



# Imperfectly perfect universe? Emerging natural order in Thomas Aquinas

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Scientific data indicate that violence is involved in the emergence of higher forms of life from lower forms. This seems incompatible with the God of Christian revelation, who is the source of love and mercy. Current attempts to explain this tension usually focus on two approaches: the 'gift of freedom' (McLeish) or the 'only way' theory (Southgate). I will argue that Thomas Aquinas' understanding of nature is able to provide an interesting framework for the challenges posed by the way of the appearance of life. The article will present Aquinas' theology of nature, which seems to fit perfectly with the current state of scientific knowledge, especially when considering the relationship between God and creation.

**Contribution:** The article shows that the problem of the interpretation of paradise in the Christian tradition may be related to the influence of the Neoplatonic tradition, which reduces paradise to the idealistic sphere. Attention is drawn to the concept of perfection, which does not mean the absence of any disvalue in the natural world, but is a relational concept. The death of animals and natural evil need not be explained by moral evil, but requires a broader interpretation of the value of the natural order.

**Keywords:** nature; theodicy; paradise; original sin; grace; science-religion.

## Introduction

The topic of the natural order has become the subject of a particularly active dialogue between science and religion, providing both sides with new insights (eds. Torrance & McCall 2018). The picture of the world proposed by the natural sciences is based on a spontaneous tendency of complex systems to self-organise. This creative process has led to enormous biological diversity and the emergence of complex organisms characterised by consciousness, self-awareness and social and cultural organisation. Nature is represented as a large system in which predominantly chaotic, indeterministic systems exist at the local level, as suggested by quantum mechanics in its standard interpretation (Llamas 2020), perhaps characterised by super determinism or macro-level determinism (Sanchez-Cañizares 2019:29). Interactions occur between these systems because they are not isolated from each other and large number of possible nonlinear connections (as yet unknown) make them into a complex whole.

It seems that the notion of 'nature' is crucial for a proper understanding of the relationship between religion and science, both from a historical and a cultural perspective. At the same time, the Thomistic approach to the order of nature allows us to answer the question of the meaning of suffering and violence in its development, which becomes clearer when we consider the role of nature in the plan of creation (Tabaczek 2018).

The purpose of this article is to show that Thomas Aquinas understands paradise as a real existing place (Vijgen 2019:25), which is not the final destination of man, because salvation is related to the attainment of heaven.

The article consists of three parts. The first part presents Aquinas' vision of the original constitution of nature, its perfection and integrity, the second part deals with Aquinas' dynamic concept of nature and order and the third part points out the consequences of the Fall for the order of nature.

## Difficulties in accepting the worldly 'struggle for survival' in theology

The image of the origin of life seems to challenge the traditional theological claim regarding the world, which is understood as called to the existence by perfect and good God and containing

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neither suffering nor death because it is the sin that is the cause of death and evil as reported in the Bible (cf. Wis 1:13; Rm 5:12; Rosenberg 2006). But according to evolutionary biology, the so-called pre-Adamic natural evil (PANE) existed before humankind and thus before the sin (Keltz 2019). At the same time, the evolutionary explanatory model refers to large degree of competition, survival of the fittest, suffering and extinction (Sollereder 2019). Why did God choose to institute such a process within the world? Could merciful God have chosen such a ruthless way to lead the universe to its fullness promised in the new creation?

### An old attempt to solve the problem

One of the first answers to these difficulties might be found in ancient Neoplatonism and the static conception of original justice that characterised first human beings in paradise. The earthly realities of the Platonic tradition are a reflection of spiritual things – namely the ideas. The Fall, which occurred in such an ideal world, led people to experience physicality and its effects as punishment (Franck 2019). In line with Origen's thinking, things happen in this world according to what takes place in the space of the spirit. Therefore, the meaning of the original sin and the condition of life in paradise is not historical, but spiritual. For this reason paradise was presented as a state of perfection in which there was no evil. The creative act of God from the beginning consisted in the creation of a perfect order (according to the idea of the ark, which is a synonym for perfection, for the Greeks everything that comes after the beginning gets only worse). Only the evil committed by man signifies the opening of a can of worms and the beginning of nature's becoming out of tune. According to this vision, sin deprives the humanity of an ideal state to which man hopes to return after his earthly life, if he lives well.

