complexity, number, pace, and adaptiveness of innovations.[31] Humans also possess an unprecedented

[29] For examples of each of these four, see: Derek C. Penn, Keith J. Holyoak, Daniel J. Povinelli, "Darwin's mistake: Explaining the discontinuity between human and nonhuman minds," *Behavioral and Brain Sciences* 31 (2008): 109–178; Andrew Buskell, "What makes humans special?" (3 March 2016), http://www.lse.ac.uk/philosophy/blog/2016/03/03/what-makes-humans-special/; Erle C. Ellis, "Why is Human Niche Construction Transforming Planet Earth?" in "Molding the Planet: Human Niche Construction at Work," eds. Maurits W. Ertsen, Christof Mauch, & Edmund Russell, *RCC Perspectives: Transformations in Environment and Society* 2016, no. 5, 63–70; Erle Ellis, Peter Richerson, Alex Mesoudi, Jens Christian Svenning, John Odling-Smee, and William R. Burnside, "Evolving the human niche," *Proceedings of the National Academy of Sciences* (*PNAS*) 113, no. 31 (August 2, 2016): E4436; Agustin Fuentes, *The Creative Spark: How Imagination Made Humans Exceptional* (New York: Dutton, 2017), "The Extended Evolutionary Synthesis, Ethnography, and the Human Niche: Toward an Integrated Anthropology," *Current Anthropology* 57, no. 13 (June 2016): S13–S26; Kevin N. Laland, Tobias Uller, Marcus W. Feldman, Kim Sterelny, Gerd B. Müller, Armin Moczek, Eva Jablonka, and John Odling-Smee, "The extended evolutionary synthesis: its structure, assumptions and predictions," *Proceedings of the Royal Society of Biology* 282 (August 2015): 20151019.

[30] Penn, Holyoak, and Povinelli, "Darwin's mistake."

[31] See Buskell, "What makes humans special?" and footnote 28.

capacity for "sociocultural niche construction," imagination, cooperation, and symbolic thinking which has allowed humans to progressively transform the entire planet.[32]

*On the Contrary (Sed Contra): Philosophical Argument for Human Uniqueness*. In the history of ancient and medieval philosophy, Plato, Aristotle, St. Augustine, and St. Thomas Aquinas—just to name a few of the most highly regarded philosophers—all held that there is a difference in kind between human beings and animals.[33] Contemporary philosophers in the Hermeneutic, Phenomenological, Analytic, Thomistic, and Semiotic schools have also continued this tradition, bringing to light through various arguments the fundamental difference between human beings or persons and other animals.[34]

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[32] See footnotes 27 and 28.

[33] See *Republic* 1, 4, and 5–7, where Plato develops a definition of the human soul as that which not only possesses sensual appetite and spirit/irascible-emotion, but reason. See Aristotle, *De anima*, 2.1–4, where Aristotle divides organic living beings into the classes of nutritive (plant), sense-perceptive (animal), and rational. This division will be treated in more detail below. See, St. Augustine, *De libero arbitrio*, 1, 7.16–12.22. See St. Thomas Aquinas, *Sentencia libri de anima* 2, lect. 3; *ST* 1, q. 75, a. 3.

[34] See, for example, in order of the schools listed: Charles Taylor, *The Language Animal: The Full Shape of the Human Linguistic Capacity* (Harvard University Press, 2016); Robert Sokolowski, *Phenomenology of the Human Person* (New York: Cambridge University Press, 2008); Hans Jonas, *The Phenomenon of Life: Toward a Philosophical Biology*, seventh essay, "Image-Making and the Freedom of Man" (Chicago, IL: Chicago University Press, 1996), 157–175; Alasdair McIntyre, *Dependent Rational Animal*; William A. Wallace, *The Modeling of Nature: Philosophy of Science and Philosophy of Nature in Synthesis*, Part I, Ch. 5 (Washington, D.C.: The Catholic University of America Press, 1996); Marie George, "Thomas Aquinas Meets Nim Chimpski" and "Humans and Apes: On whether Language Usage, Knowledge of Others' Beliefs, and Knowledge of Others' Emotions Indicate that They Differ when it comes to Rationality," in *Reading the Cosmos: Nature, Science, and Wisdom*, ed. Guiseppe Butera (Washington D.C.: American Maritain Association Publication distributed by Catholic University Press, 2012), 163–191; John Deely, "Animal Intelligence

*On the Contrary (Sed Contra): Theological Argument for Human Uniqueness*. Finally, in theology, there are long-standing arguments for the uniqueness of the human person in creation. The Catholic Intellectual Tradition has clearly asserted that humans have a particular place in creation: they are a unique combination of the physical world and the spiritual world, a union of a physical body and a spiritual soul, in a way that nonhuman animals are not.[35] Beginning in Genesis, when God distinguished humans from the rest of creation by giving them the mission to steward creation and utilize plants and animals for their sustenance, humans have been set apart from the rest of creation. As part of their Christian vocation, humans are to respect and care deeply for animals and the rest of creation, but with the awareness that "none of the animals can be man's partner."[36] From this perspective, humans are essentially different "in kind" and not just "in degree" from the other animals.

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and Concept Formation, *The Thomist: A Speculative Quarterly Review* 35, no. 1, (January 1971): 43–93, and *Semiotic Animal: A Post Modern Definition of "Human Being" Transcending Patriarchy and Feminism* (South Bend, IN: St. Augustine's Press, 2010); Daniel De Haan, "Approaching other Animals with Caution: Exploring Insights from Aquinas's Psychology," in *New Blackfriars* 100, no. 1090 (November 2019): 715–737; Thomas A. Sebeok, "Language: How Primary a Modeling System?," in *Semiotics* (1987), 15–27. See also, Kass, *Toward a More Natural Science*, Ch. 10, "Teleology, Darwinianism, and the Place of Man: Beyond Chance and Necessity?", 249–275; Robert Spitzer, S.J., *The Soul's Upward Yearning: Clues to our Transcendent Nature from Experience and Reason* (San Francisco, CA: Ignatius Press, 2015).

[35] *Catechism of the Catholic Church* (2003), http://www.vatican.va/archive/ENG0015/_INDEX.HTM, paragraphs 355–373. See also, St. Thomas Aquinas's treatise on the human being, *ST* 1, qq. 75–90 and 1–2 qq. 6–14. Thomas expresses that the human soul is distinct from that of other animals as it is immaterial intellect, incapable of physical corruption, and that, as such, it is capable of perfect free voluntary agency. For St. Thomas, these attributes set the human person apart as specially created in the image and likeness of God.

[36] *Ibid.*, paragraph 371.

## IV

*I Respond That* (*Respondeo*). The ability to garden is a unique capacity that distinguishes human persons from other animals. As this particular capacity has been unexplored in the literature, we wish to contribute to the ongoing dialogue about human uniqueness by demonstrating that the capacity to garden provides a compelling case for the distinctiveness of humans in both degree and kind.

*First Response: Distinction between Difference in Degree and Difference in Kind*. In terms of Aristotle's classic treatment of definition (*Categories*), "degree" pertains to a contrast under the category of quantity, while "kind" generally refers to a contrast under the categories of quality and action. So, as Adler says, "two entities differ in degree if both have the same defining traits, but one has more and one has less of the same trait. When the difference in kind cannot be reduced to a difference in degree, it remains a difference in kind."[37] A difference in kind therefore represents a substantive, qualitative, and radical difference between two entities, not just an apparent or superficial one. Importantly, things can be similar in kind in one respect *generically*, but different in kind in another respect *specifically* through some *differentiating* feature. To use an example in the realm of artifice, if one of two cars is slower than the other, and both are built for speed and victory on the track, the cars differ in degree but not in kind as they are both racecars. If, however, one of the vehicles was constructed for carrying 50 passengers, and not for competitive racing, we take it as different in kind—*specially*—(though under the same genus) from the racecar. Here, we can already see that one of the difficulties in discerning a "difference in kind" is that "kind," when taken

[37] Mortimer J. Adler, "On Man," *Adler's Philosophical Dictionary* (1995), http://www.thegreatideas.org/apd-man.html.

generically or specifically, has a certain relativity and plasticity about it.[38] The racecar and the bus are of the same kind, in a sense, as they belong to the same genus: vehicle. On the other hand, in terms of their respective form and function, they are specifically different: one is a racer while the other is a mass-transporter. From the outset, then, it is important to note that many classes of individuals might be generically the same, but specifically different.

Having this understanding of the classical sense of the terms "genus" and "species,"[39] let us now see the application of these principles in terms of a biological example, close to the theme of this article. Charles Darwin himself used this approach in his original formulation of the theory of natural selection. On the voyage of the Beagle, he collected bird specimens from the Galápagos Islands as part of the collecting expedition. It was not until he returned to England that he realized, on pondering the shape of their bills, the location where the specimens were collected, and the food sources available, that their beak characteristics varied depending upon the food source present on the island. Because of this difference in bill morphology and function, the finches were eventually identified as different and distinct biological species, as shown in Figure 1. The different species of birds were understood to be different in kind and not merely in degree (even as they belong to the same broader genus, *Geospiza*).

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[38] The word 'kind' is Germanic, from 'kin,' meaning race. Its meaning, then, is etymologically identical to 'genus' from the Greek γένος/*genos*, whence we have the English 'genus,' meaning 'race, family' and then 'class or sort.'

[39] See, again, Aristotle's *Categories*, 1–5, especially 3, and also Porphyry's *Isogoge*. As Aristotle expresses in chapter 3 of *Categories*, generic attributes are always predicable of lower species and the ultimate subjects/individuals, whereas specific features are not predicable, in the reverse direction, of higher order genera.

