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The apodictic method and the dialogue between theology and science (II)

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Abstract: Many present-day scientists think that religion can never come to terms with science. In sharp contrast with this widespread opinion, the authors of this paper consider that, historically, scientific reasoning and religious belief joined hands in their effort to investigate and understand reality. In fact, today’s divorce between science and religion is nothing else than the final outcome of a gradual, long-term, and deliberately assumed process of science secularisation. However, especially during the last decades, we have all been equally confronted with the rise of a new concern of contemporary scientists, for the review of the scope of problems addressed by science, which now also comprise the themes usually traditionally addressed by theological thought. It could be argued that this recent development is being captured by Science and Religion, an emerging new field of investigation within the modern scientific epistemology, Science and Religion.

Against this background, the purpose of this paper is three-fold: firstly, to briefly emphasize that one of the defining dimensions of the dialogue between science and religion dialogue is given by the discontinuity relationship, in which, the knowledge acquired through scientific reason is placed in relation to the divinely revealed one; secondly, to argue that another defining dimension of the dialogue consists in the hierarchical harmony relationship that mediates the encounter between the two, thus transgressing the discontinuity and making the theology-science dialogue possible and viable; and thirdly, to advocate for the idea that the apodictic method (based on antinomic logic) can successfully structure such a dialogue.

The paper is divided into two parts: the first part addresses the problem of truth in theology and science with a particular focus on the antinomic logic, the second part aims to illustrate how the apodictic method (based on antinomic logic) effectively implements together-workingness between scientific analysis and theological
teaching by applying it to the field of economic science through the theory of rational
behaviour, with reference to the issue of wealth and poverty.

**Keywords:** religion, discontinuity relationship, antinomic logic, patristic teaching,
epistemological transfiguration.

**Introduction**

As we have mentioned earlier in the first part of this paper (Comșa, Munteanu
2020), our goal is to investigate the extent to which patristic thinking, based on
the apodictic method and antinomic logic, can be viewed as the true ‘grammar’
of the dialogue between science and theology.

In this respect, the starting point was the study of the correspondence between
the revealed Divine Truth and human truth. Accordingly, we have argued that
along with the Divine Truth, there is necessarily the human truth, if along with
God, there is also the man, the creature. We also advocated that the human truth
is truth relative to the Divine Truth, and not to something else, that is, it is in a
certain concordance with the Divine Truth. In other words, human truth must
necessarily be the emblem of a certain fundamental property of Divine Truth.
And perhaps, the most convenient proof in this regard is the antinomic nature of
human truth as an emblem of the antinomic character of the Divine Truth.

In the second part of our analysis, we aim to discuss the following issues:

- the autonomous scientific reason cannot reach human antinomic truth
  (unless it goes through a process of ‘epistemological transfiguration’);
- the constituent elements of the apodictic method based on antinomic logic
  (faith, spiritualized reason, and antinomic thinking);
- an illustrative exercise of how the apodictic method, based on antinomic
  logic, operates as a true ‘grammar’ of the dialogue between science and
  theology (including a case study in the field of economic theory of rational
  behaviour);
- the economy seen through the lens of faith (spiritualized property; the
  Christian-Orthodox businessman’s profile; how a Christian-Orthodox
  economy would work).
Autonomous reason cannot reach human (antinomic) truth

As we showed in the first part of our study, since the early years of the last century, the efforts of logicians to construct a complete and non-contradictory formalism have been struck by the existence of logical and semantic paradoxes. We have tried to argue that behind this state of affairs lies the antinomic connection that operates between the elements that structure (human) truth: the presence of the thesis does not guarantee at all the non-existence of the antithesis: on the contrary, the thesis always presupposes the antithesis in the realm of the spirit, and in all other fields of life, as well. Therefore, the thesis and the antithesis together constitute the expression of truth, which means that human truth is an antinomy and cannot but be so.

We believe that the above statement gives us a better-grounded understanding of the relationship between truth and reason, more precisely, the extent to which natural (autonomous) human reason can access antinomic truth. In this respect, we now know that the antinomy is a sentence which being true, contains both the thesis and the antithesis, so that no objection can affect it [1]. It follows therefore that: ‘The antinomic does not say at all: “Either this, or the other, is not true”; nor does it say, “Neither this, nor the other is true.” It only says: “Both this, and the other are true, but each in its own way”; reconciliation and union are above reason’ (emphasis added) (Florenski 1999, p.106).

In our interpretation, Florenski’s argument means that, as long as human reason acts autonomously, i.e., remains within the limits of its natural powers, it cannot accommodate the antinomic: reconciling and uniting of contradictions, of thesis and antithesis ‘they are stupid, absurd for reason. A cannot be non-A. It is impossible, but also undoubted!’ (Florenski 1999, p.108). And we believe this stems from the very ‘existential condition’ of reason. In fact, the antinomic comes from the division of existence itself [2], including here reason as part of existence. Thus, the existence of a plurality of discordant schemes and theories – equally honest, it is true – but which come from different starting points is the best proof of the ‘cracks’ of the universe. Whatever is the object of our research, we inevitably divide what we examine, dissect into incompatible aspects what we study. And we do not see any consistent argument that would contradict the statement we have just made above: tangled and mired into invincible
contradictions – since it wants to permanently attach itself to this selfishly fragmented world, both in time and space – autonomous human reason on its own does not want to adjust to contradictions, it rejects ‘organically’ the antinomic.

**On the ‘epistemological transfiguration’**

Autonomous human thinking cannot accommodate the antinomic. In other words, it cannot fully understand the deep reasons of things. But it can know enough, as much as is necessary for it to open itself to humble thoughts and faith, and thus, starting from what it has seen, to come to understand the mysterious and unseen reasons of things. And this can happen only if faith is allowed to the mind, and enlightened by the Holy Spirit. That is, when reason becomes spiritual.

