DIVINE ACTION AND THOMISM. WHY THOMAS AQUINAS'S THOUGHT IS ATTRACTIVE TODAY

Ignacio Silva*

1. Introduction

The notions of providence and divine action, and in particular the metaphysical mechanisms by which God might be said to act within the created universe, have been discussed at large in the past two decades within the English-speaking philosophical and theological academic environments. The thought of Thomas Aquinas was not absent from these discussions, attracting both proponents as well as objectors to its principal propositions. America philosopher Alfred Freddoso, in a lecture given at Notre Dame University not too long ago, on July 2014, remarked that even when Thomism was left behind for the most part of the twentieth century in Catholic American philosophy, it has of late received a new influx of academic vigour, mostly in the philosophy of nature and the philosophy of religion.[1] He says that 'we seem finally to have reached a point in the narrative of English-speaking philosophy at which there is a new and increasingly explicit openness to Aristotelian-Thomistic scholasticism'.[2] His main argument is that seventeenth century philosophy, which dismissed Aristotle and his followers including Aquinas, while offering innovative ways to read the book of nature, in the long run, by the end of the twentieth century, posed many unsolvable problems – in particular related

* Harris Manchester College, University of Oxford, Mansfield Rd OX1 3TD, uk. E-mail: ignacio.silva@hmc.ox.ac.uk

[1] Interestingly, though, the *Oxford Handbook of Aquinas*, edited by Brian Davies and Eleonore Stump in 2012, does not include any analytic discussion on this topic.

[2] A.J. Freddoso, *St. Thomas on the Philosophical Intelligibility and Plausibility of the Doctrine of Divine Providence: Situating* Summa Contra Gentiles *3, chap. 64*, Aquinas Philosophy workshop, St Mary's College, 2014, p. 5. Retrieved from http://www3.nd.edu/~afreddos/unpublishedpieces.html.

to the notion of causation – that a new (or perhaps old) perspective was required and sought for. Many scholars today, thus, are reading the works and doctrines of Thomas Aquinas, finding a very powerful stock of metaphysical tools to tackle these problems of old. Among these is the issue of the relationship between God's action and the actions of created being.

This paper will be devoted, thus, to arguing for the use of Aquinas' thought in these contemporary discussions, briefly presenting a sketch of the main arguments with which Thomists are engaging today, in particular those involving God's creation and God's direct action in the created universe. Given that such topics are usually taken to be related to the natural sciences, I will mainly focus on authors making special references to the theories of the Big Bang, quantum mechanics, and evolution of species by natural selection. I will begin by offering an argument for the attractiveness of Thomas Aquinas' thought, by suggesting that historically, all discussions surrounding the issues of divine action within the created order have attempted to embrace the most of at least four 'metaphysical constants'. These constants, or principles, are 1) God's omnipotence and transcendence, 2) God's providential action, 3) the autonomy of natural causes, and 4) the success of reason and science. By presenting Aquinas' mechanism for divine action in nature, I will argue that, unlike other past and contemporary proposals, Aquinas' doctrine offers the possibility of holding to all these four principles. Finally, I will analyse the main arguments held for and against Aquinas, reinforcing my suggestion of why Aquinas' ideas are attractive to thinkers today.

2. Thomas Aquinas and the History of Divine Action Theories

The importance of the question about divine action in nature is such that it has been addressed often throughout Western intellectual history. William E. Carroll notes that 'the concern to affirm both divine agency in the world and also to affirm the integrity of nature – so important for contemporary theologians who are attracted to developments in recent science – is hardly a new concern'.[3] Not only has modern science found issue with the idea of a God acting directly in the universe, as it happens since the seventeenth century. Christian and Muslim medieval philosophers and theologians have also had concerns about the rationality and compatibility of causal powers in nature and God's activity in the world. Roughly sketched, it is possible to find this problem in at least four episodes of western intellectual history. I will present these four different episodes as to argue that it is metaphysically desirable to hold the four distinct, though related, philosophical constants at stake in

[3] W.E. Carroll, *Divine Agency, Contemporary Physics, and the Autonomy of Nature*, «The Heytrop Journal», 49 (2008), pp. 582-602: 586.

the debates. As I mentioned before, these constants are God's omnipotence and transcendence, God's providence, the autonomy of nature and, the success of reason and the natural sciences. My argument will be that Aquinas' doctrine of God's action in the created world allows for maintaining the four, and hence proves to be an attractive solution to the problem of divine action today.

The first episode is framed within ninth to twelfth century Islam, when *kalam* theologians argued that, in order to affirm God's omnipotence and power over nature, as expressed in the Quran, it was necessary to restrict and even deny natural powers. For *kalam* theologians, the nature of God's omnipotence and providence made it necessary to admit that there were no powers in nature, but that it was God who acted in every event, maintaining the natural order according to His will. This position was later known in seventeenth century Europe as occasionalism, and it was chiefly defended within the Islamic context during the twelfth century by al-Ghazali who in his famous book *The Incoherence of the Philosophers* tried to show that philosophers who adopted Greek views were unsuccessful in achieving a coherent theory of divine action. Ghazali was the fruit of a long tradition that strongly defended that, since God's omnipotence and providence were unchangeable, it was necessary to admit that there were no active powers in nature, but that it was God who acted in every apparently natural event. *Kalam* theologians considered that God re-creates out of nothing the universe at every instant, conceiving creation to be an atomic and discrete event, by which God puts the universe into existence every single moment of time. Thus, any causal action is itself grounded in God's creative causality: the single divine act which produces the existence of the thing. Hence, for *kalam* theologians, all change involves creation, since every change represents the realisation of a new being entirely. With this doctrine *kalam* theologians were able to preserve God's involvement in the world, but paying the price of diminishing natural causal powers as much as to deny the activities of nature.