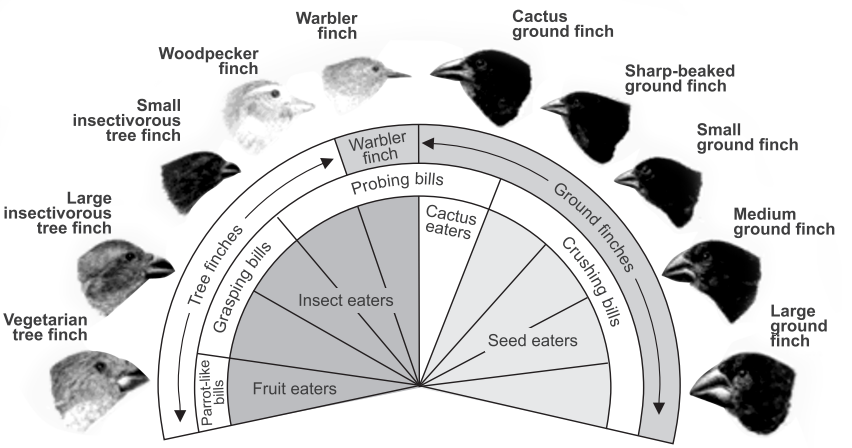


FIGURE 1. Darwin's finches[40]

Notice that, in both the artificial and biological cases, we understand a difference in kind by grasping differing structures or forms in individuals that give rise to distinct capacities or powers ordered toward distinctive activities. The bus is a different kind of vehicle than the car because of structural design, engine type, etc.: it is much longer as it has a fifty-person seat capacity (as opposed to two), has doubled rear tires, a more powerful engine in terms of load capacity, and it is also less swift and agile. The way the materials of the bus are organized in terms of its body, engine, seats, etc., gives rise to its distinct capacity to transport large numbers of passengers, and it is different in both its capacity and form than the racecar for these obvious reasons. Similarly, one species of Darwin's finches is distinct from another because of its distinctive beak shape and size as adapted to different food sources and, thus, correspondingly distinct food gathering functional behaviors.

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[40] "PBS Evolution Library for Teachers and Students," https://www.pbs.org/wgbh/evolution/library/01/6/l_016_02.html.

One might object, here, that the large, medium, and small ground finches are, along with the large and small insectivorous tree finches, not actually different in kind according to this model, as the differences in their beak shape and form are superficial and not really illustrative of a substantive difference in kind. In response to this objection, we would first point out that these finches are biologically and genetically different in kind as they are incapable of cross breeding. Thus, the form and structure of these birds' genetic makeup makes them different in kind in terms of the reproductive function. Second, our example is sufficient to illustrate the validity of the model even at the phenotypic level, as it does include clear cases of differences in kind by appeal to morphological and not merely quantitative differences. These morphological differences are clearly manifest, for example, by comparing the beak of the warbler finch to those of the rest of the finches, and especially to that of the large ground finch. The qualitative differences in these beaks are functionally ordered to the food gathering behaviors in which each finch species engages, respectively, and they are morphologically distinct, not simply a gradation of size along a continuum, as they would be if the difference were only in degree. The order and practice of the entire lives of these birds depends upon these morphologies. To understand that this is no superficial difference, again, simply consider what would likely happen if the food sources to which the warbler finch's morphology are suited disappeared, while those for the large ground finch remained. For the former species, this difference in kind likely means extinction![41]

[41] As will be made clear below, not all differences in kind can be reduced to an observable morphology, as in the case of the finch example. This is because there are differentiating capacities, e.g., the intellectual capacity, which cannot be reduced to a material form or *skhēma*, to use an Aristotelian distinction. Nonetheless, there are many examples in nature, which are better known to us, where differentiating functional-activities are directly connected to observable morphological features. Aristotle himself gives

In fact, this approach to distinguishing beings in kind by identifying powers/capacities in relation to their acts (objects) constitutes a model of definition or division first put forward by Plato and then developed and perfected by Aristotle. We call this the power-object model of definition.[42] As already indicated, the model discerns difference in kind by identifying an activity as the correlative object or end of a morphological disposition constituting a power or capacity. The model is functional and purposive as it holds that formal or morphological features of living beings are ordered toward the normative activities of the beings as their end. While teleology received much opposition with the rise of reductive materialism and positivism in the modern period, philosophers of science and biologists doing philosophy pertaining to the life sciences now recognize the necessity of teleology in biological explanation and have successfully defended the Aristotelian approach.[43] Empirical research seeking to identify defining attributes in individual living beings such as

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us such an example, connecting the long-legged, long-toed (as opposed to webbed) feet morphology of a bird species to its normative marsh-dwelling behaviors. See *De partibus animalium* 4.12 (649b11–17).

[42] We are inspired to use the descriptive phrase "power-object model" by William Wallace, *The Modeling of Nature*, especially pages 157-189. In Plato, see *Phaedrus* (270c9–d7 and 245c2–4), and *Sophist* (247d8–247e4). Aristotle adopts this model and develops it for biological division in *De partibus animalium* 1–2. He utilizes it in his generic division of living organisms in *De anima* 2.1–4. For a rigorous textual account of this topic, see Daniel Wagner, *Φύσις καὶ τὸ ἀνθρώπινον ἀγαθόν: The Aristotelian Foundations of the Human Good* (dissertation, available through ProQuest).

[43] For the relevance of the Aristotelian approach to natural explanation, see Wallace, *The Modeling of Nature*; Joe Sachs, *Aristotle's Physics: A Guided Study* (New Jersey: Rutgers University Press, 1980), 17–25; Jacob Klein, "The World of Physics and the 'Natural' World," in *Jacob Klein: Lectures and Essays* (Annapolis, Maryland: St. John's College Press, 1985), 1–34. On the need for teleology or "final causality" in contemporary biology, see Jonas, *The Phenomenon of Life*, especially 33–37; Kass, *Toward a More Natural Science*. On teleology in contemporary science, see Ernst Mayr, "The Idea of Teleology," *Journal of the History of Ideas* 53, no. 1 (Jan.–Mar. 1992): 117–135; Michael Chase, "Teleology and Final Causation in Aristotle and Contemporary Science," in

these proceeds from the observation of activities/behavior taken as effect[s], which are better known to us at first, to the connection of these acts to the capacity nested in organic form.[44] This is precisely the approach we are taking here in relation to our analysis of the activity of human gardening as reflective of a distinctive human capacity.

This model of division was used by Aristotle to generically divide the living from the non-living as organic and inorganic, and then plants, animals, and humans. Looking to the activities of (i) nourishment (including homeostasis and metabolism), growth, and reproduction, (ii) sense-perceptive awareness, and (iii) intellection, Aristotle divides plants, animals, and human beings by difference of kind.[45] These natural beings are not simply different by degree, but they differ by being in possession of categorically other functional capacities. Most generically, all living beings share in common the possession of organic parts constituting the capacities for nutrition (homeostasis), growth, and reproduction. Then, there are living beings in possession of these capacities and sense-perceptive capacities ordered to their proper objects, e.g., as sight is ordered toward the activity of making color and shape present to the awareness of the animal. Generically speaking, sense perception is the act whereby a physical organ makes some object present to the awareness of the animal. Sense perception,

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*Dialogue* 50 (2011): 511– 536; Harold J. Morowitz, *Entropy and the Magic Flute* (London: Oxford University Press, 1993), 153–154 as cited by Chase, 521; Michael W. Tkacz, "Neo-Darwinians, Aristotelians, and Optimal Design," *The Thomist* 62, no. 3 (July 1998): 355–372, "The Retorsive Argument for Formal Cause and the Darwinian Account of Scientific Knowledge," *International Philosophical Quarterly* 43, no. 2 (June 2003): 159–166, and "Thomistic Reflections on Teleology and Contemporary Biological Research," *New Blackfriars* 94, no. 1054 (Nov. 2013): 654–675.

[44] *De anima*, 1.1 (402b16–25).

[45] See: *De anima* 2.1–4. The fact that some beings fall between the divisions in no way dissolves them, but actually enforces them logically. This is because proper identification of a natural being that lies 'between' the division, say a plant which displays some sense-perceptive behavior, presupposes the defined classes into which its attributes fall.

in its connection to pleasure and pain, also gives rise to voluntary animal behavior. Finally, human beings possess not only the nutritive (i) and sense-perceptive capacities (ii), but also the capacity of intellect as ordered to its proper object, abstract universal understanding.[46] In turn, this gives rise to free or deliberate voluntary agency in human beings who, knowing their ends and themselves as the causes of their acts, are capable of choosing between alternative acts and are not determined to the ends they seek.[47] Below, we will say more regarding the difference between human intelligence and animal cognition.

A related question that needs to be addressed is whether progressive degrees of difference can eventually become a difference in kind. To answer this, it is helpful to refer to the concept of ecological resilience originally developed by C. S. Holling and based in complexity theory.[48] Ecological resilience measures how much disturbance can be sustained by a particular ecosystem before a radical change in system identity occurs.[49] A "ball-in-cup" diagram such as the one shown in Figure 2 illustrates the concept.[50]

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[46] For a contemporary defense of Aristotle's division of the grades/levels of soul with their genetic and hierarchically ascending relation in the context of modern biology and the theory of evolution, see Jonas, *The Phenomenon of Life*, 2, and especially essay four, "To Move and Feel: On the Animal Soul," and Kass, "Teleology, Darwinism, and the Place of Man," in *Toward a More Natural Science*, 270–272.

[47] See: Aristotle, *Nicomachean Ethics* 3.1–4 and St. Thomas Aquinas, *ST* 1–2, qq. 6 and 12–14.

[48] For more on ecological resilience and its explanatory power, see: Sr. Damien Marie Savino, FSE, *The Contemplative River: The Confluence between People and Place in Ecological Restoration* (VDM Verlag, 2008).

[49] Crawford S. Holling & Lance H. Gunderson, "Resilience and Adaptive Cycles," in *Panarchy: Understanding Transformations in Human and Natural Systems*, eds. Gunderson and Holling (Washington, DC: Island Press, 2002), 25–62.