The essential idea that emerges from the above is that in order to penetrate the mysterious reasons of things, the natural reason of the scientist must be itself structured by grace, be spiritualized by this inspired-by-God rationality of things, and then, it can understand it. The acquisition with the ‘eyes’ of spiritual reason of the mysterious meanings of things means in terms of the act of scientific research the scientist's experience of a true epistemological transfiguration: the scientific research he has done with the ‘eyes’ of spiritual reason reveals to him a reality that could not be previously seen with the ‘eyes’ of his natural reason, *i.e.*, the meanings and deep-rooted reasons of the investigated world.

In essence, the scientist's experience of epistemological transfiguration means that in his effort to know the reality he should rely on both demonstrable truths acquired through scientific observational, laboratory or mental experiments, and the unprovable truths received by Divine Revelation. This way, the scientific truth is not altered, weakened, or relativized by this working-together with the revealed truth, but it is consolidated and enriched, acquiring a profoundness and depth that would not otherwise be accessible. And by appealing to such knowledge, the scientist does not become a mystic or a theologian. He does not cease to be a scientist but remains a scientist and continues to do scientific
research. In fact, scientific research is based on spiritualized reason, and thus is able to access and understand the antinomic.

Therefore, one needs the enlightenment of grace, the spiritualization of reason, that is, a spiritual life and, therefore, asceticism in order to know the antinomic. But ‘the asceticism of reason is faith’ (Florenski 1999, p.98), that is, the self-denial of reason. And the act of self-denial of reason is the expression of an antinomy. For, indeed, one can believe only in an antinomy, any non-antinomic judgment is either recognized or denied by reason because it does not go beyond the selfish isolation of reason (that is, reason sufficient to itself). If truth were non-antinomic, then reason, always frequenting its own domain, would not have a point of support ‘beyond’ its field, would not see the extra-rational object, and therefore, nothing would cause to it to begin the asceticism of faith.

Towards a specific method of the science-theology dialogue

Within the science-theology dialogue, the access of reason to the antinomic truth is therefore mediated by faith. It means that the relationship between reason and faith acquires a critical importance for the issue that concerns us here, namely, the emancipation of the science-theology dialogue from the current stage of exploratory methodological probing to that of methodological joint-working based on the hierarchy-in-harmony relationship between theological and scientific knowledge (see again the first part of our paper). In such conditions, the effort to identify (more precisely, as we have seen, to reconstitute) the method which could ensure the support of this emancipation must be channelled towards understanding how the elements prefigured to be the basic structural ‘ingredients’ of the method relate to each other, faith, reason and antinomy, respectively.

Faith

Saint Maximus the Confessor says that the very possibility of the existence of faith is a gift given to man by God: ‘... He (God – our comment) gives to the pious people a faith in His existence more grounded than any demonstration. For faith is a true knowledge, based on principles that cannot be proved, as one that is the
foundation of things *above* mind and reason ‘(emphasis added) (Saint Maximus the Confessor 2017, p.130).

In the same spirit, Saint Gregory Palamas states that faith is not based on abstract notions but on life, pragmatism, realities, or rather on the reality of man's encounter with God: ‘Our faith is not in words, but in things’. And the Saint states elsewhere: ‘We do not consider the knowledge found through reasoning and syllogisms (to be – our comment) a true opinion but that demonstrated by facts and life, which is not only true but also certain and non-overthrown (by logical arguments – our comment)’ (Saint Gregory Palamas 2013, p.5).

Of course, the divine is beyond the mind and reason, so it is neither subject to the senses, nor to science, or to reasoning and syllogisms. However, it is confessed in Orthodox (patristic) theology that amongst the divine, some can be known, researched, and therefore demonstrated, and others are non-researchable: ‘... some are known, and others are sought; and there are also some that prove themselves, and others are utterly incomprehensible and unexplored (...) which – knowingly [3] – *we have by faith*’ (emphasis added) (Saint Gregory Palamas 2013, p.77).

Against this background, let us especially remember the fact that the Holy Fathers teach through their example that judgments and syllogisms can be made about the divine, although not starting from human wisdom but from the wisdom that comes from the Holy Spirit. Based on these sound premises, they were not afraid to call this type of reasoning as apodictic or demonstrative. Thus, just as hymns are made for God, even though He is beyond any hymn, so can demonstrations of Him be made, although He is beyond demonstration. So, it is not a simple reasoning (syllogistic, let's say), but one that is based on the experience of ecclesial life, of the Church, the only unshakable foundation. As long as this foundation remains unaffected, there is no danger in the use of reasoning and demonstrations.

The Fathers of the Church point out that when the apodictic method needs to be used [4], it exists as a starting point: ‘... the power moved by the Spirit, by which in a way above the mind they made use of what exists above the mind, those who were made wise by God and who preached God by word,
from God they were taught and – following God – they taught us’ (Saint Gregory Palamas 2013, pp.10-11). It means that the principle or foundation of theological and patristic demonstration is the truth received from the Spirit, His power shared with the Fathers of the Church.

For the context of our analysis, these patristic testimonies tell us that the method we are looking for – meant to instrument the science-religion dialogue – should not be limited to being an intellectual, conceptual enterprise but should consist of the very experience of faith by its practitioners, apodictically, that is, on the basis of the truth coming from the Spirit.

**Spiritualized reason**

The second ‘ingredient’ that we set out to consider in configuring the specific method of science-religion dialogue is reason, more precisely, its relationship to faith.

In essence, the Christian-Orthodox teaching on the relationship between reason and faith can be expressed as follows: man must give up his reason for believing in God, and through this, he will also gain his reason, that is, he will also use his reason at maximum power. Exaggeratingly loving his reason, he loses it: but using reason within its limits, but aided by grace, he arrives at a fruitful teaching (Saint Basil the Great 1982, pp.107, 113, 121). This means that man must use his mind correctly: to use it for the glory of God, to find God, not to make his mind God. Otherwise, science helps a lot, but it also disturbs a lot (Elder Paisie Hagiorite 2000, p.206), as reason darkens and works below its normal capacity.