On the other side of the Islamic philosophical-theological discussion on divine action in nature was Averroes, one of the 'philosophers', deeply influenced by Greek philosophy, especially Aristotle. Averroes strongly reacted to *kalam* theology arguing that nature acted in an orderly and autonomous fashion, with its own powers, possibly leaving no space for God to act at all. Averroes' main idea was that because nature possesses autonomous principles of characteristic behaviour, namely Aristotelian forms, God's omnipotence needed to be so diminished as to deny the possibility of creation out of nothing. The doctrine of creation out of nothing implied for Averroes that anything could come from anything, and that there would be no congruity between effects and causes. In addition, for Averroes if there were no natural causes, there would be no scientific knowledge (knowledge of causes) and

thus no wisdom; from which follows that it would be impossible to prove the existence of the cause of the existence of the universe, given that it would be impossible to known the fact of causality at all. For Averroes, then, in patent contrast with *kalam* theology, in order to accept the evidence of natural causality, one needed to diminish God's activity in nature.

The second episode is set in medieval Christian Europe, in particular during the thirteenth and fourteenth centuries, when different positions appeared. Of greatest importance for us are the ideas of Thomas Aquinas, who argued both for a clear rejection of occasionalism and a strong position in favour of creation *ex nihilo*, by arguing both for the autonomy of nature in its actions and for God's involvement in every action as primary cause. I will delve deeper into Aquinas' position later on. Enough would be to say now that Aquinas describes nature as an orderly world, where the order comes from nature's causes themselves, and in which God does not mix with them, allowing created being to be a real cause of their effects, by causing the action of these created secondary causes. This path of thought permits Aquinas to argue that God acts providentially through secondary causes, as I will hope to show in the following section. The fourteenth century saw positions closer to *kalam* appear, for example, in the writings of Nicholas of Autrecourt, who held an atomistic view of motion and matter, which, together with the impossibility of knowledge of an intrinsic connection between cause and effect, led him close to something similar to their occasionalism (leading, later on, to seventeenth century comparable positions).

The third episode occurred during the rise of modern science in the seventeenth century, when scholars like Descartes, Galileo, Boyle, and Newton, among many others, developed the notion of a mechanistic universe, joined to an atomistic view of matter, which led to establishing the concept of laws of nature, in patent opposition to the Aristotelian quest for natural causes. The old efficiently and teleologically active nature was transformed into an inanimate, powerless, and a-causal conjunction of bodies. Given that atoms, the basic elements of which bodies were composed, had no internal properties or causal powers – atoms had no *forms* – they needed to be directed in their apparently orderly movements by an external power: God's own very power. The laws of nature, thus, became an external divine imposition of order onto the world: God was in direct control over what happened in His creation. It is in this particularly important period of history that the old theories of atomism regained strength, and the quest on causation was contextualised under its broad framework. Thus, different approaches towards the relation between divine and natural causation appeared in the scene, with a particular emphasis on that of occasionalism. By the end of the seventeenth century, philosophers either abandoned all attempts to clarify the metaphysical notion of causation, or adopted a kind of occasionalist perspective on causality. Occasionalism as

an understanding of God's omnipotence and of the natural order seemed the perfect fit to the new natural philosophy of the seventeenth century. The scientific enterprise remained a search for the apparent relation between events, and hence, the notions of 'natural causes' and 'effects', within the scientific perspective, lost all metaphysical meaning. The laws of nature, grounded on God's immutable and eternal will, were understood to be necessary and exceptionless ways of God's activity in the world.

The fourth and final chapter in this story is the contemporary debate on divine action and providence, which sets the discussion in similar terms: if God is to be said to act in nature, something must be done with natural causality. The solution many offer today implies that there should be no natural causes where and when God acts. Scholars today assume that it is necessary to affirm a lack of natural powers to find a space for God to act in the created order. Scholars such as Robert Russell, Thomas Tracy, John Polkinghorne, Arthur Peacocke, Philip Clayton, and Nancey Murphy, making use of the developments of twentieth century science which pointed towards the indeterminate character of the natural processes (such as quantum or evolutionary processes), developed several theological models to understand God's involvement in nature.

The key move in their arguments is to find in the current scientific theories 'places' where to locate God's action within nature in ways which would develop history in the directions God wants, but without disrupting the apparent lawful natural order. These places were found in the real causal gaps existing within the causal order of nature. These 'gaps' would allow God to interact with creation without disrupting the works of nature, without breaking or intervening its laws. Following, for example, the emergence of an indeterministic account of nature given by the development of quantum mechanics in the twentieth century, Russell, Tracy, Murphy, and the others explored the possibility of understanding divine action through these indeterminacies.[4] The indeterminism of quantum events offered these scholars the conceptual framework where to place God's action, without disrupting the natural causal order, but determining its outcome. For these scholars, because the very laws of nature show that there are events which are open to several distinct outcomes, God could simply choose which outcome to determine without breaking those laws. In addition to this quantum divine action thesis, other proposals have also tried to use the non-deterministic character of twentieth-

[4] See in particular the impressive six volumes under the title of *Scientific Perspectives on Divine Action* edited by Robert Russell et al. For a full review of the project see R. Russell, *Challenge and Progress in 'Theology and Science': An Overview of the VO/CTNS Series*, in R. Russell, N. Murphy, W. Stoeger (eds.), *Scientific Perspectives on Divine Action. Twenty Years of Challenge and Progress*, Vatican Observatory-ctns, Rome-Berkeley 2008, pp. 3-56.