[50] "Difference between Engineering, Ecological, and Social-Ecological Resilience" (February 21, 2016), https://soroushmz.wordpress.com/2016/02/21/3-difference-between-engineering-ecological-and-social-ecological-resilience

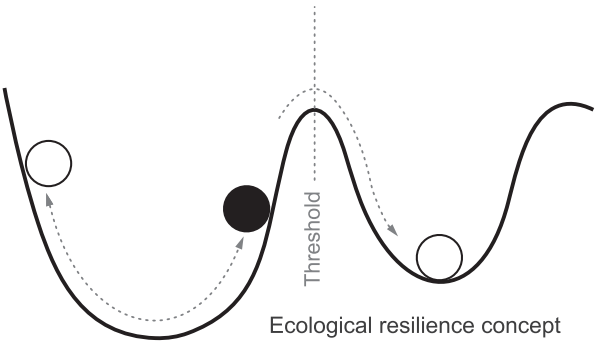


FIGURE 2. “Ball in Cup” Diagram of Ecological Resilience

In response to gradual changes (i.e., of “degree”), the ball moves up and down in the first cup, but when disturbances to the ecosystem accumulate over time to a particular threshold point, a small disturbance can “flip” the ball into the second cup (or stability basin). In the resilience literature, this represents a “catastrophic shift” in the ecosystem. This ecological shift is very difficult, if not impossible, to reverse. An example is when a lake eutrophies from one ecological state (clear) to a radically different one (turbid), sometimes as quickly as overnight, after years of gradual changes in response to fertilizer inputs.

While not a perfect analogy, this image can assist in envisioning the distinction between degree and kind. Many small changes in degree can bring a system to a threshold that when crossed results in an irreversible difference in kind. While the two states, or stability basins, are related, they represent a difference in both degree and kind. Just as gradually increased movement of the ball over time eventually results in its radical relocation to a new cup, so also gradual changes in qualitative features can result in radical changes in kind. Applying the analogy to evolution presents an image of evolutionary processes that unfold over long periods of time, with extended periods of small, incremental changes punctuated by radical discontinuities.

Indeed, as Marie George has pointed out, evolutionary gradualism is not incompatible with the claim that there are radical differences and discontinuities between humans and their ancestors. To make her point, and following the psychologist Clive Wynne, George appeals to an example given by contemporary psychologist and linguist, Steven Pinker. Pinker's example is that of the relation and difference between the elephant and its closest living biological relative, the hyrax (a "guinea-pig-like mammal").[51] These two species have a common genetic ancestor, share about 90% of their DNA, and have speciated through gradual morphological adaptations, but this does not change the fact that there is radical qualitative difference between them, not reducible to difference in degree. The elephant has a tubular, six-foot long trunk for a nose, which, *inter alia*, allows it to pick up trees, move them and stack them, and shower its back with water. While the hyrax does have nostrils, it is incapable of performing these functional actions with its nose. Perhaps the difference occurred through gradual accumulation of the trunk from members of parent species to their progeny. This does not change the fact that there is a difference in kind, here and now, between particular animals expressing the elephant morphology and those expressing the hyrax morphology. An analogous argument could be proposed in relation to the question of the difference in kind between humans and the chimps, their closest evolutionary ancestor.

*Second Response: Distinction in Kind Utilizing Aristotle's Categorization of Knowledge*. By examining and analyzing the human activity of gardening, it becomes clear that human beings utilize capacities as gardeners that other animals do not use in their gardening-like

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[51] See: George, "Humans and Apes" 163, note 1, and 166–167, note 10. As cited by George, see Clive Wynne, *Do Animals Think?* (Princeton, New Jersey: Princeton University Press, 2004), 42–43; and Steven Pinker, *The Language of Instinct* (New York, NY: HarperCollins Publishers, 2007).

behaviors—which is also to say that gardening, properly speaking, is a species-specific activity of human beings. To achieve this understanding, it is helpful to refer to Aristotle's categorization of knowledge in *Nichomachean Ethics* VI. Here the Philosopher describes three types of knowledge: *techné* (τέχνη), *phronesis* (φρόνησις), and *episteme* (ἐπιστήμη).[52] *Techné* translates to craftsmanship or art and refers to knowledge ordered to the production of material goods; it is pragmatic knowledge which employs instrumental reasoning to make or produce something. The English word, "technology," derives from this Greek root. *Phronesis* is practical wisdom or prudence; it is an understanding, not only of universal moral norms, but of the particulars of given circumstances such that the good can be obtained by deliberation. *Episteme* means, most properly, "science;" it is theoretical, demonstrative knowledge of universal causes of facts.[53] The English word, "epistemology," meaning the study of knowledge, comes from the Greek ἐπιστήμη/*episteme*. Human uniqueness in the exercise of these three types of knowledge will now be addressed.

In relation to *techné*, or technical knowledge, it is clear that humans garden in a way that is distinct from other animals. First, humans farm multiple crops, while animals typically specialize in one. This shows that humans understand the nature of gardening *qua* gardening (universally), and are thus capable of extending their gardening activities beyond a singular garden type behavior that might otherwise simply be determined by instinct. Humans have also domesticated and implemented selective breeding programs for multiple plant and animal species, while other animals do not do so in such a far-reaching manner. Humans have even gone so far as to genetically manipulate plants and animals in order to create GMOs, new breeds of meat and dairy

[52] *Nicomachean Ethics* 6.3–13.

[53] On τέχνη and ἐπιστήμη in Aristotle, see also *Metaphysics* 1.1–2 and *Posterior Analytics* 1.2.

cattle, etc. The ability to manipulate plants genetically in this manner requires that the agent doing so has the capability to grasp what the plant is in its being itself and then reason about cause-and-effect relations given this meaning. Desired plant features are understood as a sub-kind of a given species and selected for various physical forms of manipulation.

A similar pattern of complexification in *techné* is manifested in the development and use of tools. Although some animals like chimps and crows use tools, they have not developed advanced (and now even computerized) technologies like plows, tractors, irrigation systems, seeders, milking equipment, etc. These tools have been produced based on knowledge of what the task is, along with relevant materials, and how it can best be accomplished in terms of cause-and-effect relations.

In addition, humans evaluate the functioning of agricultural technologies and attempt to devise improved solutions in an iterative and hyper-cooperative manner. Current technologies are the result of widespread human cooperation and building upon previous knowledge, expressed and recorded in propositional-linguistic form, over broad ranges of time and space. What has taken most animals millions of years to develop has increased in complexity rapidly in human communities in just thousands of years. As Fuentes states: "Humans have a great capacity to ratchet up, or scaffold, information. …Other animals do some ratcheting and scaffolding, but they lack the human combination of discovery, innovation, cooperation, and information transfer. Human cognitive capacities and manual dexterity (our brains and hands) and our hyper-cooperation give us a broader range of ways to manipulate the world relative to other species."[54]

In relation to agriculture, consider the level of *techné* necessary for the development of technologies of food production, security, trans-

[54] Fuentes, *The Creative Spark*, 253.

portation, preparation, and consumption; the complexity and synergy of these systems far exceeds that of other animals. Nonhuman animals do not have the capacity to cook foods, to develop recipes and share them, to sell food and to create local and global economic markets surrounding food. Humans have the capacity for organization and creativity, for pushing the limits and imagining new futures, and for developing whole cultures around gardening and agriculture in ways that do not exist in nonhuman animals. The empirically given fact of these differences is explained by appeal to *techné* as following on the capacity of intellect.

Human communities have responded to the widespread and complex application of technical knowledge with *phronesis*, or practical wisdom and ethics, in order to discern the best uses and impacts of those technologies in particular situations. While there may be seeds of morality in the most cognitively advanced animals—such as chimps who evidence a sense of fairness, helpfulness, and sharing—the ability to make moral judgments and act upon them (or not) is unique to humans.[55] Numerous researchers have found that the higher apes are not able to make moral judgments about the behavior of other animals.[56] For example, Dr. Jerome Kagan, pioneer of developmental psy-

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[55] Judith M. Burkart, Rahel K. Brügger, and Carel P. van Schaik, "Evolutionary Origins of Morality: Insights from Nonhuman Primates," *Frontiers in Sociology* 3 (July 2018): 17; Jerome Kagan, *Three Seductive Ideas* (Cambridge, MA: Harvard University Press), 1998; Richard A. Shweder, "Humans Really are Different," Science 283 (1999): 798–799; Michael Gazzaniga, *Human: The Science Behind What Makes Your Brain Unique* (New York: HarperPerennial, 2008); Francisco Ayala, "The difference of being human: Morality," *Proceedings of the National Academy of Sciences* (*PNAS*) 107 (May 11, 2010): 9015–9022; Michael Tomasello, *A Natural History of Human Morality* (Cambridge, MA: Harvard University Press, 2016).

[56] Keith Jensen, Josep Call, & Michal Tomasello, "Chimpanzees Are Vengeful But Not Spiteful," *Proceedings of the National Academy of Sciences* (*PNAS*) 104, no. 32 (2007): 13046–13050; Katrin Riedl, Keith Jensen, Josep Call, & Michael Tomasello, "No third-party punishment in chimpanzees," *Proceedings of the National Academy of*

chology, points out: "Not even the cleverest ape could be conditioned to be angry upon seeing one animal steal food from another."[57] The reason, we take it, that animals do not display such moral behavior, is that they lack the powers of intellect and will and, consequently, the ability to understand universal moral norms and to reason in conjunction with them regarding particular circumstances. In this case, the animal would have to grasp justice and 'what is due' in universal terms in order to have the consequent (human emotion) of indignation.

Humans, on the other hand, are concerned with right and wrong and about the long-term consequences of their actions, as well as the actions of others. In relation to farming, they care about such questions as whether food is equitably distributed, whether farm workers are treated fairly, whether persons are starving, whether the land is being polluted or soil fertility is being compromised, etc. Not only do they care about such questions, but they modify their actions in response to what they reason is for the common good.

Humans generally feel anger at disruptions or inequity in relation to the practice of farming and growing food. They demand restitution and seek to develop measures to protect or provide for persons who are underprivileged, starving, or treated unfairly. Understanding, universally, that all humans have a right to nourishment—are due food—they act accordingly given particular circumstances. They pursue ways to limit large multinational corporations who exploit others or the land. They consider which agricultural practices have positive and which have negative effects and test out new ideas to improve them.

Not only that, but humans are also capable of *not* acting in a moral way. No other animal species is capable of the moral depravity found

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*Sciences* (*PNAS*) 109, no. 37: 14824–14829 (2012); Daniel J. Povinelli, *Folk Physics for Apes: The Chimpanzee's Theory for How the World Works* (Oxford: Oxford University Press, 2003).