But ‘... grace is constitutive of reason, it is the spirit, it is the power set in motion, it gives life to reason’ (emphasis added) (Comșa 2003, p.85). Therefore, the state of union is the fundamental state that expresses the true relationship between reason and faith, more precisely, between reason and grace. For, as Father Dumitru Stănilioae shows, faith is the attainment of reason by grace, it is the ‘spiritual feeling’ of God’s faith, man's spiritual feeling of God obtained from His works, from His power that touches us’ (Stănilioae 1979, p.69, apud Comșa, 2003, p.56).
Therefore, reason is set in motion by a spirit. And Saint Basil the Great confesses in this respect: 'I am of the opinion that in the mind of man there are two powers, one evil and demonic, able to draw us to fall, and the other divine and good, able to raise us to the likeness of God' (Saint Basil the Great 1986a, p.481, apud Comșa 2003, p.57). We can infer from this that:

- if reason is set in motion by an evil spirit, then it darkens and boasts indifference and contempt for the divine appearance, and thus the 'wisdom of this world' is reached. This circumstance means that man through the very contemplation of the surrounding nature, through the very act of (scientific) investigation of reality, comes to the conviction that God does not exist;
- if, on the other hand, reason is set in motion by the grace of the Holy Spirit, ‘...reason can be opened to humble thought, it can be opened to faith, it can be spiritualized. At this moment, the pure soul feels apathy (the calm of the soul similar to the calm of the divine nature), because through it, the image of God is restored in the soul, as much as possible to the man’ (Saint Basil the Great 1988, p.117, apud Comșa 2003, p.55). In terms of our analysis, this means that for the man who opens his soul to humble thinking, contemplation of nature and investigation of reality, there are opportunities to confess his faith in God.

Thus, appealing again to the teaching of Saint Basil the Great, let us remember that ‘This world was not conceived in vain, nor in the desert, but for a useful purpose and for the great benefit it brings to those who exist on earth – provided the world is really a school of souls endowed with reason and a place where the man can learn the knowledge of God ‘...this word being through what is seen and felt in it a guide of the mind for the contemplation of the unseen’ (emphasis added) (Saint Basil the Great 1986b, p.77, apud Comșa 2003, p.64).

In line with these thoughts, it should be noted that according to the patristic vision, God created the world for a reason and a purpose. He created the world out of goodness, in order to make other beings become partakers of His love: ‘...The world, as nature, is created for human subjects, because only in man the rationality of the world, of indefinite virtualities, acquires a meaning, a purpose, or reaches its fullest fulfillment’ (Stâniloae 1978, p.339). Above all, ‘...the world and the things in it discover their meaning because their rationality is seen by a
man as having creatively its source in the personal God, because they are seen as a means of God's love, therefore of His dialogue with people... Man's dialogue with God through things contributes to his development, as they are seen as images or transparent faces of God's reasons, of the meanings He pursues through their creation, meanings through which He wants to lead the man all more to Himself and to man's own development. The man thus grows through things, because through them he knows more and more the loving intentions of God towards him’ (Stăniloae 1978, pp.355-356).

In this sense, Saint Gregory Palamas explains that ‘God, being neither seen, nor material, He can be known none other than sensible and intelligible beings. For knowledge being of creatures and stopping at the edge of creatures, from which they show God’ (Saint Gregory Palamas 2001, p.357). And Saint Maximus the Confessor states that in the unseen of God, which is seen ‘from the creation of the world, being understood by creatures, that is, His eternal power and divinity’, are shown ‘the reasons of the things made before centuries by God, as He Himself knew… These, being unseen, are seen by the understanding of creatures. For all the creatures of God contemplated by us in accordance with our nature, with the help of due science and knowledge, secretly announce to us the reasons, according to which, they were made and revealed to us through them, through the purpose set by God in every creature’ (emphasis added) (Saint Maximus the Confessor 2017, p.130).

In such a vision, one of the hesychastic descendants, Patriarch Calist, also contemplates existence in its entirety, Creator and work: 'I see myself filled with the Holy Light of my heart, by the gift of God, as an unquenchable candlestick of the spirit, and if it may be said so I am introduced into the reasons of creatures, and I see all the reasons of all united in a mysterious Reason, and all of Scripture I see ending in that Reason... That reason is the great Council of God’ (emphasis added) (Saint Calist the Patriarch 1979, pp. 292-293).

Through spiritualization, reason becomes enlightened, it expands itself, and can include in itself the logic of grace, the logic of faith, as much as it is possible (Comșa 2003, pp. 54-55, 71, 90). The soul repents, makes metanoia, that is, the change of thought, of reason; there is an orientation of reason towards God, towards faith. After believing, then reason understands the logic of faith, for as
the prophet Isaiah says: 'If you do not believe, you will not understand', and Saint Basil the Great says in his turn: 'The good can be truly understood by reason only by faith' (see Comșa 2003, p.55).

**Antinomic thinking**

We believe that the essence of what was discussed in the previous subsections of our paper in relation to faith and reason as the 'ingredients' of the desirable method of instrumenting the science-theology dialogue can be summarized in this formulation: decrease of reason (to make room for faith) means its use at maximum powers, while the exacerbation of reason (to the detriment of faith) is equivalent to its use not even at the level of its normal powers.

This means that the problem of finding the correct and natural relationship between reason and faith is solved in antinomic thinking, since antinomies – which operate with the ternary logic of paradox – are positive for knowing God, because natural reason itself – which operates with the binary logic of non-contradiction – gets to know its own limits, it is prevented from hardening itself, and it *humbles itself*.