century physics: John Polkinghorne, for example, has argued for divine action in and through chaotic systems, Arthur Peacocke suggested models of top-down divine causation, and Philip Clayton held that theories of emergence could be regarded as a viable path to think new models of divine action. Many other scholars have objected to these approaches, mainly due to the fact that God's action seems to be conceived as any creature's action (a 'cause-among-causes'), rendering God not to be omnipotent or even provident.[5]

As I advanced early in this section, I believe there are four metaphysical principles or constants that guide these discussions. Each position throughout history, in each of the four episodes described, opted for one or more of these principles. Briefly presented, the four constants are: 1) God's omnipotence and transcendence: roughly understood as God having the power to bring about any non-contradictory state of affairs in the universe together with the idea that God is utterly distinct from the created universe and its parts. 2) God's providential action in the created universe, meaning that God not only creates and sustains the universe, but also acts in objective and direct ways in nature to guide it to its fulfilment. 3) The autonomy of nature in its activity, in the sense that, for what we empirically know, there is no reason to admit that nature needs anything extra-nature to act in an orderly and regular manner. 4) The success of natural science and reason, meaning that reason and science (broadly understood as an empirical study of nature) have a rightful access to nature, to its activities, and can describe these in some kind of rational and naturalistic way.

God's omnipotence was maintained against natural powers for some in medieval Islam and in fourteenth-century occasionalism, while nature's autonomous agency was emphasised in opposition to God's power in Averroes' and in today's debate: God cannot act where there are natural causes acting, or put it in other terms, if God is to act, there can be no other causes at all. The denial of natural powers, that is, powers intrinsic to natural things, during the seventeenth century led to the acceptance of God's direct and continuous

[5] The main argument being that if the only alternative is to accept that God should act according to what a scientific theory states, it seems difficult to avoid the conclusion that God's action should be considered an action as any natural cause's action. Thomas Tracy has made this conclusion explicit, perhaps inadvertently, when claiming that «we have good reason not to deny that God might act *among* secondary causes to affect the ongoing course of events» (my emphasis). See T. Tracy, *Scientific Vetoes and the Hands-Off God: Can We Say that God Acts in History?*, «Theology and Science», 10/1, (2012), pp. 56-78: 61. See also W.E. Carroll, *Divine Agency*, cit.; M. Dodds, *Unlocking Divine Causality: Aquinas, Contemporary Science, and Divine Action*, «Angelicum», 86 (2009), pp. 67-86; I. Silva, *John Polkinghorne on Divine Action: a Coherent Theological Evolution*, «Science and Christian Belief», 24/1 (2012), pp. 19-30; T.A. Smedes, *Chaos, Complexity, and God: Divine Action and Scientism*, Peeters, Leuven-Paris-Dudley 2004; E.A. Johnson, *Does God Play Dice? Divine Providence and Chance*, «Theological Studies», 56 (1996), pp. 3-18.

action in the universe, enforcing, ironically for some, the success of natural science. It seems evident that for the most part, the key question was whether to affirm God's omnipotence (*kalam*) and providence (seventeenth century occasionalism and today's scholars) in addition to denying the causal power of nature, or vice-versa: to affirm nature's causal powers, while diminishing the power of God, but holding the success of reason in studying nature (today's scholars and Averroes' position). Carroll clarifies this situation when saying that the «fear is that any causality one attributes to God must, accordingly, be denied to creatures. This is precisely the fear which informs many who defend creation against evolution as well as those who defend evolution against creation: both opposing sides view the general terms of the discourse in the same way».[6] Finally, Aquinas' perspective claims to portrait a plausible way of holding all these four principles together, by affirming God's radical distinctiveness implied in his doctrine of creation, which results in holding, through the doctrine of primary and secondary causation, that natural causes are indeed causes on their own right. Following Carroll again, «Thomas thinks that to defend the fact that creatures are real causes, far from challenging divine omnipotence, is a powerful argument for divine omnipotence. As he says, to deny the power of creatures to be the causes of things is to detract from the perfection of creatures and, thus, to detract from the perfection of divine power».[7] Nicanor Austriaco joins Carroll in praising Aquinas, pointing to the doctrine's «great explanatory power and its ability to unify an enormous amount of theological data».[8] To this doctrine I now turn my attention.

3. Thomas Aquinas on Divine Action: Primary and Secondary Causation

The basic idea behind the notions of primary and secondary causation, used throughout the middle Ages to explain the way in which God interacts with the created natural causes, is that God somehow causes the action of natural causes, which nevertheless are said to have their own causal powers. This doctrine follows closely, and builds upon, the doctrine of creation out of nothing, affirming that God not only creates the natural world giving it its causal powers, but also moves, in some way, created causes to cause. Hence it is said that God acts in and through created natural causes. The key to understanding the issue is elucidating the meaning of the 'somehow' or 'in some way', and philosophers and theologians since medieval times have been undertaking this

[6] W.E. Carroll, *Creation and the Foundations of Evolution*, «Angelicum», 87 (2010), pp. 45-60, p. 51.

[7] W.E. Carroll, *Creation and the Foundations of Evolution*, cit., p. 54.

[8] N. Austriaco, *In Defense of Double Agency in Evolution: A Response to Five Modern Critics,* «Angelicum», 80 (2003), pp. 947-966: 952.

task, which today comes back to the discussion table due to the contemporary discussions on divine action and science to which I referred above.

Probably the most important thinker to give a full and plausibly working account of how these two notions should be understood is Thomas Aquinas. His thought has inspired many different arguments for and against understanding God's relation to natural causes through the notions of primary and secondary causation, and it is him to whom most twentieth and twenty-first century authors relate when discussing these ideas. In what follows I will introduce some key ideas for understanding Thomas Aquinas' account, later on to move onto how Aquinas' doctrine has been interpreted and argued for and against it in recent years.