[57] Kagan, *Three Seductive Ideas*, 158.

in human life, nor is any other species capable of disrupting natural cycles to such a dramatic extent on a global scale. This is because only an animal intellectually aware of a universal moral norm can be responsible for violating it. Humans alone are capable of the widespread destruction associated with desertification, soil erosion, pesticide contamination, and other environmental and agricultural disasters. Nonhuman animals do not have the freedom to choose this level and kind of destructive activity, or to practice it, as they are not intellectually aware of themselves as causal agents responsible for their effects.

According to Daniel J. Povinelli from the University of Louisiana's New Iberia Research Center: "Humans constantly invoke unobservable phenomena and variables to explain why certain things are happening. Chimps operate in the world of concrete, tangible things that can be seen. The content of their minds is about the observable world."[58] Humans, on the other hand, ask why and reflect on general, universal principles. They are capable of naming, organizing, and studying plants and animals in ways that other animals cannot. Using their gift of *episteme*, humans have developed the sciences of agronomy, horticulture, animal husbandry, botany, agricultural economics, organic farming, sustainable agriculture, and agricultural chemistry, to name a few. Whole universities are devoted to providing courses of study and training in these faculties.

Humans envision, design, and build technology (*techné*) and have the capacity to farm for the benefit of the common good (*phronesis*). From experience and action, they are able to generalize knowledge of

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[58] Povinelli, "Animal Self-Awareness: A Debate – Can Animals Empathize?" *Scientific American Presents: Exploring Intelligence* 9, no. 4 (1998): 66–75. St. Thomas Aquinas and Aristotle held that sense-cognition was limited to the apprehension of particulars of sensation and that animals with this power alone are limited to calculative acts of association (they cannot properly reason, which requires the apprehension of universals, abstract and separate from the particulars).

abstract principles and laws (*episteme*) which enable them to better comprehend the world around them and share it with others. No other animal is capable of such coordinated understanding, deliberation, and action.

Importantly, all three forms of knowledge are second order capacities that follow on the first order intellectual capacity, as they share three fundamental acts of the intellect: concept formation, judgment, and reasoning.[59] After sense-perceptive experience of individual beings in the world, human beings form conceptual meanings that are free, separated, or abstracted from individual material conditions. These are universal meanings not reducible to matter as extended and individuated.[60] This is possible as the meaning of sensed objects for human beings goes beyond benefit (attraction) and harm (repulsion)—the type of meaning necessary for estimative or instinctual behavior ordered to survival—extending in orientation to the being or existence of the object in itself. The human knows the tomato not merely as attractive for satisfaction of hunger (as does a squirrel), but he is also

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[59] The most generic intellectual concepts and acts of judgment are treated by Aristotle in *Topics* and *Categories*. Valid forms of syllogistic reasoning and the material conditions (soundness) for demonstrative reasoning are treated in the *Prior* and *Posterior Analytics*. Inductive type reasoning and division used for knowing first principles (definitions) is generically treated in *Posterior Analytics* 2 (especially, chapters 13–14 and 19) while *De partibus animalium* 1–2 treats the division of animal kinds. The three acts of the intellect are explicitly recognized by St. Thomas in *Expositio posteriorum*, lib. 1. First order capacities are powers that are the ontological or entitative perfection of the human. They are the primary end of ontogenesis. Second order capacities are operative powers that arise in the human from the exercise of first order capacities and the formation of perfective habits/states/dispositions. As we have shown, farming is a second order capacity constituted by a unique formation of the habits of *techné*, *phronesis*, and *episteme*. On the distinction between entitative and operative perfection, see Wallace, *The Modeling of Nature*, 163–168 and 185–189.

[60] See: *Categories* 5 (3b10–18). See also, *De anima* 3.4–6, and St. Thomas' commentary on the text.

aware of its existence in itself. This is why the human person can wonder about what it is and give an account extending from its basic phenomenal attributes to its elemental and atomic composition. Moreover, grasping the being of things in this manner, humans not only know things in the world and their meaning through concepts, but also in turn make concepts/meanings into objects of knowledge in themselves.[61]

Related to this capacity are the intellectual possibilities for grammar, syntax, and the proper linguistic expression of the being of things through meaning in propositional statements.[62] For example, while animals are able to communicate intentional meaning, they do not comprehend grammatical syntax. The linguist and philosopher of language, Noam Chomski, formulated a brilliant test for syntax comprehension: animals that grasp syntax should be able to understand the

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[61] By the intellect, human beings make concepts into objects of knowledge themselves, and form concepts of concepts (Logic). Humans and animals use signs (percept or concept meaning) to act in and relate to the world. However, humans are aware of sign use and signs themselves, so that they make the sign an object in itself and form signs about signs. "Semiotic" then is referred to this latter capacity while mere animal use of percepts is "semiosis." See John Deely, *Semiotic Animal*, and *Intentionality and Semiotics: A Story of Mutual Fecundation* (Chicago, IL: Scranton University Press, 2007). Helpful treatments of this topic are also given by Brian Kemple in "Signs and Reality: An Advocation for Semiotic Realism," *Reality* 1, no. 1 (Fall 2019): 11, and De Haan, "Approaching Other Animals with Caution."

[62] See: Sokolowski, *Phenomenology of the Human Person*, parts 1–2; George, "Thomas Aquinas Meets Nim Chimpski," and "Humans and Apes;" Spitzer, *The Soul's Upward Yearning*, 133–139. As Spitzer details, the scientists Allen, Gardner, and Van Cantfort claimed to have taught a chimpanzee, Washoe, American Sign Language. While Washoe did understand 350 signs, Herbert Terrace successfully challenged their study because they did not rigorously test for apprehension of grammatical syntax. In another study that has since been repeatedly verified, researchers concluded that chimps "show no unequivocal evidence of mastering the conversational, semantic, or syntactic organization of language." (Herbert S. Terrace, Laura-Ann Petitto, R. J. Sanders, and Thomas G. Bever, "Can an ape create a sentence?" *Science* 206 (1979): 891–902.)

difference in meaning between syntactically different sentences with the same terms, e.g., 'dog bites man' and 'man bites dog.' In fact, there is no evidence to suggest that chimps or other primates possess such a comprehension, as they have failed to distinguish the meaning of sentences such as these. More recent attempts have been made by researchers to show that other animals utilize syntax in communicating. In one study, researchers sought to establish the use of syntactical rules in communication by the Japanese bird species, the great tit (*Parus minor*). They show that members of this species utilize ten different calls, and that they regularly recombine sounds in order to communicate different meanings to their conspecifics. However, their conclusion is that the species uses "compositional syntax," but not the "grammatical syntax" used in human language.[63]

Language is constituted in the second act of the intellect: judgment. Judgments arise when humans compose conceptual meaning in a sentence with a subject and a connecting verb (copula). All judgments, then, like 'the stream is fluid,' have in common the characterization of the existence of a subject through a predicate and truth value (judgments can be true or false).[64] Having formed statements of judgment in this manner, human beings are then capable of reasoning, which works by connecting judgments (premises) through logical relations that

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[63] Toshitaka Suzuki, David Wheatcroft, and Michael Griesser, "Experimental evidence for compositional syntax in bird calls," in *Nature Communications* 7 (March 2106): 10986, (https://doi.org/10.1038/ncomms10986). Here, 'compositional syntax' means the regular ordering of various sounds so as to convey different meaning, e.g., 'scan for danger.' Such recombination is merely a complex form of sign/percept use in communication that can be fully explained by acts of one-to-one perceptual association. 'Compositional syntax' does not entail an understanding of the syntactical order of subject, verb, and predicate, which is what linguists, philosophers of language and philosophers in general mean by 'syntax.'

[64] Thus, St. Thomas holds that being is the primary thing that belongs to the intellect—its first apprehension. See, *ST* 1–2, q. 94, a. 2, resp.

necessitate another judgment as a conclusion. For example, 'roses are in need of pruning; this is a rose; ergo, this is in need of pruning.'

In the most general terms, then, and by analyzing the expression of these acts in language, it becomes apparent that intellect is a capacity or power distinct from others in terms of its object, which is abstract universal meaning and being of things.[65] *Techné*, *phronesis*, and *episteme* all entail that the practitioners of such knowledge have formed concepts from experience, utilized them in judgments expressed in linguistic propositions, and reasoned to conclusions. It seems that careful and proper analysis of gardening and agriculture shows these three types of knowledge are present in the activities, making them distinct and unique to the human being.

*Third Response: Analogical and Theological Knowledge*. Another important distinction between humans and nonhumans is that human persons have the capacity to think abstractly, metaphysically, and holistically about the philosophical and even spiritual dimensions of agriculture. For example, humans can learn from the "book of nature" and are capable of making analogies based upon lessons learned from the natural world. In the Christian tradition, agricultural analogies are the foundation for many of Christ's parables of the spiritual life. Consider the parables of the sower, the mustard seed, the weeds, the tenant farmers, the laborers in the vineyard, the lost sheep, or the leaven. Christ clearly favored agricultural analogies as a way to speak of spiritual realities in a manner that his (human) listeners could hear and understand.

Furthermore, while other animals cannot comprehend or believe in God, human persons have a capacity for God. Throughout the Scriptures, it is to humans, and not to the nonhuman creation, that God

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[65] See: Aristotle, *De anima* 3.4–6; St. Thomas Aquinas, ST 1, q. 79, especially a. 3 on the active intellect.

communicates himself.[66] The great story of the Scriptures is of God's searching for his people and of their human responses to the Divine call—not to mention that Jesus Christ himself, the Son of God, was a man.

Humans, moreover, are able to perceive God's creative handiwork in creation and to grow in faith through their relationship with the created world. One could say that farmers regularly exercise "expanded reason" as they apply their considerable human knowledge and cooperative effort to bring forth their crops, while always aware of factors beyond their control such as weather, seasonal variations, predation, etc. A farmer by nature recognizes his or her ultimate dependence upon forces transcending human control.

In addition, an essential aspect of the call of humans in the Scriptures relates to gardening. In Genesis, God gives Adam the mission to "till and keep" the earth (GN 2:15). No other animal receives this role. In God's eyes, humans are to be gardeners in order to fulfill His Divine plan for the world.