In this sense, let us recall the words of Pavel Florenski: '... the asceticism of reason is faith, that is, its self-denial'. By assuming its limitations and by engaging in asceticism, reason gives up to considering itself sufficient and opens itself to faith, lets itself be assisted by faith, engages into a process of working together with faith. But this act of self-renunciation of reason in favour of faith, this self-contradiction of reason through working-together with faith, is the very expression of an antinomy. Through its asceticism, through its openness to faith, reason ends up asserting itself and denying itself at the same time. *So, it ends up operating in terms of antinomic logic.*

**Some concluding remarks**

In our research (both in part I and part II) we have been looking for a method that could instrument the emancipation of the interdisciplinary science-theology dialogue from the current stage of *exploratory methodological probing* to that of *a viable methodological working-together*. In our opinion, the study has undergone two distinct and successive stages in this regard.
The main ideas highlighted in the first stage are the following:

- the basis of patristic theologizing is the truth coming from the Holy Spirit, His power shared with the Fathers of Church;
- we ascend to the knowledge of God not by the common notions processed autonomously by our intellect but by the grace of God;
- the starting point in the knowledge of God is the power inspired by the Holy Spirit;
- scientific knowledge can also be part of this ascent to the truth of Creation only if the scientist engages himself in such a spiritual ascent and opens himself to his own transfiguration under the work of grace of God.

(ii) The second stage of our analysis also focused on the ideas that we consider to be of importance, namely:

- the method is not a mere intellectual enterprise, but a living experience of faith intertwined with apodictics and antinomics. As such, the faith based apodictically on the truth of the Holy Spirit, the spiritualized reason, set in motion by the activation of the grace that constitutes it, the antinomic nature of asceticism in which spiritualized reason is engaged are all dynamic processes that give substance and mark the territory of the specific action employed by the method;
- functionally, the method is dual: on the one hand, the premises and conclusions are given by faith (which represents the apodictic component of the method); on the other hand, the 'path' from one to another is rationally-syllogistically woven, this warping itself being done in the atmosphere of faith, in its 'gravitational field' (which is the antinomic component of the method);
- teleologically, the demonstrative reasoning thus obtained does nothing but confirms and strengthens what is already held by faith itself.

An illustrative application

With this illustrative exercise, we aim to show how the apodictic method (based on antinomic logic) effectively implements together-workingness between the scientific and theological knowledge by applying it to the field of economic
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science, in particular, through the theory of rational behaviour with a special reference to the issue of wealth and poverty.

The context of the problem

Expressed synthetically, the teaching of faith that crowns the patristic interpretation of revealed truths about human nature and rational economic behaviour has a paradoxical formulation that undoubtedly aggresses the common sense of the logic of professional economic research: ‘Scatter your wealth so that you do not lose it! Don’t keep it with you if you want to have it! Throw it away, to keep it! Spend it to earn it!’ (Saint John Chrysostom 1994, p.75).

At the risk of formulating the dullest platitudes, let us mention that, as a whole and beyond the differences related to doctrines, schools of thought or ideologies, economic thought agrees with the idea that the whole edifice of the economy is set in motion by man's desire to improve his situation, to do everything in his power to achieve his goals, in a given situation of choice, in his own best interests. As such, when dealing with the problem of human nature and rational economic behaviour, ‘all-colour’ economists are willing to view it in the nature of man that he should always prefer to have more than fewer goods, want to own as much of certain things as possible, be interested in giving up a smaller quantity of a given good in exchange for a larger quantity of another good, choose the course of action that promises the highest expected value, want to obtain the highest level of value and satisfaction from a certain action he undertakes. In other words, the idea that well-being represents the possibility of man to satisfy as many of his desires as possible, the desires having the tendency to be unlimited, and the man being consequently a maximizer, has been broadly agreed upon.

In view of this state of affairs, it can be said that the vision that emerges from the interpretations of the Holy Fathers on the divine truth revealed about human nature and rational economic behaviour is in conflict with the vision commonly shared by the community of economists. At first glance, the conflict seems to be about the teleology (ends, purposes) of economic behaviour. Thus, while secularized economic thinking considers the ends such as the accumulation of wealth and the eradication of poverty, the patristic vision speaks of the
damage of enrichment in material goods and the benefit of impoverishment through the merciful spending of wealth.

Our opinion is, however, that, in fact, the conflict is based on the logic of argumentative discourse, which, in the case of economic thinking, is the logic of science, and in the case of patristic thinking, is the antinomic logic. In what follows, we will try to discuss these issues in more detail.

The logic of (economic) scientific research

We start from the fact that professional economic research, like any act of authentic scientific investigation, is based on a rational thinking that involves the intervention of three fundamental logical principles (our references to the principles of the logic of science follow the line of analysis developed in Botezatu 1983, pp.174-198).

(i) The principle of identity: stipulates that everything is what it is, that is, a thing is identical with itself (examples: A is A; B is B; I will be what I will be; I wrote what I wrote; non-A is non-A; if A is non-B, then A is non-B). All these examples show that identity is valid for all logical forms: notions, judgments, and reasoning. The principle of identity is not a tautology or a truism. Thus, the formula “A is A” specifies that A (an object, a notion, a term) is itself and is also nothing else.

(ii) The principle of non-contradiction (or excluded contradiction): stipulates that it is impossible for a sentence to be and not to be true (at the same time and under the same relation). Likewise, two contradictory sentences cannot both be true (at the same time and under the same relation), if one is true, the other must be false. And, a property cannot be asserted and denied to the same object (at the same time and under the same relation).

(ii) Excluded third party principle stipulates that a sentence cannot be neither true nor false. Likewise, two contradictory sentences cannot both be false (at the same time and under the same relation), one of them is necessarily true. And, it is impossible for a property neither to belong nor not to belong to an object. In other words, there could not be a middle (third) term between the two extreme terms of a contradiction, because for any object, all property
must be affirmed or denied (if between the extreme terms of a contradiction there were a middle /third term, then, mixture of properties, nothing true could be stated).