Aquinas states his account of God's operation in nature in detail in his *Quaestiones De Potentia Dei*, question 3, article 7. He explains that to be the cause of the action of something else can be understood in four different ways. First, something can be said to give another thing the power to act: every operation consequent to a certain power is ascribed to the giver of that power as effect to cause. Hence, God causes all the actions of nature, because He creates, in all natural things the powers by which they are able to act. Second, God may be said to be the cause of an action of a created thing by upholding and sustaining the natural power in its being, since the preserver of a power is said to cause the action, in the same way a remedy which preserves the sight is said to make a man see. Thus, Aquinas argues that God not only creates the causal powers when they first begin to exist, but also preserves these powers in existence. Consequently, if the divine causality were to cease, all operation would come to an end.

I have elsewhere called these first two instances static or founding moments of God acting in and through natural agents.[9] The next two ways of God acting in and through natural causes, which I called dynamic moments, are key for Aquinas' understanding of divine action and usually forgotten in many of the discussions within today's debate. Thus, the third way of understanding God's operation in nature is as follows: a thing is said to cause another's action by moving it to act. Here Aquinas means that a primary cause applies the power of a secondary cause to act, as a man causes the knife's cutting by applying the sharpness of the knife to cutting by moving it to cut. Hence, as the knife does not act except through being moved (by the man), God causes the action of every natural thing by moving and applying its power to act. Finally, one thing causes the action of another, as a principal agent causes the action of its instrument reaching an effect which goes beyond the power of the instrument. Since for Aquinas every natural thing is a being, and everything that

[9] See I. Silva, *Revisiting Aquinas on Providence and Rising to the Challenge of Divine Action in Nature*, «The Journal of Religion», 94/3 (2014), pp. 277-291: 281-282.

acts in a certain way causes being, but being is the most common and intimate first effect, belonging to God alone to produce by His own power, Aquinas argues that in every action of natural beings, since they cause being somehow, God is the cause of that action, inasmuch as every agent is an instrument of the divine power causing that being.[10]

These final two ways of causing the action of another appear quite similar. Recalling Aquinas' account of instrumental causes, however, will reveal the difference. An instrument, when acting as an instrument, reaches two different effects: one which pertains to it according to its own nature; another which pertains to it insofar as it is moved by the primary agent and which transcends its own nature. When Aquinas explains how God acts in nature through natural agents by using them as instrumental causes, he uses the analogy of instrumental causality according to both ways of causing. The first of the dynamic ways of God's action refers to the first effect of an instrumental cause. Thus, every agent performs its action according to its own nature and powers, moved and applied by God. In the same manner, the second way of causing the action of the instrument refers to the causing of being, which is the effect that completely transcends the power of the natural being, though it is given to it as a participation in God's power.

Consequently, God works in everything to the extent that everything needs His power in order to act. Therefore God is the cause of everything's action inasmuch as He gives everything the power to act, preserves that power in being (founding moments), applies it to action, and inasmuch as by His power every other power acts (dynamic moments). Nevertheless, this should be understood in the sense that the causal powers of a natural thing suffice for action in their own order, yet require the divine power. God and the natural agents act on two different levels. The same effect is ascribed to a natural cause and to God, not as though a part of the effect were performed by God and a part by the natural agent: the whole effect proceeds from each, yet in different ways, as the whole of the one same effect is ascribed to the instrument, and again the whole is ascribed to the principal agent. This would seem to imply, however, that it is not necessary to admit that nature works, because if a sufficient cause is acting then there is no longer the necessity for another cause, and God acts as a sufficient cause. In order to avoid the temptation of falling into any form of occasionalism, Aquinas holds that the secondary (or instrumental) cause determines the particular effect achieved by the action of the primary cause. Moreover, Aquinas argues that God acts perfectly as first

[10] See *ibidem*; J.F. Wippel, *Thomas Aquinas on Creatures as Causes of Esse*, in his *Metaphysical Themes in Thomas Aquinas* II, Catholic University of America Press, Washington DC 2007, pp. 172-193; and R. te Velde, *Participation and Substantiality in Thomas Aquinas*, Brill, Leiden 1995, pp. 165-166.

cause: but the operation of nature as secondary cause is, in a sense, also necessary because, although God can produce the natural effect even without nature, He wishes to act by means of nature in order to preserve order in things. It is not that God does not have the sufficient power to cause what He causes through natural causes. Were He willing to do so, He could. God, however, acts through natural causes because of the immensity of His goodness, by which He decides to communicate His similitude to things, not only in their existence, but also in their being the causes of other things.

With this doctrine Aquinas is able to hold the four metaphysical principles discussed before. By characterising God as the primary cause of all things, God is omnipotent and transcendent. By explaining the relation between the primary cause and the secondary causes, God is also provident, and, in addition, nature has real causal powers that cause real effects. Finally, and even if I did not discuss the issue here, for Aquinas the reality of these effects warrants the truthfulness of reason's knowledge of the natural world. Acknowledging these features, many contemporary scholars had offered Aquinas' arguments to solve the disputes over divine action today. I have chosen three examples of these arguments to which I now turn.