*Conclusions*. It is clear that human acts and proficiency in gardening distinguish human persons from other animals, both in degree and kind. While some of the human practices in relation to gardening are shared with other animals on a rudimentary level (implying a difference only in degree), human technical, ethical, theoretical, and spiritual knowledge, accompanied by hyper-cooperative action, work together synergistically to make human gardeners fundamentally different from their closest relatives in the evolutionary sequence and from other species that garden. The activity of gardening manifests knowledge capacities of *techné*, *phronesis*, and *episteme*, as following on the generic acts of the intellect of concept formation, judgment, and rea-

[66] See, for example: Exodus 3:1: God communicates himself to Moses, not to the flock he is tending. Similarly, God spoke through human prophets and human apostles.

soning, which are distinct from the capacities of other animals. These powers, generally speaking, take being and abstract universal conceptual meaning as their object. In this manner, they are distinct by way of the power-object model of definition. In effect, these multiple and extensive distinctions have pushed the ball into another cup or stability domain, in which with humans we have a "leap" into a qualitatively different state, representing a difference in kind from other animals. The approach to distinguishing human gardening activity from the garden-like behaviors of other animals by appeal to the power-object model, moreover, holds great explanative force. It allows us to explain the empirical fact that other animals do not exhibit proper gardening acts: they lack the capacity of intellect and the corresponding forms of knowledge necessary to act properly as gardeners, namely, *techné*, *phronesis*, and *episteme*.

In terms of how one might envision the fullest and most comprehensive understanding of the human person, using expanded reason to integrate scientific, philosophical, and theological knowledge, one could say that humans are both part of nature and distinct from the rest of nature. Human persons are clearly corporeal beings, in evolutionary continuity with other animals, but they are also intellectual and spiritual beings. To appeal to Aristotle's genetic account of the division of living beings, as possessing and containing the powers of the inorganic (utilized by organic beings), organic plant life (nutrition, reproduction), and animal life (sense-perceptive cognition and agency), human beings are connected to and part of the natural world. However, as possessing the capacity of intellect and free voluntary agency, human beings are distinct from the rest of nature. Humans are a unique synthesis of body and soul, not to be reduced to their physical or intellectual constitutions. Rather, there is a mutuality between external practices and interior capacities of intellect and will, such that they inform one another in constituting the nature of the human person as a whole. The uniqueness of the human person rests upon this multilayered dis-

tinctiveness, which is evident in the way that persons garden, as has been described.

## V

*Replies to the Objections: Reply to Biological Argument*. While it is true that other animals grow their own food, they do this according to their instinct and nature. The empirical fact that they normatively "garden" a narrow/limited plant form shows that they do not grasp the meaning of gardening *qua* gardening in abstract universal terms as human beings do. They are not aware that humans farm. Humans are the only creature able to study, name, and categorize animals that farm, via the intellectual capacities of concept formation, judgment, and reasoning. In fact, this kind of observation and study is the joy of the scientist's particular vocation. Even though many species have been farming for millions of years, and humans for only 10,000–15,000 years, it is interesting that humans have developed a high degree of complexity in their farming practices in a short evolutionary period, while it took creatures like ants millions of years.

*Reply to Darwinian Argument*. The difference between humans and animals is one of kind as well as of degree. As shown above, human beings can be distinguished from other animals by the power-object model of definition. Aside from basic vegetative and animal capacities, human beings possess the capacity of intellect ordered to the distinct objects in the apprehension of being and abstract universal meaning. As was also shown above, humans have developed whole technologies, economies, social and educational structures and spiritualities around farming. There is a categorical difference between how humans and animals garden, even though they are in evolutionary continuity with other creatures. Further, it is not fair to compare the gap between chimps and ants with that between humans and chimps, since this compares distantly related species with closely related ones.

*Reply to Genetic Argument*. Even though humans are genetically related to all species, and most closely related to the chimpanzees and bonobos, it is now known that genes alone do not determine the organism; epigenetics and culture also play significant roles.[67] In fact, the human genome underwent rapid changes when humans evolved from primarily hunter-gatherers to farmers; the cultural change came first, and genetic adaptation followed.[68]

In addition, how genes influence the nature and behavior of organisms is regulated by the turning off and on of genes, not just by the genes themselves. This regulatory function is modulated in the noncoding regions of the genome. Recent research indicates that the noncoding regions in humans differ significantly from those of other species. For example, the noncoding regions in the mouse genome are not very similar to those in the human genome (50% or less).[69] Even though human and chimp DNA are 99% similar in the protein coding regions, "the vast majority of all genomic changes that happened since the human–chimpanzee ancestor are in noncoding regions."[70] This suggests that the degree and kind of relationship between humans and

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[67] Ethan Watters, "DNA Is Not Destiny: The New Science of Epigenetics," *Discover* (November 21, 2006), https://www.discovermagazine.com/the-sciences/dna-is-not-destiny-the-new-science-of-epigenetics; Daniel Frías & Christian Villagra, "The Importance of ncRNAs as Epigenetic Mechanisms in Phenotypic Variation and Organic Evolution," *Frontiers in Microbiology* 8, no. 2483 (2017): 1–13.

[68] See footnote 3 and Iain Mathieson, Iosif Lazaridis, Nadin Rohland, et.al., "Genome-wide patterns of selection in 230 ancient Eurasians" *Nature* 528 (2015): 499–503; Michael J. O'Brien & Kevin N. Laland, "Genes, Culture, and Agriculture: An Example of Niche Construction," *Current Anthropology* 53, no. 4 (2012): 434–470.

[69] National Human Genome Research Institute, "Why Mouse Matters." https://www.genome.gov/10001345/importance-of-mouse-genome.

[70] Lucía F. Franchini & Katherine S. Pollard, "Human evolution: the non-coding revolution," *BMC Biology* 15, article 89 (2017). https://doi.org/10.1186/s12915-017-0428-9: 1–12 (2017).

chimps is more strongly governed by differences in the noncoding regions of the genome, rather than by similarities in the protein-coding regions of the DNA.

Moreover, this criticism is based in a fundamental methodological error concerning causation and the division of natural kinds. From the Aristotelian standpoint, the primary principle/cause for the division of kinds is not common matter, but rather, distinguishing form. Therefore, although humans are over 99% genetically similar to their closest evolutionary relative, the bonobos, the human form in connection to gardening is distinctive, as we have proposed in this article, and represents a difference in kind between humans and bonobos.

*Reply to Nominalist Argument*. Proper analysis of human knowledge and language shows first, that the nominalist position itself results in a manifest contradiction and second, that there is, in fact, a principle of identity between individual natures and the universal conceptions formed in the intellect.[71] First, while the denial of universal conceptions signifying common natures can be uttered in speech (*ut significata*), this assertion contradicts and is incompatible with the use of defining terms in language already given to us as a phenomenon and exercised (*ut exercita*) in human life and culture. When I am in the garden, for example, I identify tomatoes as distinct from soil and rock as organic plant life, and as distinct from other plants such as peppers, which possess similar features like leaves and fruits. In fact, I apply the name and universal meaning to these particular individuals in the garden precisely because I know/believe these universal characteristics to be ontologically present in the particulars themselves. The presence of

[71] For a more developed argument in defense of the Aristotelian, realist approach to definition against nominalism see Daniel Wagner, "The Logical Terms of Sense Realism: A Thomistic-Aristotelian & Phenomenological Defense," and Brian Kemple, "Signs and Reality: An Advocation for Semiotic Realism," in *Reality* 1, no. 1 (Fall 2019): 19–67 and 75–123.

universal common features is verifiable by sense-perceptive experience: I see directly the generic and specific features of *x* in *y*, or know them through experiment, etc. The nominalist denial of universal conceptions used to identify particular plant beings in the garden results in a contradiction, then, because, except that I believe that the essential features expressed in the definition are really present in the particular plant, it would be impossible for me to say the definition of the plant, classifying it with others of its kind. However, I, along with many other horticulturists and botanists, already regularly predicate definitions in this manner.[72] Moreover, nominalism would make all human thought and action involving the application of universal meaning to particulars impossible, including human science. Every science, however, actually rigorously defines its subject-genus in order to study it. Therefore, nominalism is false as resulting in these impossibilities.

Second, following Aristotle and the development of his hylomorphic philosophy of nature by Avicenna and St. Thomas Aquinas, we identify the natural form, distinct from matter, as the principle of identity between individual natures/essences and universals apprehended in human understanding.[73] The individual cannot be identical to the

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[72] This *reductio ad impossibile* style argument against nominalism is inspired by Etienne Gilson, *The Unity of Philosophical Experience* (San Francisco CA: Ignatius Press, 1999), 4. At the outset of his *New List of Categories*, Charles Sanders Peirce appears to offer a similar argument. Human knowers could not experience a unity from the sensuous manifold constituted and expressed by the connection of a predicate to subject through the copula, unless the universal (predicate) exists. However, humans do experience this unity and express it in language. Therefore, the universal conceptual meaning and the common essence it signifies are real.

[73] Aristotle shows with necessity that explanation of natural beings capable of change/motion requires appeal to matter and form (hylomorphism) at *Physics* 1.5–7. For recent defenses of this doctrine of physical explanation, see the following: Wallace, *The Modeling of Nature*, Part 1, and "A Place for Form in Science: The Modeling of Nature," in *American Catholic Philosophical Quarterly* 69 (1995): 35–46; Robert Sokolowski, "Formal and Material Causality," in *American Catholic Philosophical Quarterly* 69

universal meaning by which we know it with respect to its extended material existence. However, it is possible that the formal nature of the individual exists in two modes: form is capable of existing in the individual as the essence, making it to be what it is, and as separate in the intellect where it may, in abstraction, be predicated of those individuals from whence it was derived.[74]

*Reply to Ecological Argument*. We have two points in response to ecological concerns about humans being viewed as distinct in kind and therefore as somehow justified in relating to other creatures and nature in a reckless and destructive manner. The first is that a distinction in kind does not imply a lack of relationship or continuity with other creatures. It is in no way logically necessary that, since human beings are different in kind from the rest of nature as possessing higher order capacities of gardening, as we posit here, that, therefore, it is acceptable for human beings to engage in wasteful, reckless, destructive practices in relation to nature. Evolutionary science, as we have indicated, is predicated on the fundamental interrelatedness of all life, which by definition includes human life. Further, the Aristotelian and Thomistic division of human beings that we have proposed here, far from disconnecting the human from the natural world and providing humans with reason for such despicable behavior, shows an essential connection of human beings with the rest of the continuum of natural being. According to this approach, the human being is not a rational

(1995): 57–67; Tkacz, "The Retorsive Argument for Formal Cause"; Jonas, *The Phenomenon of Life*, especially 33–37; and Kass, *Toward a More Natural Science*.