Suppose, however, that one shifts the Fall to a non-temporal and strictly spiritual level, in accordance with the Platonic model. In such case, it would still be difficult to explain many of the details about paradise, such as Adam's naming of the animals, which suggests his work and thus his development. At the same time, emphasising the change in God's plans after the first humans sinned is a strategy that remains at odds with the truth presented by biblical revelation (according to which redemption was part of God's plan from the very beginning). Such an approach focuses only on selected biblical episodes instead. This seems to impose an alien framework on the biblical description of original happiness, which according to Aquinas, does not depend on the non-existence of evil, but – as Tomasz Gałuszka (2021) notes – on the harmony summarised in the term *rectitudo*. These attempts to describe paradise and sin as unrealistic frames tacitly assume that the perfection of the universe is about homogeneity: a static state associated with reaching the pinnacle of development.

### Modern defence strategies: 'Only way' or 'free-process'

The Platonic paradigm proved inefficient in providing explanation that would be convincing in the context of

modern science. But its incompatibility with the biblical vision was also already perfectly recognised by Aquinas, who observed that the Platonic concept of trans-temporal Fall does not take into account the divine plan for man's salvation, which existed from the very beginning (and not appeared only after the sin of first people) as God chose us before the foundation of the world (cf. Eph 1:4) It is not that there is a new plan B after original sin – it is still the same plan A, albeit with some modifications. For Aquinas, the abandonment of paradise after sin was not a transition to another world, but a modification of the conditions of God's original plan, which henceforth is implemented 'differently', but still for the benefit of man, so that he may attain, albeit in a different way and whilst preserving his freedom, the intended happiness.

For Aquinas, the universe that existed before Adam and Eve is a dynamic scenario of real history that takes place in the spiritual environment and whose traces or consequences affect the world in which humans live (Houck 2020; Roszak 2020). It seems that Aquinas would not entirely agree with those explanations of the existence of suffering and violence in the primordial world that prevail today. On the one hand, some believe that creating such a world in which animals struggle to survive was God's only alternative – in a similar way a runner who decides to run a marathon ends up with a side effect, namely the fatigue (Southgate 2008). Aquinas, however, vehemently rejected the possibility of understanding the act of creation as inherently necessary and therefore subject to a single option (Levering 2017). On the other hand, it is argued that such a world of rivalry and mutual violence among living beings is the price of the freedom that can arise only when there is a genuine choice (McLeish 2020).

### The perfect imperfection of nature? The Thomistic concept of the perfection of the universe

Such charges against the Christian vision of the original state of nature can be answered on the basis of Aquinas' theology of life in paradise. This life is described as perfect – as is the entire formation of nature before sin (*ante confirmationem*) – although, as the terminology itself suggests, it is not a static block falling from heaven and formed on a prefabricated basis, but an unfinished process of development requiring confirmation (*confirmatio*) on the part of free creation. How then does Aquinas understand the perfection of the universe before original sin? Is nature something fixed and static or is it a dynamic process? Does the nature itself possess some external purpose or does it tend towards 'self-realisation' and nothing else? The crucial point seems to be Aquinas' understanding of 'nature'.