4. Some uses of Aquinas' doctrine today

There is a plethora of authors studying the thought of Thomas Aquinas, putting it in dialogue with today's philosophy of religion, in particular with the discussions surrounding God's action in the created universe. As I implied earlier, the main issues at stake come from questions raised by the natural sciences, in particular by twentieth century developments in cosmology, evolutionary biology, and quantum mechanics (there are other issues, for example, those related to free will and providence, which I will omit from my discussion). Issues raised with cosmological backgrounds in mind are usually tackled referring to Aquinas' doctrine of creation out of nothing. William R. Stoeger held these views, which I will address in the following paragraph. The challenges that the theory of evolution through natural selection poses to the doctrine of providence and to any idea of divine involvement in the history of the natural world and of humanity in particular are well known. Nicanor Austriaco, OP, deals with them by recurring to the doctrine of primary and secondary causation, as Sarah Coakley does to engage with the evolution of cooperation. William Carroll and myself also recur to this doctrine, based on the doctrine of creation, to engage with issues coming from attempts to understand divine action through quantum mechanics. I will finally introduce a few references to Michael Dodds' major work on Aquinas on divine action.

Discussing Big Bang cosmology, William Stoeger, SJ (1943-2014), recurred to the notion of creation out of nothing and its radical difference with expla-

nations coming from the natural sciences. Thus, he explains that the «basic reason why *creation ex nihilo* is complementary to any scientific explanation, including whatever quantum cosmology theoretically and observationally reveals about the "earliest" stages of our universe – or multiverse – and not an alternative, is that it does not and cannot substitute for whatever the sciences discover about origins. It simply provides an explanation or ground for the existence and basic order of whatever the sciences reveal».[11] Holding a notion of complete dependence upon God through Aquinas' doctrine of creation out of nothing means, for Stoeger, that the natural sciences do not compete with metaphysical approaches to origins. On the contrary, these two are complementary features of our understanding of such origins. Furthering on his analysis, Stoeger emphasises that «quantum cosmological scenarios or theories – which describe the Planck era, and the Big Bang, or which describe the primordial regularities, processes and transitions connected with these extreme very early stages of the universe – are in principle incapable of being alternatives to divine creation conceived as *creatio ex nihilo*. They simply do not account for what *creatio ex nihilo* provides – the ultimate ground of existence and order. Reciprocally, *creatio ex nihilo* is not an alternative to the processes and transitions quantum cosmology proposes and provides – these are models of the physical processes which generated our universe and everything emerging from it… Thus, quantum cosmology and *creatio ex nihilo* contribute deeply complementary and consonant levels of understanding of the reality in which we are immersed».[12] As it will become apparent with the rest of scholars, it is clear that Stoeger is advocating for a strong position which allows the natural sciences to be successful in their discoveries of natural processes, which in themselves are autonomous, while still affirming the utter dependence of these processes upon God's creative action.

American microbiologist Nicanor Austriaco, OP, addresses the challenges brought by the theory of evolution through natural selection with a stronger emphasis on the distinction between God's primary and creative causality and creaturely secondary causality. It is worth quoting him in length when discussing the chanceful and unpredictable appearance of human language as an essential element of human nature – through a mutation in the *FOXP2* gene that occurred sometime during the last 200,000 years of human history – as an example of how both God and nature are at work in a random mutations: «the mutation which gave rise to language use occurred when a particular DNA polymerase was repairing a DNA strand damaged by high energy ra-

[11] W.R. Stoeger, *The Big Bang, Quantum Cosmology and creatio ex nihilo*, in D.B. Burrell, C. Cogliati, J.M. Soskice, W.R. Stoeger (eds.), *Creation and the God of Abraham*, Cambridge University Press, Cambridge 2010, pp. 152-175: 169.

[12] W.R. Stoeger, *op. cit.*, p. 175.

diation. According to the classical account of double agency, God acts in this event as efficient cause because he gives the DNA strand and the DNA polymerase their existence. Furthermore, he gives them their natures. The DNA strand can be repaired by the DNA polymerase because God made them what they are. Indeed, the DNA polymerase was able to introduce a random mutation into the *FOXP2* gene precisely because God knew it and thus created it as error-prone and capable of randomly making mistakes. In introducing the genetic mutation into the DNA strand, the polymerase was functioning according to its nature. It was striving for its end that was established by God as Final Cause. Finally, the mutagenic event can be said to be ordained from all eternity, and in this sense be providential, because in knowing the DNA polymerase as error prone, God knows it as error-prone and existing at a particular time and place. The random event which gave rise to human *FOXP2* occurred at the time and place that it did because God knew it and allowed it to exist precisely as happening in our past rather than in our present or in our future».[13] Reflecting on the idea that creaturely and divine activity do not mix up, Austriaco argues that «classical double agency allows one to accomplish the task of explaining noninterventionist objective special divine action without denying either the mystery of divine providence where God knows all events in past, present, and future, or the radical distinction between the Creator and his creatures».[14] Again as with Stoeger, Austriaco is attracted to Aquinas' doctrine of primary and secondary causation because it allows him to maintain the distinction between the work of the natural sciences in the discovering the autonomous activity of nature – even if that activity is random or chanceful – and the discourse about God, while holding high the principles of divine providential guidance of the universe and transcendence.

Oxford-based philosopher William E. Carroll clearly expresses the reasons for being attracted to Aquinas' doctrine, when, while analysing evolutionary biology in light of Aquinas' thought, he defends «a Thomistic analysis of creation and the relative self-sufficiency of nature» because «this analysis helps us to see that the very processes which evolutionary biology explains depend upon God's creative act».[15] For Carroll the very intelligibility of nature «depends upon a source which transcends the processes of nature», because, he continues, «without the very fact that all that *is* is completely dependent upon God as cause, there would be no evolution at all».[16] Carroll is evidently more adamant in expressing creation's radical dependence upon God both in its being and in its acting. The very reason for nature to be causally powerful is because it intrinsically depends upon the God's creative power, which transcends

[13] N. Austriaco, *op. cit.*, p. 956.
[14] *Ibidem*, p. 950.
[15] W.E. Carroll, *Creation and the Foundations of Evolution*, cit., p. 51.
[16] *Ibidem*, p. 51 (my emphasis).