[74] For a detailed textual account of this Aristotelian solution to the problem of universals, see Wagner, "The Logical Terms of Sense Realism," 36–38. The key texts in Aristotle for producing this account are *Categories* 5, *Physics* 2.3, *Metaphysics* 5.8, and *De anima* 3.4. Avicenna first distinguished two modes of existence of essence along these lines, in *The Metaphysics of the Healing* 5.1. St. Thomas Aquinas picks up and develops the distinction in his *De ente et essentia*, 3.

ghost, unrelated in kind and superior to its own body and the bodies of other natural beings. In fact, this was the view of René Descartes and his Modern followers who did, upon taking it up, view nature as an object for human domination, and who coldly and cruelly engaged in such horrific practices as vivisection.[75] Rather, the human soul, in animating the organic human body, is defined not only by its rational capacities but also by the animal capacities connected to sense perception and the nutritive capacities connected to growth, homeostasis, and reproduction.[76] This, precisely, is a principle and source of a true and authentic connection of empathy between humans and animals and plants. Properly understanding their ontological connection to nature in this manner leads humans to treat other natural beings with care and respect – knowing, as it were, that other animals are intentionally aware of pleasure and pain and live emotional lives, and that plants too

[75] For Descartes' substance dualism, radically separating *res cogitans* from nature as matter and mechanism in this manner, see *Meditations on First Philosophy* 1, 2, 3, and 6. Following Francis Bacon, and rejecting the Ancient and Medieval conception of human knowledge as ordered to the perfection of the person in the satiation of wonder (Aristotle, *Metaphysics* 1.1–2), Descartes held the purpose of science and human knowing was to control and dominate nature for material benefit. In the introduction to his *New Organon*, Bacon says the following: "But any man whose care and concern is not merely to be content with what has been discovered *and make use of it*, but to penetrate further [has gone astray]; and not to defeat an opponent in argument but *to conquer nature by action* [is the point of knowledge]." Emphasis added. For an excellent treatment of the Moderns' "mastery of nature" project, see Richard Kennington, "Bacon's Reform of Nature," in *Modern Enlightenment and the Rule of Reason*, in *Studies in Philosophy and the History of Philosophy* (vol. 32), ed. John C. McCarthy (Washington, D.C.: The Catholic University of America Press, 1998). For more on the disjunct between the Aristotelian-Thomistic view of humans and the Cartesian one, see Sister Damien Marie Savino, F. S. E. and John Hittinger, "Loss of Creation and its Recovery through Aquinas and Bonaventure," *New Blackfriars* 97, no. 1067 (2016): 5–21, especially 6–8.

[76] See: Aristotle, *De Anima* 2.1–4.

live lives ordered to nutrition and reproduction, and that it is as good for them to achieve these ends as it is good for us.

Secondly, while the authors acknowledge that humans have unfortunately manifested their unique capacities in destructive ways upon the earth, it is important to recognize that those unique human capacities are irreversible and cannot be "dialed back," so to speak. It is precisely because humans are different in kind from the other animals and not merely in degree that they have been able to effect such far-reaching, global environmental changes. No other creature is capable of this, nor has any other creature succeeded in doing so in the evolutionary history of the earth. However, asserting the difference in kind between humans and other creatures does not need to imprison humans in a negative understanding of their nature and purpose as created beings. Rather, an alternative, compelling vision is needed in which the special capacities of humans are put to the service of others and of the created world in a more humble and life-giving manner. The conception of human persons as gardeners is one such vision. Gardeners enrich their soil, tend their crops, care for their animals, and feed others. In the Christian understanding, it is in this sense that human persons have been commissioned by God to till and keep the garden of the world.

## *Disputatio* on the Distinction between the Human Person and Other Animals: the Human Person as Gardener

SUMMARY

While the Catholic intellectual tradition upholds the uniqueness of humans, much contemporary scientific research has come to the opposing conclusion that humans are not significantly different from other animals. To engage in robust dialogue around the question of human uniqueness, we utilize Aquinas's

model of *disputatio* to focus on an attribute of human beings that is unexplored in the literature – namely, the human capacity to garden – and address five scientific and philosophical objections to our position that the capacity to garden makes humans distinct. Engaging with various branches of science, we demonstrate that human capacities and modes of gardening are not only incrementally different, but also fundamentally different in kind, from those of nonhuman creatures. Philosophically, we utilize the power-object model of division and Aristotle's categorization of knowledge to express the difference in kind between human beings and other animals. These responses allow us to set aside each major objection.

**Keywords:** human uniqueness, gardening, person, personalism, philosophical anthropology, philosophical biology, Thomas Aquinas, Aristotle, human intelligence, animal intelligence, cognition, epistemology, metaphysics, philosophy of language, evolutionary biology, ecology, logic, ethics, *disputatio*

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# The Philosophical Foundations of Communication Education

## Preliminary remarks

Public speaking, rhetoric, persuasive techniques or the art of discussion and debate, as well as interpersonal, verbal, non-verbal and intercultural communication, are topics that have entered the contemporary scientific discourse a long time ago. Already in the first issues of scientific journals in the field of communication, such as the Quarterly Journal of Public Speaking, published for the first time in 1915 (now the Quarterly Journal of Speech), the issues concerning, inter alia, what are the characteristics of good public speaking, what is and what a discussion should look like and what communication education should look like at different levels of education, were discussed. It seems, however, that research directions are still limited to a practical approach to communication. It is primarily about developing and strengthening the broadly understood individual communication com-

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petences enabling life in society and achieving one's own development goals.[1]

The development of technology and the mediatization of society today have a huge impact on all spheres of human life. Therefore, educational institutions face the important task of not only tracking changes in the communication space, but also ensuring and maintaining a high standard of education, thanks to which people will be equipped with appropriate interpersonal competences from the early years of their education. Communication education issues are taken up in the framework of various disciplines: journalism, public relations, advertising. However, they are rarely undertaken in a philosophical context.

Communication education is a general term that includes the skills of speaking and listening, as well as learning and teaching others. Researchers have long wondered about the competences that a teacher should have to support student development, about teaching strategies that support the learning process, about methods that will teach not only to speak in public, but above all to communicate with others in an effective and appropriate manner, and to evaluate messages (both in the interpersonal space and in the media).[2]

It can be said that communication education focuses on, on the one hand, how to teach communication, and on the other hand, how to communicate with a student in order to effectively convey knowledge to him or her. Two terms differentiating these aspects can be found in the literature: the rhetorical approach and the relational approach.[3]

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[1] James C. McCroskey and Joseph L. McCroskey, "Instructional communication: The historical perspective," in *Handbook of instructional communication: Rhetorical and relational perspectives*, ed. Timothy P. Mottet, Virginia P. Richmond, James C. McCroskey (Boston: Allyn and Bacon, 2006), 33–47.

[2] Ann Q. Staton-Spicer and Donald H. Wulff, "Research in communication and instruction: Categorization and synthesis," *Communication Education*, no. 33 (1984): 377–391.

[3] James C. McCroskey and Kristin M. Valencic and Virginia P. Richmond, "Toward a general model of instructional communication," *Communication Quarterly*, no. 52

The rhetorical approach emphasizes the role of teachers as those who have a key influence on the learning process, because they, through various persuasive techniques, make decisions about the choice of the topic and the way of presenting it, and shape the student's approach to education. It is emphasized that the teacher is responsible for the teaching process, therefore he or she should develop a style of communication that will implement the ancient tasks of the speaker (Latin *officia oratoris*), i.e. inventio (appropriate selection of content), *dispositio* (proper ordering of selected content), elocutio (the way of presenting this content in the language), *memoria* (remembering the content planned to be communicated) and *actio* (appropriate delivery of content, including verbal and non-verbal communication). Teachers who speak clearly and in a structured manner are more likely to convey learning content that is interesting and understandable. Attention to explaining difficult concepts, formulating appropriate examples, and clearly conveying the content not only facilitates understanding and remembering, but also increases students' motivation to learn and bring satisfaction from expanding the scope of their knowledge.[4]

In the relational approach, however, attention is paid mainly to the way the teacher communicates with the student at the interpersonal level. Does he or she interact with the student, allow him or her to discuss, show concern and understanding, and adjust the message to the individual needs of his or her audience? As part of this approach, researchers focus on personality traits that favor teaching and those that act as a barrier to adequate communication. Teachers who are assertive and responsive to student behavior are perceived as more

(2004): 197-210; James C. McCroskey and Joseph L. McCroskey, *Instructional communication: The historical perspective*, 33–47.

[4] James C. McCroskey and Joseph L. McCroskey, *Instructional communication: The historical perspective*, 33–47.

effective, credible and competent, while those who are responsive and show concern for students' well-being and understanding of the content they convey are perceived to be supportive, trustworthy, and can be counted on to help when needed.[5]

The interpersonal competence of the sender of the message, as well as the way he or she does it, are extremely important issues. However, it should also be remembered that if a person who wants to convey something to others does not adhere to the truth about reality, does not use rational language, but tries at all costs to draw the recipient's attention to himself or herself with the words he or she utters, then he or she not only becomes incomprehensible to others, but what's more, builds a model of communication based on stimulating others to construct their own, subjective image of the world, in which they can freely change the meanings of the words spoken – depending on their preferences, context or, finally, the goal they want to achieve.[6]

## Communication in education

The approach which is not about presenting the truth in communication, but about a game of appearances, was already presented by ancient teachers – the sophists. The words of Phaedros are eloquent, who – in his discussion with Socrates – states that whoever wants to be a speaker does not have to know what is fair, but what the crowd thinks is the truth. So truth, goodness and beauty are irrelevant. The most important thing is what convinces people.[7] It seems to still be valid

[5] James C. McCroskey and Joseph L. McCroskey, *Instructional communication: The historical perspective*, 33–47.