### Perfection and integrity in *prima rerum conditio*

Aquinas' reflections on the original state of nature before the original sin are characterised by the fundamental belief that there is an inequality among creatures, which is the

result of the will of God, who acts in the manner of an artist (*artifex*) who chooses stones of different shapes, weights and qualities for his building. He does not act unjustly, however, because this 'first institution of things' proceeds from such a relational recognition (typical of justice), and diversity in nature is a sign of its perfection (Contra Gentiles, lib. 4 cap. 88 n. 3). The diversity of things, some of which are subject to destruction while others are not, contributes to the perfection of the universe because both kinds of beings possess good natures, although their goodness is twofold. Moreover, we do not know in detail the providence of God which organises everything, and we find ourselves in the situation of a man who enters the workshop of a workman and is surprised to find so many similar tools there. Nevertheless, this is not without significance for someone familiar with craftsmanship (De Veritate q. 5, a. 5, ad 6).

The PANE of the world is predicted not on the basis of the nature of beings (which in itself is a good thing, e.g. it is proper for a snake to have venom), but on the basis of utility. For Aquinas, however, this is not the full perspective:

[F]or they do not reflect that what is in some way injurious to one person, to another is beneficial, and that even to themselves the same thing may be evil in some respects, but good in others. And this could not be, if bodies were essentially evil and harmful. (S. Th., I, q. 65, a. 1, ad 2)

As far as the relationship between creatures is concerned, it can be seen that evil – from the beginning of nature – indicates that creation as such is not a common good, but is 'particular and contracted' (*particulare et contractum*), leading to a divergence of interests between created things that sets one against the other. A systematic approach to creatures and nature is necessary in order to see them not as separate parts, but as parts of a universe whose purpose is their perfection and existence for the good of the other (as the lung is for the heart, the sense for the thought) and consequently for the perfection of the whole.

The world before Adam's sin was characterised by its perfection, which consisted in the integrity of the universe, and therefore in the wholeness of the parts (*integritas partium*). This is the first perfection that Aquinas distinguishes when he considers the significance of the seventh day of the creation of the world and the subsequent rest of God in it, where the *consummatio naturae* takes place (S. Th., I, q. 73, a. 1, ad 2). In the commentary on the Sentences, the first perfection is described through the prism of changeability (Super Sent., lib. 4 d. 48 q. 2 a. 5, ad 3). Causally, there is ultimate perfection that consists in creating all things; therefore, the second perfection is connected with the end.

Accordingly, the description of the world before sin refers to its fullness and completeness and having the right things to accomplish its purpose, namely the fullness of happiness at the end of time. The first institution is the fulfilment of nature, and thereby the initiation of grace and glory is causal (the

existence of an end is primary, its realisation is secondary). This is why Aquinas emphasises that *consummatio naturae* took place in creation, in the Incarnation of *consummatio gratiae*, while *consummatio gloriae* will be attained in glory. It is not natural for nature to freeze beings after their creation, just as Incarnation does not capture grace and is not the only time at which the grace is granted: the fulfilment (in this case the fulfilment of nature) rather signifies constituting itself as a source origin. Originally, the state of nature was not about immutability, but about dynamic development that is distinct from other creatures. Thus, at the end of time, some of the beings will disappear. But the substance of the elements of the universe, which contribute to its perfection, will remain. In this way, in the final state of the universe not everything will be degraded, but only that which had no relation to the final goal. Therefore, as Aquinas explains, there will be no plants in heaven, for example (De potentia, q. 5 a. 7, ad 4). The perfection of the universe before human sin is not inconsistent with the existence of natural defects, such as the necessity of gaining food, although they too may – *per accidens* – contribute to the perfection of the universe, just as repentance is something perfect although caused by sin, same as the perseverance of martyrs in persecutions (Super Sent., lib. 1 d. 46 q. 1 a. 3 ad 2).

To be more precise, Aquinas distinguishes between two kinds of perfection by referring to the metaphor of a house: one type of perfection concerns living in the house (its definition includes being inhabited) and the other is about possessing the components of the house (buttresses, beauty of the house). In other words, a perfect house is not an 'empty place' but a house in which someone lives, that is, a house that lacks nothing because it possesses all the necessary elements. From such a perspective, Aquinas' statement that the perfection of the universe is 'the union of the perfection of all individual things' (De Veritate, q. 2, a. 2 c) is not surprising. Consequently, perfection takes place in this twofold way: when the object is not possessed but perfected.