all creation. Following Thomas, Carroll holds that «no matter how random one thinks evolutionary change is, for example; no matter how much one thinks that natural selection is the master mechanism of change in the world of living things; the role of God as Creator, as continuing cause of the whole reality of all that is, is not challenged».[17] If asked for the reason of this assertion, Carroll would answer with what is perhaps his most important insight into Aquinas' account of God as a cause: *creatio non est mutatio* – creation is not a change. Anything the natural sciences discover about the proper workings of nature would always refer to a change. But God's action does not involve change, because, based on Aquinas' doctrine of creation out of nothing, there is nothing there to change when God creates. Carroll similarly ends his analysis of the physical sciences in relation to divine action stating that «the complete dependence of all that is on God does not challenge an appropriate autonomy of natural causation; God is not a competing cause in a world of other causes. In fact, God's causality is such that He causes creatures to be the kind of causal agents which they are. In an important sense, there would be no autonomy to the natural order were God not causing it to be so».[18]

Scholars not typically associated with Aquinas have also found his thought attractive when discussing evolutionary biology. In her interesting and thought-provoking work with Harvard biologist Martin Nowak on the evolution of cooperation, Cambridge theologian Sarah Coakley explicitly recurs to Aquinas' notions of primary and secondary causation, arguing that «classic Thomism fares particularly well as an accompaniment to evolutionary dynamics».[19] After a quick but careful presentation of the evolutionary phenomenon of cooperation, Coakley addresses three challenges that evolutionary biology poses to classical theism, stating that «it is vital to avoid… the presumption that 'God' *competes* with the evolutionary process as a (very big) bit player in the temporal unfolding of 'natural selection'… Rather, God is that-without-which-there-would-be-no-evolution-at-all».[20] In fact, she continues, «the 'no-contest' position is to be affirmed for its right insistence that God and the evolutionary process are not on the same 'level', whether temporally or in 'substance'»,[21] making clear that Thomas' emphasis on God's transcendence is key for understanding God's relation to any evolutionary process.

Besides discussing Aquinas' thought in relation to evolutionary biology, William Carroll also engages with other scientific and theological perspec-

[17] W.E. Carroll, *Divine Agency*, cit., p. 591.

[18] *Ibidem*, p. 595.

[19] S. Coakley, *Providence and the Evolutionary Phenomenon of "Cooperation": A Systematic Proposal*, in F. Aran Murphy and P.G. Ziegler, *The Providence of God: Deus Habet Consilium*, T&T Clark, Edinburgh 2009, pp. 181-195: 182.

[20] S. Coakley, *Providence and the Evolutionary Phenomenon of "Cooperation": A Systematic Proposal*, cit., p. 186.

[21] *Ibidem*, p. 190.

tives on divine action, also resolving them by recurring to Aquinas' ideas. For example, he deals with Robert Russell's idea that God needs indeterminate events in nature, such as quantum events, to act in nature, and the associated idea that the traditional notion of God needs to be left aside, because it cannot account for a non-deterministic nature (the argument being that a necessary being can only bring about necessary effects). Carroll counter argues that «God is so powerful that His causal agency also produces the modality of its effect: the effect is assimilated to God's will in every way so that not only what happens occurs because God wills it to happen, but it happens in that way which God wills it to happen. God's will transcends and constitutes the whole hierarchy of created causes, both causes which always and necessarily produce their effects and causes which at times fail to produce their effects. We can say that God causes chance events to be chance events».[22] With these ideas Carroll wants to emphasise that God, by being constantly active in nature through secondary causes, does not need indeterminate events allowing Him to intervene, so to speak, in the history and development of His creation. For him, this would imply a diminishing of God's power and a negation of God's transcendence, reducing God to a cause among causes. Thus, Carroll strongly asserts that the «source of most of the difficulties in grasping an adequate understanding of the relationship between the created order and God is the failure to understand divine transcendence. It is God's very transcendence, a transcendence beyond any contrast with immanence, which enables God to be intimately present in the world as cause. God is not transcendent in such a way that He is 'outside' or 'above' or 'beyond' the world. God is not different from creatures in the way in which creatures differ from one another. We might say that God 'differs differently' from the created order».[23] Ultimately, «God's will transcends and constitutes the whole hierarchy of created causes, both causes which always and necessarily produce their effects and causes which at times fail to produce their effects»,[24] which means that nature is no position to *allow* God to act, but that, on the contrary, it requires God's constant creative action to be able to act by itself.[25]

Finally, American Thomist Michael Dodds, OP, has also argued extensively in a relatively new comprehensive volume for a Thomistic understanding of divine action. I will not address the details of his analysis, and focus mostly in his conclusions. After a long investigation of the current debates on divine action, its assumptions and difficulties, and after presenting his solution based on the very notion of God causing efficiently, formally and finally, Dodds concludes that the «creator of the universe is not in competition with his crea-

[22] W.E. Carroll, *Creation and the Foundations of Evolution*, cit., p. 53.
[23] Idem, *Divine Agency*, cit., p. 590.
[24] *Ibidem*, p. 589.
[25] I have dealt with similar issues in my *Revisiting Aquinas*.

tures, but is rather the source of their proper actions. Aquinas sees no competition but compassion as the font of all God's works. God is not distant, but intimately present in the being and action of each creature. His acting is not called "intervention" since that term fails to represent the intimacy of his presence».[26] This intimate presence, which directly speaks of the utter transcendence to which Carroll was referring above, allows Dodds to refer to God's causing in terms of Aristotelian causes. Thus, Dodds argues that the «God who is the efficient and exemplar cause of all things, creating them in his likeness and present in all their actions, is also the final cause drawing all creation to its fulfilment in him. Each creature, through its action, seeks to share God's goodness according to the capacity of its particular nature».[27] The key feature that Dodds wants to stress throughout his work is that, while there is an infinite difference between creative and created causes, «by acting, the creature attains its proper perfection, which is a participation in the perfection of the creator. Each creature, by acting according to its nature, imitates the perfection of God».[28] Once again we find that Dodds finds in Aquinas the elements to hold God's transcendent provident action in relation to a dependent though autonomous creation.