If we were to try to formalize scientific research in terms of the principles of logic, economic behaviour in relation to the problem of poverty and wealth (a crucial topic addressed by the teaching of the Holy Fathers), then the logical scheme would be, as follows:

<table>
<thead>
<tr>
<th>Principle of identity</th>
<th>A is A</th>
<th>Poverty is poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principle of non-contradiction</td>
<td>A is not non-A</td>
<td>Poverty is not non-poor (wealth)</td>
</tr>
<tr>
<td>Excluded third party principle</td>
<td>There is no a T (third) state that is neither A nor non-A at the same time and under the same relation</td>
<td>There is no man who is neither poor nor non-poor (rich), at the same time and under the same relation</td>
</tr>
</tbody>
</table>

*Source:* Authors' work

**The logic of patristic thinking**

To address the problem of the characteristics of logic that underlies patristic thinking, we believe that it is first necessary to return to the Holy Fathers' teaching on the existential condition of man in relation to the problem of wealth and poverty and try to deepen their meaning. So, we can see that the Fathers of the Church advance in successive steps in clarifying the problem:

(i) To begin with, they show the fallen state and bad order of this world.

(‘For the world is a lover of sins ... and the world is related to those who are united with the ugliness of morals and have bad behaviours, and they value it’ / Saint Cyril of Alexandria)

The bad order of this world lies especially in disobedience to God's commandments, which leads man to a ‘second fall’, in which, the tyrannical authority of the body over the soul is installed, as well as the worship of idols, such as worldly power, wealth, glory, pleasures.
(ii) Then, the Fathers urge to despise the worldly (which makes the man a slave to the excesses of the needs of the body), and to renounce the passion of enrichment (which is the major source of all evil).

(‘... in all circumstances, let us despise all that is beyond necessity. Nothing makes us submit so much to the devil as the desire to have more, such as greed’ / Saint John Chrysostom)

(‘Those who want to get rich ... fall into temptation and in a trap, and into many mad and harmful lusts, like some that plunge people into ruin and perdition. For the passion for the love of silver (of riches) is the root of all evil ...’ / Saint Paul the Apostle).

(iii) Further, it is shown that the renunciation of the passion of enrichment can be achieved only by giving one's own wealth to those in need. It means it equates to merciful impoverishment.

(‘Now ... He (the God – our comment) speaks directly of the contempt of wealth, showing that He gives this Commandment not for the benefit of those who receive mercy (alms) but for the benefit of those who give mercy (alms), so that, even when there is no one to do us injustice and bring us to justice, even then, we should despise our fortunes, giving them to the needy’/ Saint John Chrysostom)

(iv) Next, the Fathers of Church learn that merciful impoverishment is edifying, only if it is done out of love for those who receive mercy, who are in need. Otherwise, it is merely a harmful accumulation of sins.

(‘Truly, the great and honest man is the merciful man, because almsgiving, then, is true, when one does it with love and voluntarily, disregarding that he gives, but that he receives a gift, as if he were acquiring, and not as damaging’/ Saint John Chrysostom)

(‘That every one that does mercy in his earthly live shall receive back hundredfold of it, and also he shall inherit everlasting life: but this I say to you, that you should not repent of your alms, neither doubt the poor when you have given him something, lest, instead of payment, double damage to receive’/ Prologues)
In line with the Holy Fathers’ interpretations, we believe that we can consider that the merciful impoverishment powered by love, far from being limited to philanthropy or, in a more precise formulation, to a voluntary unilateral transfer of wealth, of material goods (as usually happens in the case of different schools and schools of secularized economic thought) is a type of economic behaviour that hosts the equivalence of two components: the act of merciful impoverishment powered by love (that is, the loving sacrifice of someone’s consumption of material goods in favour of those in need) is equivalent to the act of renouncing enrichment (that is, the loving sacrifice of the temptation of passionate enrichment in material goods).

Thus, if we were to formalize in logical terms the equivalence relationship between the two components, we would use the following notations:

- the term $A$ defines the notion of merciful impoverishment powered by love;
- the term $non\cdot A$ defines the notion of non-impoverishment out of love, or the alternative notion of renouncing to the impoverishment out of love;
- term $B$ defines the notion of enrichment;
- the term $non\cdot B$ defines the notion of non-enrichment, or the alternative notion of renunciation of enrichment;
- the wording ‘merciful impoverishment powered by love is the renunciation of enrichment’ defines the equivalence relationship between impoverishment out of love and the renunciation of enrichment and is, at the same time, the expression of the logical principle of dual identity (we will return to these notations later in our paper, when we shall present the scheme of antinomic logic).

(v) Then, the Fathers of Church reveal that impoverishment powered by love for the sake of those in need is in fact a loan granted to God.

(‘Whatever you give to the poor, you put it into the hands of Christ, and no one can snatch them from the hands of the One who took them, but they spend there a lot of fruit bringing us ...

For this is what Solomon says: “He who has mercy on the poor lends to God”. But, have you seen what a glorious way is it to borrow? As One takes the loan and Another puts Himself as guarantor for it. For it has not been simply said, “He who has mercy on the poor gives to God”. And this was not said in this way
because, at the reward of the merciful man by God, he may not only take back what is his due interest, but together with it, he receives from God even more interest ‘(emphasis added) / (Saint John Chrysostom).

Trying to understand more deeply the teaching of the Holy Fathers, let us observe that the act of impoverishment powered by love (that is, the renunciation of enrichment as a passion) is a narrow path requiring spiritual ascent. A transfigurative spiritual ascent, as it ‘descends heaven to earth’ (cf. Father Constantin Galeriu), leads the merciful man to God. It is a synergistic act of man’s cooperation with God, an act that makes God the debtor of the merciful man.