It is worth emphasising that Aquinas regards the perfection of the universe as relational, that is, he does not recognise it as the epitome of any particular being, but takes into account only place of this being in the whole order. For this reason he states directly that:

[T]he perfection of the universe is not the perfection of a person or entity constituting a specific subject of activity, but rather consists in a uniform arrangement of relatively ordered parts. (S. Th., III, q. 4, a. 1, ad 4)

This is because of the assumption, accepted by Aquinas, that a thing occupies the best place for it in the given order (De veritate, q. 5, a. 3 c). Therefore, in *Summa Contra Gentiles* Aquinas compares this perfection with the perfection of the human body, in which many parts serve the body and cannot be considered in isolation, but only in relation to the whole (Contra Gentiles, lib. 3 cap. 112 n. 8). For Aquinas it is not possible to consider the perfection of the 'lung' outside its network of references.

Accordingly, perfection is seen as a specific ‘opportunity’ created in proper relation to the whole, rather than as an abstract entity considered absolutely. It is an argument that appears in *De potentia* q. 3 where Aquinas discusses the errors of the ancient philosophers in dealing with the issues of nature and evil, treated by them as equal factors (and thus regarded in Manichean way). One cannot simply judge that something is harmful or less perfect in relation to other, more perfect things, but a *comparatio ad totum ordinem universi* is required (*De potentia*, q. 3 a. 6 c). This is why Aquinas relates the notion of perfection strictly to species, simply emphasising in case of spiritual beings that it is better for them to differ in species rather than in many individuals (*Contra Gentiles*, lib. 2 cap. 93 n. 5). Paradoxically, it is part of the perfection of the universe that beings are born and die out because *esse* is being preserved in the individual species (*De veritate*, q. 5 a. 3, ad 2).

Something about the goodness of the universe would be lacking if nature did not exist, hence the statement in the description of creation that created individuals are ‘good’, while the whole is ‘very good’. Aquinas’ reasoning on this explains that it is better when two things are good rather than just one; the good of nature is greater than the good of the individual; therefore, the multiplicity of individuals of a given nature contributes to the good of the universe because both kinds of entities, permanent and decaying, have good nature both of which are beneficial for the universe (*De veritate* q. 5, a. 3, ad 3). It is only from this perspective that the understanding of the perfection of the universe, which is related to the multiplicity and diversity of the degrees of goodness of each entity, becomes more accessible, for none can provide the fullness of the first goodness, thus some entities are simple, other complex, some destructible, other indestructible. The lack of variety prevents the good of order, which contributes to perfection – hence the bold comparison by Aquinas:

If every part of the house were the roof, the house would be imperfect and fail of its purpose which is to shelter from rain and disaster. Accordingly, we must conclude that the multitude and diversity of creatures proceeded from one principle, not on account of a necessity imposed by matter, not on account of a limitation in power, not on account of goodness or a necessity imposed by goodness, but from the order of wisdom, in order that the perfection of the universe might be realised in the diversity of creatures. (*De potentia*, q. 3 a. 16 c.)

According to this logic, the imperfection of created things is a pursuit of the greater good, preferred by God over lesser evil (which for Aquinas is also good – and not evil – in a certain sense), because ‘God loves what is better’ (*De veritate*, q. 5, a. 5, ad 3). That God allows the existence of the imperfect *superiores e inferiores* follows from the greatness of divine providence, for the perfection of divine goodness is communicated to creatures in many ways. In this way they can be a cause of good for one another: the expansion of beings capable of imitating God as the source of goodness (although instrumentally) is also something good and reflects two aspects of God’s perfection: in himself and in other

things (*De veritate*, q. 11 a. 1 c). This category prevails here: the goodness of God as a foundation is the key to understanding the actions of God.