[6] José M. Barrio Maestre, "Crítica filosófica al constructivismo," in *Actas del Congreso Internacional: ¿Una sociedad despersonalizada? Propuestas educativas*, ed. Enrique Martínez (Barcelona: Editorial Balmes, 2012): 25–40.

today. Words are no longer an expression of "the reality of things," but have become information characterized by the fact that it is apparent and transient. The world of beings that we get to know is no longer the world of truth that we read from reality, but the world of information transmitted, which, depending on the sender and intentions with which they communicate, take on various meanings.[8]

If, on the other hand, the word that reflects the truth about being is a sign of the order of reality, then the word that only appears to be truth, and is also fleeting, becomes a sign of chance, disorder, chaos. The intellect, on the other hand, which reads the truth written in being, ceases to be the author of this word. Its author becomes the will, which imposes meaning on it in an arbitrary manner, depending on the context and intentions.[9]

Meanwhile, the author of the message should make every effort to convey it, to say—as far as possible—the truth about what he or she is talking about. Quintilian wrote about it when he defined the purpose of rhetoric:

> Writers on rhetoric have fallen into some false, in my opinion, ambition not to define anything with the same words that someone else had already used before them. Of course, I am not applying for such originality and I will say not necessarily what I come up with, but what I consider to be good, namely that rhetoric is knowledge in terms of reliable pronunciation. For, since its best term has been invented once, anyone who seeks another must therefore seek a worse one. In accepting this, we also obtain a clear definition of the goal or ultimate ideal of rhetoric,

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[7] "καὶ πάντως λέγοντα τὸ δὴ εἰκὸς διωκτέον εἶναι, πολλὰ εἰπόντα χαίρειν τῷ ἀληθεῖ", Platón, "Fedro" 272e, in Platon, *Diálogos*, vol. III, (Madrid: Gredos, 1986).

[8] Enrique Martínez, "Verba Doctoris: La fecundidad educativa de las palabras del maestro," in *Sapientia*, no. LXXI (237): 40–44.

[9] *Ibid*.

> which in Greek is called *télos*, to which all this art is heading; for if it itself is knowledge of honest pronunciation, its goal and ideal is to practice honest pronunciation.[10]

The reality that is available in our cognition is not self-understood. It is composed of entities that combine into cause-and-effect relationships. Often, in order to understand a phenomenon, one must reach for its cause, and then for the cause of that cause. Only then does it reveal itself to us in its entirety. The person who has achieved this understanding has the difficult task of imparting knowledge to others in such a way that, first, they do not become discouraged from further seeking the truth, and that they begin this difficult process at the right starting point. The teacher is therefore someone needed, because thanks to the education he or she has received, he or she has much more advanced knowledge, understanding the world and tools enabling proper and purposeful communication. However, if his or her words, means and educational methods are incomprehensible to the student, then it will discourage him or her from learning the truth and direct him/her to take a shortcut. In other words, if the language with which we speak about the world is not understandable to the recipient, then the world described by this language will be not understandable either. Clear, precise, and sound messages and an indication that the teacher (in the broadest sense) is someone necessary to know and understand the world are criteria without which the educational process becomes meaningless. Education is talking about difficult things as simply as possible. Developing the belief in a student that he or she will not achieve knowledge alone, without the help of teachers, is a key element of his or her further development. The medieval philosopher and

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[10] Marek Fabiusz Kwintylian, *Kształcenie mówcy* [Institutes of Oratory], vol. II, chapter XV (Cracow: Księgarnia Akademicka, 2012).

theologian Bernard of Chartres uttered the following words, which indicate how important it is to use the knowledge and understanding of those who sought the truth before us:

> We are like dwarfs that climb on the shoulders of giants to see more than them and see further, not because of our sharp eyesight or body height, but because we climb up and rise to the height of giants.[11]

These words, treated in the cultural discourse as the so-called winged thoughts (Greek: ἔπεα πτερόεντα, epea pteroenta), i.e., commonly known and often quoted statements, due to their pictorial, colorful and allusive nature, have become the subject of interpretation of many thinkers, including Umberto Eco. He stated that based on the great achievements of our ancestors and adding even a small brick to what they discovered, we in some way outgrow them, but our discoveries are the result of a joint effort.[12]

If, however, what our predecessors discovered was not confirmed in reality, and was only their subjective interpretation conditioned by some individual goal, then we would start our cognition of the world from scratch each time, and science would not be at the point where it is today. Moreover, in order for the exchange of experiences and the effects of cognition to be possible, rules of communication are needed that will regulate the discourse and guard its goal.

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[11] Stefan Swieżawski, *Dzieje europejskiej filozofii klasycznej* [The history of classical European philosophy] (Warszawa–Wrocław: PWN, 2000): 487.

[12] Umberto Eco, *Na ramionach olbrzymów. Wykłady na festiwalu La Milesiana w latach 2001–2015* [On the shoulders of giants. Lectures at the festival La Milesiana in the years 2011–2015], trans. Krzysztof Żaboklicki (Warsaw: Noir Sur Blanc, 2019).

## Communication education—rules of discourse

Discourse, understood as an element of communication consisting in the exchange of thoughts and views, is inextricably linked with the emergence of philosophy. In their reflections on the world and man, the ancient Greeks began a centuries-old dialogue. It has always been conducted according to certain rules, without which it is impossible to exchange thoughts.

The first rule says that the existence of truth (as the conformity of intellect with thing) should be considered as the criterion for formulating views. This means that reality is the test of our views and statements. The point in the sentences uttered by the participants is whether they are true, not whether somebody likes them, whether they make an impression, or whether they are a manifestation of speaker's experiences.[13]

The second rule indicates that one should adopt intersubjective ways of achieving this truth, i.e., some ways of knowing it and the possibility of communicating it to others. In the event of any discussion, its participants should take care of the correctness of the arguments they formulate. It is taught by rhetoric and logic. Two conditions for the correctness of arguments are indicated: the law of non-contradiction and the law of the excluded middle. The first is that of two contradictory statements, at most one is true, and in the case of reality it means that nothing can happen and not happen at the same time. The second one says that if we have two contradictory statements, one of them must be true and the other false.

The third rule emphasizes that the freedom and rationality of discourse participants should be respected. So, we persuade others with

[13] Henryk Kiereś, *Człowiek i cywilizacja* [Man and civilization] (Lublin: *Servire Veritati* IEN, 2007): 101–102.

integrity without resorting to manipulation, lies, intimidation or other forms of pressure.[14]

The above rules can be organized by relating them to branches of philosophy. The existence of truth means that there is a reality that tests our beliefs about the world (these are metaphysical issues). Searching for truth means that there are some methods, that is, ways of arriving at knowledge (these are epistemological issues). Respecting freedom and rationality takes into account the anthropological and ethical aspects of discourse (these are issues from the philosophy of morality). The rules of discourse do not only concern philosophical issues, but also cover all spheres of human life. This means that even in conversations with friends or in the family, we can either respect the given rules and conduct an honest and cognitively valuable exchange of thoughts, i.e., an exchange of thoughts that brings us closer to the truth, or we can go in the direction of manipulation or pointless arguments.[15]

It is worth adding that in order for the discourse to be fruitful at all, it must be about something. And it is not about choosing a topic that is controversial or currently popular. The point is to clearly formulate the question, that is, to pose the problem. If we ask a question and oblige the participants to stick to the topic, we will certainly not waste time, and the discussion will not be about everything and about nothing, it will not be an exchange of impressions, i.e., what it seems to whom, but a joint attempt to discover the truth.

We can discuss theoretical issues. Then we try to find out how it really is. An example are discussions of a philosophical nature, such as the discussion of early philosophers about whether *arché* is water or air. It was theoretical in nature, because its participants tried to establish something about it. We can also discuss practical issues. Then we

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[14] Henryk Kiereś, *Człowiek i cywilizacja* [Man and civilization], 101–102.

[15] Henryk Kiereś, „Kultura klasyczna wobec postmodernizmu" [Classical culture towards postmodernism], *Człowiek w Kulturze*, no. 11 (1998): 242.

try to determine how it should be. In this case, we are discussing with the intention of convincing someone to introduce some changes or determine how to do something (what actions to take). Ancient philosophers, for example, who dealt with the issues of attaining happiness, argued that there were different ways of acting that would lead us to that happiness.

Let us add that the ability to use basic concepts is important in discourse and argumentation. One should distinguish the thesis from the argument. A thesis is a statement that someone accepts as true and tries to convince somebody of it (if he or she is not convinced of the truth of the thesis, but still persists stubbornly, it means that he or she is trying to manipulate or simply self-love (pride) does not allow him or her to admit his or her mistake). The argument is formulated to justify the thesis. In other words, this is the reason why we are to accept this thesis.

Knowledge of the above rules is crucial and should become an element of education. Contemporary social discourse that takes place in social media, especially in the so-called virtual reality, gives everyone the opportunity to speak on any issue, regardless of their competences and culture of language. Therefore, there is an increase in the so-called communication chaos and there is a common lack of communication skills, as manifested especially in the ignorance of or even an ostentatious disregard of the criteria of discourse. It points to such phenomena as the brutalization or vulgarization of language and an evident lack of understanding of the issues at hand, what is said and how it is said. They make the social debate, in its content (semantic), largely reduced to a cognitively sterile exchange of opinions. What is worse, although these opinions express various attitudes and views of a worldview nature, and thus are to a large extent subjective, due to the lack of the aforementioned universal criteria of discourse, they are regarded as cognitively equal. On the other hand, it is often enough to use professional terminology and build a syntactic statement in order to pretend to be an expert in a given matter. In other words, superficial linguistic

competence and proficiency, expressing merely someone else's opinion, may be regarded as binding for users of media and internet forums. Moreover, due to the possibility of anonymous participation in the discourse—which is made possible by social forums—the responsibility for the spoken (written) word disappears. That is why education in this area is so important.