(vi) Forwards, the saints show that, having God as debtor and guarantor at the same time, the merciful man becomes the beneficiary of the mysterious transfiguration of the ‘sacrificed’ material goods into spiritual ones. (‘He gave them (the material goods – our comment) to God and shall receive back hundredfold because they have all become spiritual and above the mind’ / Father Ilie Cleopa)

Understood in terms of an encounter between the earthly and the heavenly, between contingent and transcendent, between creation and Creator, in short, between man and God, the act of impoverishment powered by love reveals its deep nature: the material goods sacrificed from the consumption of the passing, worldly life, are transfigured, as a gift, by the power of the indebted God, into spiritual goods, as snacks capitalized in the passing earthly life to be consumed in the eternal heavenly life. At the same time, say the Holy Fathers, it is a mysterious transfiguration. But what does this mysterious transfiguration really mean?

Sacrifice in material goods is the loving initiative of the merciful man, and their transfiguration into spiritual goods is the answer of God's unspeakable love of people. Material sacrifice is a human act that takes place at the level of the intelligibility of human reason, while the transfiguration of material goods into spiritual ones is a divine, mysterious act that takes place beyond the level of understanding, knowledge, and explanation of human reason (it is ‘above the mind’, as Father Cleopa writes). As such, the impoverishment powered by love is a reality that is both open and closed to human rational knowledge. In other
words, human reason alone cannot understand, know, and explain it in all its fullness. It is necessary for reason to assume its own limitations, humble itself, and therefore practice asceticism (see in this sense, Florensky's argument presented earlier). And, the asceticism of reason is faith, i.e., the renunciation of reason in favour of faith (assuming its limitations and practice of asceticism, reason gives up on considering itself sufficient and opens itself to faith, lets itself be assisted by faith, engages in a synergic process of together-workingness with faith). But this act of self-renunciation of reason in favour of faith, this self-contradiction of reason itself – through its together-workingness with faith – is the very expression of an antinomy. Through its asceticism, through its openness to faith, reason ends up asserting and denying itself at the same time. In other words, it ends up operating in terms of antinomic logic.

All these mean that impoverishment powered by love (as renunciation of enrichment) is a form of economic behaviour that falls outside the understanding of rational thinking, unassisted by faith (and based on the logic of science) but which can be understood instead by rational thinking assisted by faith (that is, spiritualized reason), based on antinomic logic.

(vii) Furthermore, the Holy Fathers put at our disposal a spiritual teaching of cardinal importance, we would say, namely, the promise of Christ for heavenly goodness is also accompanied by His promise for earthly things.

‘Verily I say unto you: There is no one who has left house, or brothers, or sisters, or mother, or father, or child, or land for My sake and the Gospel's, and who shall not receive a hundredfold – now in this time of persecution – houses and brothers and sisters and mothers and children and lands, and in the age to come: eternal life ‘(emphasis added) (Mark 10, 29-30).

It turns out that the promise given by Christ targets simultaneously both planes of human existence: the earthly and the heavenly. So:

- in what concerns the heavenly goods, the Savior's promise refers to the fact that the choice of impoverishment powered by love / renunciation of enrichment (it is about those who put Christ and His gospel above the family and the material goods held) brings the transfiguration of material goods (sacrificed from consumption of transient earthly life) into spiritual goods
(as snacks capitalized in the passing earthly life to be consumed in the eternal heavenly life):

- **in what concerns the earthly goods**, the promise refers to the fact that the impoverishment powered by love in material goods (the renunciation of enrichment as a passion) brings increased reward in material goods too [5].

It is equivalent to the paradoxical wording: *the renunciation of enrichment in material goods enriches in material goods.*

(viii) Finally, as a culmination of the interpretation of the revealed truths, the Holy Fathers take the consequences of their paradoxical teaching to the limit: ‘*Scatter your wealth so that you do not lose it! Don't keep it with you if you want to have it! Throw it away, to keep it! Spend it to earn it!*'

We believe that now it is even clearer that only in the register of an antinomic logic we could understand how it is possible for the impoverishment powered by love, that is, for the renunciation of enrichment (in material goods), to get enriched (also in material goods). Note also that accepting the possibility of such a reality (‘renunciation of wealth enriches’) means operating with the principle of contradiction in antinomic logic (as opposed to the principle of non-contradiction in the logic of science) which, applied to our problem, stipulates that two contradictory notions [6] [the notion of B (enrichment) and the notion of non-B (the renunciation of enrichment)] are true at the same time (the renunciation of enrichment enriches), but they are also true under the same relation (the renunciation of enrichment in material goods enriches in material goods).

Moreover, accepting the possibility of such a reality also implies operating with the principle of the included third party from antinomic logic (as opposed to the principle of the excluded third party from the logic of science), a principle which, applied to our case, stipulates that there is a term (T), *mercy/alms*, which is neither non-enrichment nor enrichment at the same time and under the same relation. This is because in mercy there is neither non-enrichment (because mercy enriches) nor enrichment (because mercy is the renunciation of enrichment) at the same time and under the same relation.

Now, if we were to try to formalize, in terms of the principles of antinomic logic, the characteristics of economic behaviour in relation to the problem of wealth.
and poverty (enrichment and impoverishment), as they result from the teaching of the Holy Fathers (which we have just analysed above), then the logic scheme would be as follows:

**Table 2 Antinomic logic scheme**

<table>
<thead>
<tr>
<th>Principle of dual identity</th>
<th>A is non-B</th>
<th>Impoverishment powered by love is the renunciation of enrichment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principle of contradiction</td>
<td>Non-B is B</td>
<td>Renunciation of enrichment enriches</td>
</tr>
<tr>
<td>Principle of the included third party</td>
<td>There is a T (third) state which is neither B nor non-B at the same time and under the same relation</td>
<td>Mercy is neither enrichment nor non-enrichment</td>
</tr>
</tbody>
</table>

*Source:* Authors’ work

**Some concluding remarks**

In this illustrative exercise on the apodictic method, we had as a working assumption that its application will highlight the tension in terms of the logic of argumentative discourse between economic thinking (operating with the logic of science) and patristic thinking (operating with antinomic logic). We now reached the finding that the application of the method was likely to lead to a process where the fundamental logical principles with which economic thinking operates (namely identity, non-contradiction and the excluded third party) lose their authority (hitherto undisputed).