At the same time, such approach leads to proper understanding of human salvation, which does not consist in escaping the world (where remaining in the world is understood as a punishment), but – as Aquinas sees it – in profound ordering of man in relation to the purpose of the whole universe (*De potentia*, q. 6 a. 1, ad 21). At the same time the perfection of the universe is not something that would add any goodness to God (as if his goodness could increase), nor does God’s goodness depend on the perfection of the universe (*S.Th.*, III, q. 1 a. 3, ad 2).

### Nature as *ars* and *ordo*

The use of the term ‘order of nature’ (*ordo naturae*) indicates that being created should not be understood as something present in given being, but as relation of this being to its goal and fulfilment. Thus, creation is a relationship (*esse ad aliud*) that is not found in ‘being’ as a kind of ontological component. Capturing created nature in the category of *ordo* reveals its complexity and allows us to see the whole of creation within it – ordered in relation to itself and directed towards the goal. But in order to see this creativity, one must see the inclination and the orientation of nature towards something, which is its dynamism. The difficulty in judging the perfection or imperfection of nature may stem from our inability to grasp the entire natural order, as it is elusive from the perspective of the whole and the plan of God’s goodness and wisdom and both are beyond the possibility of *comprehendere* of the created intellect (*Contra Gentiles*, lib. 3 cap. 59 n. 7).

Aquinas introduces several terms to approximate the understanding of nature through the prism of an ‘ordinary course’ rather than from the point of view of fixed determinism that deprives and excludes freedom (Silva 2015). First, when he emphasises the uniqueness and incomparability of creation and justification, and second, when he sees God’s action as a miracle that is not about breaking the rules of nature but about transcending them. When nature proceeds differently than usual – because of the influence of other causes – its rules are not broken, but suspended and strengthened. Therefore, the action of God is not the action that would bypass natural causes – like a kind of circumvention. If that were the case, such model of God – world relationship based on a contrastive stance would be a negation of the analogical understanding of divine causality (Ramage 2020; Roszak 2017).

Accordingly, nature must be viewed in terms of the purpose to which it is directed and as a dynamic. This view does not allow nature to be treated as externally directed by God, who would impose His will despite the creature’s freedom. Rather, God’s action consists in giving created beings the power to act – hence the popular Thomistic metaphor of God as the sun, which makes vision possible but which is not looked at directly. Nature itself gives the power to enact what it is. For



this reason, its main characteristic is not being a ‘thing’ distinct from some another kind of being, but the way it evolves, namely out of itself: *ex se ipso agit*. It is worth quoting Aquinas’ words in full: although they date from the 13th century, they still sound – as Mariano Artigas observed – very modern (Artigas 2000). Aquinas, in his commentary on *Physics*, after analysing the arguments for the teleology in nature, summarises and provides a following definition of *natura*:

Nature is nothing but a certain kind of art, i.e. the divine art, impressed upon things, by which these things are moved to a determinate end. It is as if the shipbuilder were able to give to timbers that by which they would move themselves to take the form of a ship. (In octo libros Physicorum Aristotelis Expositio lib. 2, cap. 8, lect. 14)

It is clear that nature for Aquinas means a process of self-directing development. It is not a matter of the purchased pieces of furniture ‘assembling themselves’ at home, thanks to the one who follows the plan. Nature is characterised by internal dynamism and creativity (Novo-Pereda-Sanchez, Pereda & Sanchez-Cañizares 2018:65). The *ordo naturalis in rebus*, then, is the persistence of a certain foundation that, in harmony with nature, evolves into new forms of expression of the good. That is, the ‘addition of the good’ to the natural good has an extraordinary power to recover what has been lost.