5. Some objections to Aquinas' understanding of primary and secondary causation

Even when Aquinas' doctrines are regarded as very attractive with regards to the issue of divine action, there have been some recent objections to their principal propositions. There are two basic objections made against Aquinas' account today. The first one is best represented by the ideas of John Polkinghorne. He argues that the distinction between primary and secondary causation is not enough to explain God's action in the world, because it requires admitting that it is either God or nature which produces the effect. Philip Clayton joins Polkinghorne affirming that emphasising God's action as primary cause runs the risk of falling into a form of occasionalism, where it is only God who causes events in nature; whereas emphasising nature's action would deny any kind of divine activity in the universe.[29] Keith Ward is of similar ideas. The second kind of objection derives from ideas put forward by Thomas Tracy. Simply put, he argues that Aquinas' perspective is not enough

[26] M.J. Dodds, *Unlocking Divine Action. Contemporary Science & Thomas Aquinas*, Catholic University of America Press, Washington DC 2012, p. 260.

[27] *Ibidem*, p. 261.

[28] *Ibidem*, p. 260.

[29] N. Murphy, in her *Divine Action in the Natural Order*, in R.J. Russell, N. Murphy, A.R. Peacocke (eds.), *Chaos and Complexity*, cit., pp. 325-57 (on p. 333), also agrees with this objection. For her, any double agency approach suffers from two defects: it leaves no room for special divine acts, and it leads directly to occasionalism.

to give a solid theological account of a God who is objectively and personally involved in the lives of human beings. The main problem with these objections is that Aquinas' account of primary and secondary causation is usually conflated with Austin Farrer's, a twentieth century Oxford theologian; and that Aquinas' account is usually not presented in full. Using similar terminology, Farrer tries, and according to Polkinghorne fails, to explain God's action in the universe. This failure, however, is unfairly attributed to Aquinas. The objections, I think, hold against Farrer's views, but that they do not against Aquinas' position.

John Polkinghorne understands Thomas Aquinas' and Austin Farrer's accounts of the notions of primary and secondary causation to be essentially the same.[30] Polkinghorne objects that this way of understanding God's action in the world rest solely on faith and remains ineffable and veiled from the eyes of human reason, complaining that there is no explanation given on how primary causality works,[31] which remains unintelligible. Thus, it becomes a fideistic solution to the problem of divine action, which turns to be more of an evasion than a solution. Clayton agrees with Polkinghorne, explaining that the doctrine could be understood in two ways: God's being the sustainer of existence or God's being one of the efficient causes affecting every event. The first does not solve the problem of divine action (an argument supported by Keith Ward). The second comes close to occasionalism or to denying God's divinity. Thus, Clayton claims, it is «unclear how appeals to double agency can help to resolve the tensions raised by claims to divine action»,[32] simply because an action belongs to one or the other agent, namely God or the natural agent. In this perspective, then, the doctrine of primary and secondary causality 1) leaves the whole problem of divine action in the world shrouded in mist; 2) it does not solve the issue of particular divine actions; and 3) it promotes occasionalism.

Farrer's doctrine of double agency explains how God and a natural agent act to cause a single event; or that God acts in and through the actions of finite agents without destroying their individual integrity and relative independence. This doctrine was a key notion in Farrer's account of divine providence. From his perspective, God's agency must actually be such, so as to work omnipotently on, in, or through creaturely agencies without either forcing them or competing with them. Thus, argues Farrer, both God's and the creature's agencies are completely real in causing the effect. So far, the doctrine seems similar to Aquinas'. The problem arises when Farrer affirms that it

[30] J. Polkinghorne, *Science and Theology. An Introduction*, SPCK-Fortress Press, London-Minneapolis 1998, p. 86.

[31] See, for example, J. Polkinghorne, *The Metaphysics of Divine Action*, in R.J. Russell, N. Murphy, A.R. Peacocke (eds.), *Chaos and Complexity*, cit., pp. 147-156: 150.

[32] *Ibidem*, p. 177.

is impossible to conceive the 'causal joint' between omnipotent creativity and the creature's agency. In fact, how God works in creation is a mystery which cannot be understood.[33] Hence, Farrer fails to provide an explanation of the way in which divine and creaturely agencies are related, just as Polkinghorne and Clayton claimed.

By protecting himself behind the shield of religious experience, Farrer becomes accountable for Polkinghorne's main critique: it is a fideistic position, which renounces an exploration of the reality of God's action in the world in the name of faith, which also fails to provide a technical explanation of the articulation between created and God's causation.

Thomas Tracy objects that the doctrine of primary and secondary causes fails to provide a proper understanding of a *personal* divine action. Tracy explains Aquinas, affirming that God as creator gives being to creatures, and does so at every moment throughout the creature's history, and that this divine creative action does not cause a change in the creature, but rather brings it about that that creature exists at all. He continues to explain that created natural things cause changes in other created things, concluding his exposition stating that, for Aquinas, both God and creatures act in every change which takes place in nature. In fact, he claims, God must act in order for creatures to act.[34] Tracy's objection is the following: «if God acts exclusively as the absolute ontological ground of all events, and never acts directly to affect the course of history, can we say that God responds to the dramas of human history…?».[35] His answer is no. If God only gives and sustains things in being, God is not acting directly to affect the course of the history of the universe and humanity. Surprisingly, some proponents of Aquinas' account take a similar view, rendering Aquinas' doctrine in a weak position over against Tracy's objection. The difficulty, however, comes from Tracy's incomplete portrayal of Aquinas' doctrine. As I explained earlier, Aquinas' full account include the creative and the sustaining aspects of God's action complemented by two further aspects, which explain how God can be said to be providentially active throughout nature.