Thus, it can be seen how, in the case of the patristic teaching of divine revealed truths, the three fundamental principles of the logic of scientific research are dislocated one by one: *identity* gives way to *dual identity*, *non-contradiction* is replaced by *contradiction*, and *the excluded third-party* leaves room to *the included third-party*. In logical terms, the antinomic vision of the Holy Fathers does not say: ‘The poor and rich attributes of man cannot be both true at the same time and under the same relation since one of them is necessarily false’ (The principle of non-contradiction in the logic of science). It also does not say: ‘The poor and rich attributes of man cannot be both false at the same time and under the same relation because one of them is necessarily true, and therefore,
there can be no middle/third attribute between the extreme attributes, *poor* and *rich* (The principle of the excluded third party from the logic of science).

The patristic antinomic says instead: ‘Both the *poor* attribute and the *rich* attribute of the merciful man are true at the same time and under the same relation’ (The principle of contradiction in antinomic logic). It also states that: ‘There is a middle attribute between the extreme *poor* and *rich* attributes, namely, the *merciful* attribute, which is not included by the two extreme attributes’.

This way, we believe that the ‘scandalous’ assertion of the patristic vision of economic behaviour (*‘Scatter your wealth so that you do not lose it! Don't keep it with you if you want to have it! Throw it away, to keep it! Spend it to earn it!’*) becomes logical and intelligible when guided by the apodictic method and antinomic logic.

**The economy seen through the lens of faith**

The present paper aimed to investigate the extent to which patristic thinking based on the apodictic method and antinomic logic can be considered as the true "grammar" of the dialogue between science and theology. As an application in the field of economic analysis of this working hypothesis, we tried to highlight in the previous section how the patristic thinking can bring more depth and clarity to understanding economic events.

Finally, it is our intention to go a little bit further and advance some considerations on the foreseeable implications of the circumstances, in which, economic actors would freely decide to define their business behaviour by referring to the teaching of the Christian-Orthodox faith.

**The issue of property**

Patristic thinking considers that the world has belonged to Him, belongs to Him, and will belong to God alone, whatever the powers that would temporarily rule the world. Like man, the world is God’s creation: only what belongs to God can belong to man (our references to the issue of property follow the line of analysis developed in Shahovskoi 2013, pp.243-252).
Does that mean that man can own no property? On the contrary, human property has its unshakable foundation in the fact that there is property since there is a Master of all. Therefore, the Holy Fathers tell us, property can be given, since it has a Master of all things: like life, property is also given by God. Accordingly, as it is written in the Holy Scriptures, man is called upon not only to possess (see Genesis 1, 28) but also to inherit (see Matthew 5, 5): land, natural resources, economic resources.

One can speak therefore of a spiritual status of property. The highest expression of human life is its full devotion to God: freeing himself from the pride of life, lust of the eyes and lust of the body, man becomes more and more ‘transparent’ to God, accessible to the abode of the Holy Spirit. And when man becomes completely transparent, free from all pride, free from any dark passion for himself and for the world, then property becomes a vector of human love, in God. However, people in everyday life often make property a vector of hatred of God and man. Still, it is not the property that is to blame here, nor the fact of possession, but the bad possession, the bad desire to own. The patristic teaching shows us that the evil desire for possession is represented by people who do not use their property as a vector of love, they are the selfish people who ‘hid it for themselves’, that is, those who buried what they possess in the earth (see The Parable of the Bags of Gold / Matthew 25, 14-30). On the other hand, the good desire for possession is best illustrated by the words of St. Maximus the Confessor: ‘Mine is only what I have given’ (to God and to people). These are people who have begun to consider themselves called upon only to distribute to the world, in the fairest possible way, the property they own (as God's steward).

Such an administration of property made under the seal of the Holy Spirit is expressed differently: some distribute their property immediately or gradually, others keep the whole appearance of possession, but in their souls, they give it sincerely to God, and assume as their task only the just distribution of it. This way to dispose of property can be hypostasized both by the ordinary household and by the organization of a good earthly enterprise (agricultural / industrial / services). From the outside, it will be like all things in this world, but from the inside it will already be a small incarnation of the Kingdom of God.
Archbishop Shahovskoi (quoted above) offers us a telling example of this type of Christian economic behaviour. He refers to the Russian nobleman Alexander Homiakov, who lived in the 19th century. Homiakov had land and serfs, but by the way he understood to manage his wealth, he was not in fact the master in the ordinary sense of his lands and people, but rather their caring father and even their servant. In view of the words of the Lord Jesus Christ: (‘... whosoever will be great among you, let him be your servant’/ Matthew 20, 27), Homiakov understood that by ‘whosoever will be great among you’ Christ meant the rich one in property and that, on the basis of the gifts (material or spiritual) given to him by God only for a while, ‘the greatest’ must serve and not command.

Towards a spiritual profile of the Christian-Orthodox businessman

Patristic thinking has in view a hierarchy of the work of well-doing and virtues, a continuous ascent to different stages of spiritual growth towards liberation from passions, towards enlightenment and deification. The condition of the businessman who defines his actions and decisions by reference to the teaching of the Christian-Orthodox faith requires necessarily the completion of such spiritual ascent.

In our opinion, a first step in this spiritual ascent is the honest accumulation of wealth. At this stage of the ascent are found those businessmen who are spiritually weak and disturbed by lack of wealth and material prosperity so that the pursuit of enrichment in their case is not a sin in itself, provided it be done in honest ways. And when we say ‘in honest way’, we mean:

- not by fraud or deception;
- not through political means of statist interventionism, based on the ability to discover and use better than rivals the possibilities opened by the institutionalization of aggression, i.e. by forming parasitic interest groups getting advantage of the honest, confiscating their wealth through taxation and redistributing it to meet their own ambitions;
- but through the economic means of the free market, that is, working honestly, accumulating capital, investing using their personal
entrepreneurial talent, and voluntarily changing goods and services in the marketplace.