## Rectitudo and paradise

Given this perception of nature as *ars* and *ordo*, it is clear that the essence of original justice is thus not an ontological inequality of men before and after sin, as if something had been ‘cut off’. By using the language of ‘wounds’ and wounded nature, Aquinas indicates that the proper order of reference marked the first state of human nature. This is expressed by the term *rectitudo*, which indicates harmonisation. After sin, creation is detached and needs someone to restore the lost relationships, to restore the *ordo*.

As there is no ontological change after sin, what was the state before it? What was the state of the Fall? The earlier state of man stems from God’s creation of man’s *rectum* (Sir 7) and Aquinas describes it with the help of following formulas: *subiectio corporis ad animam* or *habitus corporis sub anima*, which indicates *ratio totaliter inferiores vires contineret, et anima corpus*. He discusses this in detail in q. 94 of *Prima Pars*, where he explains:

Man was made right by God in this sense, that in him the lower powers were subjected to the higher, and the higher nature was made so as not to be impeded by the lower. Wherefore the first man was not impeded by exterior things from a clear and steady contemplation of the intelligible effects which he perceived by the radiation of the first truth, whether by a natural or by a gratuitous knowledge. (S. Th., I, q. 94 a. 1 c)

Crucial to understanding the state of nature before sin is the realisation that it wasn’t a case of something ceasing to exist after the Fall, but of change in the order and in the relationships between its parts. Sin does not introduce any new

phenomena – like earthquakes or other catastrophes – that did not exist in paradise. Aquinas mentions that poisonous animals had poison (if they had not, something in the essence of their being would be missing), but it was not harmful to humans because of the *rectitudo* over nature. Sin causes human nature to immerse itself in sensuality (De veritate, q. 29 a. 4, ad 3).

## Conclusions

Michael Foster argued that the view of nature as an established order created the conditions for the emergence of modern science (Foster 1934). From an analysis of Aquinas’ texts and the framework that emerges in the treatise on divine government in the *Summa Theologica*, it can be seen that Aquinas has a realistic understanding of the state of original justice. His interpretation is consistent with the claims of modern science about the beginning of the universe – although these approaches are not in complete agreement, they still have the same intuitions. This is probably because of Aquinas’ understanding of theology as a discipline that reads the world *sub ratione Dei* (today we would say *top-down*) and does not produce its knowledge on the margins of the sciences, but organises it like a subaltern science. It cannot exist without other doctrines. Thus, the *sacra doctrina* remains in constant relationship with research on the world conducted from the bottom-up (in Aquinas’ times such research was regarded as synonymous with the work of Aristotle).

Aquinas’ reflections on nature – in its state at the beginning of its existence – can be summarised in three statements:

1. For Aquinas nature is a system (*ordo*) that introduces order where there is chaos. It is unfinished, open to the future, creative and conveys meaning through relationships. Therefore, the connection between God and nature is a covenant broken by Adam’s loss of *rectitudo* – we live in hope that one day it will be healed and the full meaning will be discovered. Nature is not a cold machine, but a network of relationships, a creative nature from which new qualities emerge. *Diversitas rerum* is a necessity here and something worth striving for. This paradigm of modern science is consistent with Aquinas’ vision of nature.
2. The primal perfection of nature, before the Fall, is not absolute, but open to fullness. The purpose of human life does not change after sin (access to heaven remains), but the procedure of obtaining it varies because the original *rectitudo* was broken. This openness of primal perfection of nature also means that the paradise was created as a world in which some physical calamities occurred. However, these calamities were not harmful to man because of the support of grace in which Adam was created.

In contrast to the later Scotism (Verdia 2019:151), Aquinas emphasises that God respects nature and that the establishment of good in the world is not achieved by violating nature but by reading it profoundly.

3. Is it worthwhile for God to take care of nature, which has been thrown into turmoil by sin? Aquinas' reflections suggest that God respects nature: it is not a matter of controlling nature after the Fall, but of 'healing' it. If this is naturalism, it is very theological and leads to the discovery of something more profound in the nature itself.

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