Unfortunately for these scholars, none of these objections address Aquinas' full doctrine. A complete, and arguably rational, explanation of God's acting in and through secondary causes implies not only that God creates and sustains secondary causes (the founding moments), but also that God applies the secondary cause to be the cause and that God reaches effects which go

[33] A. Farrer, *Faith and Speculation. An Essay in Philosophical Theology*, Adam & Charles Black, London 1967, p. 110.

[34] T. Tracy, *Special Divine Action and the Laws of Nature*, in R.J. Russell, N. Murphy, W.R. Stoeger (eds.), *Scientific Perspectives on Divine Action*, cit., pp. 249-283: 255.

[35] *Ibidem*, p. 257.

beyond the secondary cause's power (the dynamic moments). Thus, in terms of the first kind of objections, Aquinas' position is not Farrer's. For Aquinas the interplay between primary and secondary causes is a problem which has a rational, metaphysically complex solution, which is a strongly non-fideistic way of understanding how God acts through secondary causes with the four-fold view of God's action: God gives the power, sustains the power, applies the power to cause, and achieves effects which go beyond that natural power He applies. These last two features are technically explained in Aquinas' work, and with them Aquinas shows how every action of every natural agent is to be referred to God. Thus Aquinas' explanation is intelligible through the analogy of instrumental causality. At the same time, divine action remains ineffable, since God is absolutely beyond human reason. Aquinas also rejects occasionalism by explaining that natural agents need God's influence in order for them to work. It is a view of nature working with God's power, which also rejects the position that it is only nature at work in the production of natural effects. Finally, this four-fold way of understanding God's action in nature expresses that God's action is objective and special, as scholars today claim they should be. Since each of these actions is done through the divine intellect and will, Aquinas' doctrine gives an account of special providence. Thus, Tracy's question about God's providence and guidance of the universe and human history can be given a positive answer. God acts providentially, i.e. knowing and willing what happens, in and through every natural agent. In fact, when Aquinas addresses the question of divine providence he uses all these metaphysical technicalities to provide an answer.[36]

6. Conclusion

Thomas Aquinas knew that it is not easy to solve the question of divine action in nature.[37] Nevertheless, with full metaphysical arsenal of arguments he offered in the thirteenth century a plausible and complex account of divine action in which every natural effect is caused both by the first and the secondary cause. This account is held today by many to be sufficiently attractive as to recur to it in order to engage contemporary problems, mostly raised by the natural sciences. Even if there are some objectors, I have shown that there are plausible solutions to their objections in Aquinas' writings.

[36] See Thomas Aquinas, *Summa Contra Gentiles*, iii, cc. 71-75. In particular in chapter 75 when he states that «God acts in all secondary causes, and all of their effects are to be referred to God as their cause: thus anything which is done in these particulars is His own work. Therefore their particular motions and actions are subjected to the divine providence».

[37] Thomas Aquinas, *Summa Contra Gentiles*, iii, c. 70: «Some find it difficult to see how to understand that natural effects are to be attributed to God and to natural agents».

I have tried to show in this paper why Aquinas' doctrines are attractive today, presenting a brief history of the discussions surrounding the issue divine action, which metaphysical principles led them, and how Aquinas' thought has been seen lately to be able to hold all of them. As Elizabeth Johnson has remarked, «one of the strengths of Aquinas's' vision is the autonomy he grants to created existence through its participation in divine being. He is so convinced of the transcendent mystery of God *esse ipsum subsistens* and so clear about the sui generis way God continuously creates the world into being that he sees no threat to divinity in allowing creatures the fullest measure of agency according to their own nature. In fact, it is a measure of the creative power of God to raise up creatures who participate in divine being to such a degree that they are also creative and sustaining in their own right».[38] Scholars who hold Thomas' account are certain that they will be able to defend God's transcendence and providence, as well as the autonomy of the natural causes in conjunction with the success of rational knowledge of those natural processes. Ultimately, for all these philosophers and theologians today, not only those present in these pages, the account Aquinas «offers of divine agency and the autonomy and integrity of nature is not merely an artefact from the past, but an enduring legacy».[39]

Abstract: *In this paper I suggest a reason why the Thomas Aquinas' doctrine of providence is attractive to contemporary philosophers of religion in the English-speaking academy. The main argument states that there are at least four metaphysical principles that guided discussions on providence and divine action in the created world, namely divine omnipotence and transcendence, divine providential action, the autonomy of natural created causes, and the success of reason and natural science. Aquinas' doctrine, I hold, is capable of affirming these four principles without rejecting any of them, as it is in the cases of other doctrines. In addition, I present and answer some objections raised against Aquinas' thought, and briefly expand on how Aquinas' ideas on providence are used today to tackle issues regarding contemporary science, such as evolutionary biology, quantum mechanics, and big bang theory.*

Keywords: *Thomas Aquinas, Providence, Divine Action, Thomism*.

[38] E. Johnson, *Does God Play Dice? Divine Providence and Chance*, «Theological Studies», 57 (1996), pp. 3-18: 11.

[39] W.E. Carroll, *Creation and the Foundations of Evolution*, cit., p. 60.

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