Moreover, it is commonly believed that the purpose of the discussion is simply to win it. Entering the discussion from the very beginning assumes that someone has to be defeated and someone has to win. That is why many people think that sometimes no holds are barred. Such an approach at the starting point assumes a negative attitude towards another person or treating him or her as a material for preparation or confrontation. In this approach, manipulation is used – the words uttered by the speaker are negative, and the procedures he or she uses are aimed at shaping someone's attitude, behavior or belief by means that are dishonest, secret and inconsistent with the good. This dishonesty may include, for example, lying outright or concealing the goals pursued by the manipulative person. People with this attitude do not care about anyone's interests. Their goal is to win the dispute at any cost, not to come closer to the truth. An honest discussion, however, is not about winning, but about finding a common reason for accepting or rejecting a position or action for the sake of the recognized good. In order to see and understand this, it is important to bear in mind that the goal of communication is not self-gain, but the intersubjective truth that is associated with an intersubjective good.

## Rhetoric and its philosophical foundations

The essence of human activity in the field of culture is the rational and purposeful cultivation of the world, and one of the important areas of this cultivation, especially in its social dimension, is the language

through which man can express his states and communicate with others. Language is the subject of interest and research in many sciences and disciplines, among which rhetoric, i.e., the art of speaking beautifully, stands out. It was discovered in ancient Greece as an expression of the rationality of a man (*zoon logikon*), gifted with speech (*echon logon*), using speech in social discourse, especially political and judicial. The achievements of the Greeks in the field of language culture were appreciated by the Romans, and in the Middle Ages, when rhetorical education became a permanent part of the canon of humanistic education as an element of the so-called liberal arts (*artes liberales*). Rhetoric – along with logic and grammar – was to provide tools to discipline thinking and communication. The prestige of rhetoric was lowered in the Renaissance. It became only the art of using a decorative and lexically rich language efficiently. This rhetoric focused on the problem of tropes, word figures and the technique of verbal expression. As a consequence, it was transformed into a discipline that is nowadays referred to as stylistics.[16]

Rhetoric, understood primarily as the art of expressing subjective opinions and individual emotions, began to be treated as elaborate hollow words, with the help of which the speaker – "an eloquent man" (*homo loquens*) – hides his own ignorance and lack of competence. The second tendency in the approach to rhetoric has placed this discipline on the side of manipulation and made it a set of manipulative techniques that deceive other people and thus pose a threat to their rationality and freedom.[17]

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[16] Chaim Perelman, "The New Rhetoric: A Theory of Practical Reasoning," in *The New Rhetoric and the Humanities* (Dordrecht: D. Reidel Publishing Company, 1979): 1–2.

[17] Jakub Z. Lichański, *Retoryka od renesansu do współczesności – tradycja i innowacja* [Rhetoric from the Renaissance to modernity – tradition and innovation], (Warsaw: DiG, 2000).

The history of how rhetoric is treated is closely related to philosophy, which – as we know from textbooks and compendiums on philosophy – is not a monolith of thought. Philosophy is made up of two traditions: the tradition of realism and the tradition of idealism, which, in turn, are internally conflicting and consist of two currents: irrationalism and rationalism. Both traditions are characterized by a specific attitude towards the problem of rhetoric, its presence in culture and its concept. Undoubtedly, there are three sources of thought that have influenced and still influence the way of presenting and solving the above-mentioned issues, namely the sophists and Plato, and the thought of Aristotle and the Stoics. An insight into these three sources of rhetoric proves that it is based on a specific concept of the world and man and the purpose of his or her existence in the world. It follows that the debate over the problem of rhetoric, or more broadly: communication, is philosophically conditioned and that in order to understand its purpose well, the problem of philosophy itself must be resolved in terms of its mental claims to explain the mystery of the world and man.[18]

It can be assumed that the criterion for assessing various concepts of rhetoric that emerge from these three sources is the ancient principle of "right reason" (*orthos logos*; *recta ratio*), i.e., the need to respect the anthropological factor in the light of which the general principles of cultural discourse are defined. The sender of the message should always have the benefit of the recipient of the message in mind, and its addressee should have the ability to adopt the right attitude towards the message in question. He or she should understand the cause-and-effect relationships contained therein, should distinguish between facts and

[18] Piotr Jaroszyński and Lindael Rolstone, "Sophists, Aristotle and Stoics: three concepts of ancient rhetoric," *Studia Gilsoniana* 11, no. 1 (January–March 2022): 59–87; Joanna Kiereś-Łach, *Filozofia i retoryka. Kontekst myślowy „nowej retoryki" Chaima Perelmana* [Philosophy and Rhetoric. The idea context of the 'new rhetoric' of Chaim Perelman] (Lublin: Academicon, 2015).

opinions, recognize erroneous assumptions, and analyze the content in terms of their compliance with the subject of communication. It seems that the general model of rhetorical discourse outlined in this way should be the basis of rhetorical education. The combination of these two aspects of the discourse guarantees the ordering of the various methods used in it according to the criteria of the so-called critical thinking.[19]

## Final remarks

When spoken words are not rooted in being, they cease to be a communication tool and become only *flatus vocis*, i.e., a name without an equivalent, a hollow word. The criterion for their evaluation is then not the reference to the truth, but whether they are pleasant and attractive to the recipient. Such words are fleeting, introduce chaos and force communication participants to make the effort of constantly inventing something new—not at all related to the truth about the world.[20]

Contemporary Spanish philosopher and theologian Francisco Canals noted that this lack of rooting of the word in being and striving to create new and attractive words is especially the domain of the media. We often see how much the so-called 'facts' presented in the news services differ from the actual state of affairs. Journalists pay more attention to the fact that their message is interesting and shocking than that it reflects the reality it refers to.[21] All this makes the phe-

[19] Paweł Gondek, "Communio and communicatio: the role of communication for participating in public life," *Studia Gilsoniana* 4:1 (2015): 21–22.

[20] Enrique Martínez, *Verba Doctoris: La fecundidad educativa de las palabras del maestro*, 50–51.

[21] Francisco Canals, "Teoría y praxis en la perspectiva de la dignidad del ser personal," *Actas del Congreso Internacional ¿Una sociedad despersonalizada? Propuestas educativas,* ed. Enrique Martínez (Barcelona: Editorial Balmes, 2012): 17.

nomenon of empty words and verbalism more and more common. This was pointed out by Jacques Maritain, who wrote that means that become ends in themselves, and not something that is intended to lead to this end, cease to have any practical value. They then multiply endlessly and only widen the range, which leads to confusion. It is normal and related to the natural dynamism of reality that new means leading to an end arise. This is a sign of some progress. The point is that they should actually lead to this goal. New words should refer to an undiscovered aspect of reality, they should bring new knowledge and understanding of the world, and not only expand the scope of vocabulary and meanings, the interpretation of which is arbitrary.[22]

Another very serious consequence that we can observe in the scientific language of broadly understood education is the multitude of regulations and laws that do not help and organize, but introduce chaos and cause useless work consisting in multiplying subsequent regulations, laws, programs, reports, etc. Teachers devote all their efforts to meeting new ministerial expectations, they make sure that the language they use in their work contains specific and sophisticated words that do not relate to reality at all, but are only a kind of semantically empty *newspeak* that sounds wise but instead of explaining, confuses and discourages. Inundated with these meaningless words and expressions, students become discouraged from learning, limit their expressions to simple messages and become convinced that language is a barrier to understanding the world, not a means of understanding it.

Contrary to this common phenomenon today, issues in the field of communication and communication education should be grounded in the philosophy of man, especially in the context of various interper-

[22] Jean J. Maritain, "Pour une Philosophie de l'Éducation," previously: "L'Éducation à la croisée des chemins," in J. and R. Maritain, *Oeuvres complètes*, vol. VIII (Friburg: Éditions Universitaires Paris, Éditions Saint-Paul, 1988): 771–772.

sonal relationships and their conditions. Language is then the tool by which the recipient is engaged by authenticating the sender. This authentication takes the form of communication patterns through which persuasion becomes possible. In other words, authentication is a type of proof that is based on finding what is convincing, using words that are verifiable when we confront them with the actual state of affairs.[23]

Every day we deal with situations in which we convince someone, express an opinion on a subject, or communicate our emotional states. The ability to communicate precisely, relevant to the subject and adapted to the listener, is an element of the broadly understood culture of language. Knowing the rules of discourse, understanding the essence of communication, and seeing its relationship with philosophy (including ethics, anthropology, or the theory of cognition) allows us to protect ourselves from manipulation. It also helps to consciously formulate arguments adequate to the content. Knowing the rules governing discourse increases the probability of the accuracy of our message and the effectiveness of the arguments we formulate.

Education, as a form of support for other people in getting to know the world and in discovering the truth about oneself, should be built on communication in which the objective truth about the world is expressed, in which the word shows being, relates to it and reveals it. This was emphasized by Thomas Aquinas when he pointed out that the teacher, as a person with greater knowledge about the world, must convey this knowledge properly. The words he or she uses should express his or her intellect, which has come closer to knowing the truth about the world. The language describing a given fragment of reality should

[23] Joanna M. Gondek, "Ethos jako forma perswazji retorycznej w ujęciu Arystotelesa," [Ethos as a form of rhetorical persuasion in Aristotle's perspective] *Вісник Харківського національного університету імені В. Н. Каразіна. Серія: теорія культури і філософія науки*, Випуск 49–1 (2013): 114–120.

even bring a person closer to understanding it than the reality itself. A word, like a thing, is supposed to lead to knowledge, not to introduce chaos and consternation.[24]

## Philosophical foundations of communication education

SUMMARY

This article deals with the philosophical foundations of communication education. At the beginning, the author points out that communication skills are an important issue. For a long time, researchers have been wondering about the good qualities of public speaking, as well as what qualities a speaker should have in order to convey knowledge, and the importance of communication skills in social life and individual development. Then the author shows what communication education is understood as, on the one hand, the ability to transfer knowledge, and on the other hand, teaching to communicate clearly and purposefully. In the next step, the author indicates the differences between the rhetorical approach and the relational approach to communication, and then points to the rules of discourse and emphasizes the importance of a realistic philosophy focused on presenting the truth in accordance with the good of the recipient. Finally, she indicates the consequences of the approach to communication detached from the real and intersubjective reality and shows what responsibility therefore lies on the part of the teacher, as the one who is supposed to bring students closer to the truth.

[24] Enrique Martínez, *Verba Doctoris: La fecundidad educativa de las palabras del maestro*, 44–46.

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