A second step in the entrepreneurial spiritual ascent consists of *merciful impoverishment powered by love*. That is, the loving sacrifice of entrepreneur's consumption of material goods in favour of those in need. At this stage are those for whom wealth is not so much the source of one's own well-being but the source of almsgiving for one's neighbour, that is, those for whom business projects are an expression of self-giving devotion to others through interpersonal communion.

On the third step of the ascent are found the entrepreneurs who have committed themselves to the path of spiritualization. The entrepreneur is engaged in the effort of detachment from wealth and all of it, with the only concern of always obeying God and in all things pleasing Him. For these businessmen, the corporate strategy will not be one of expansion, of tireless identification of new and new opportunities, of taking on new and new projects and related risks. Thus, as he synchronizes with the Orthodox teaching, the entrepreneur will eventually end up with a trend of tempering, which at first, could be a counterfactual tempering: that is, expansion, production and profit on a smaller scale than could have been done, even if it is on a larger scale than ‘yesterday’.

**A Christian-Orthodox economy?**

Focusing this time on the societal (macroeconomic) level, we now ask the following question: Could there exist a society that would try a certain consistency in the practice of Orthodoxy? (our references to this issue follow the line of analysis developed by Topan 2013).

We share the above-mentioned author's view that: ‘...an Orthodox society and economy will not operate on the principle of permanent growth: the annual increase in GDP would not necessarily be a criterion of well-being but, on the contrary, the years of assumed stagnation or economic decline would be years of spiritual growth’ (Topan 2013, p.253).

Even if an Orthodox society would experience steady economic growth and the effervescent expansive nature of modernity: ‘...at least the attitude towards it would be different: prosperity and material sophistication would be seen as
circumstances leading to humbleness and a sign of inability to progress more spiritually, and not a satisfaction, self-sufficiency or contentedness’ (Topan 2013, p 254).

Given that achieving a certain level of prosperity is viewed by modernity in the logic: ‘it is good that we have managed to accumulate so much, and hope that in the future it will be even better (to accumulate more)’, in a consistently Orthodox civilization, this prosperity would be viewed differently: ‘it is good that we do not want more and that we are satisfied with what we have produced and accumulated: and maybe in the future, we will increase spiritually and worry less and less about this matter’ (Topan 2013, p 254).

Conclusions

Gnoseological discontinuity is the fundamental feature of the dialogue between science and Orthodox theology: the scientist is engaged in a knowledge ‘on his own’, based exclusively on his own cognitive powers, while the theologian’s knowledge has the very power infused by God as the source and the driving force.

Since the early years of the last century, the efforts of scientists to construct a complete and non-contradictory formalism have been struck by the existence of logical and semantic paradoxes and by antinomies. As long as human reason acts autonomously, *i.e.*, remains within the limits of its natural powers, it cannot accommodate the antinomic, reconciling and uniting contradictions, thesis and antithesis are stupid and absurd for scientific reasoning. Tangled and mired in invincible contradictions, autonomous human reason, on its own, does not want to adjust to contradictions, rejecting ‘organically’ the antinomic.

On the other hand, the authentic and full experimenters of faith, the Holy Fathers, have testified over the centuries that the closer we get to God, the clearer become the contradictions. The mysteries of faith, far from being secrets that we must not divulge, are inexpressible, unspoken, and indescribable experiences of the Divine Truth, which cannot be otherwise hypostasized in words than in the form of antinomy, which is both ‘yes’ and ‘no’. This means that the basis of patristic theologizing is the Truth coming from the Holy Spirit, His power shared with the Fathers. We ascend to the knowledge of God not by common notions processed autonomously by our intellect but by the grace of God.
The starting point in the knowledge of God is the power inspired by the Holy Spirit.

In the case of the dialogue between science and Orthodox theology, scientific knowledge can also be part of this ascent to the truth of Creation only if the scientist engages himself in such a spiritual ascent and opens himself up to his own transfiguration under the work of grace of God. By assuming its limitations and by practising asceticism, scientific reason gives up to considering itself sufficient and opens itself to faith, lets itself be assisted by faith, engages in a process of working-together with faith. But this act of self-renunciation of reason in favour of faith, this self-contradiction of reason – through its working-together with faith – is the very expression of an antinomy. Through its asceticism, through its openness to faith, reason ends up asserting itself and denying itself at the same time. So it ends up operating in terms of antinomic logic.

Methodologically speaking, the assumption by the scientist of his own spiritual ascent under the power of grace is instrumented by the apodictic method based on antinomic logic. The method is not a mere intellectual enterprise, but a living experience of faith intertwined with apodictics and antinomics. As such, faith based apodictically on the truth of the Holy Spirit, the spiritualized reason, set in motion by the activation of its constituting grace, the antinomic nature of asceticism, in which, a spiritualized reason is engaged, are all dynamic processes that give substance and mark the territory of the specific action employed by the method.

The illustrative exercises that end the paper emphasize that patristic thinking based on apodictics and antinomics can bring more depth and clarity to understanding economic phenomena.

Endnotes

[1] And, in an alternative formulation: if the antithesis entails the thesis and, at the same time, the thesis entails the antithesis, then the ensemble formed by the thesis and the antithesis, if it is not false, is an antinomy.

[2] From a dogmatic perspective, it can be said that if there is sin, then our whole being and the whole universe are divided. In fact, the ancients also spoke about the precarious ontological condition of the world and of the man living in it, a
special voice among them being that of Heraclitus. And it was this philosopher, who aspired to the ‘impassive heart of the indisputable Truth’ (Parmenides), who did not cease all his life to insist on the division, fractionation, and antinomic character of our earthly life. Discovering the perfect harmony of the Godhead, he also saw the inner discord of the world: ‘People do not understand how the opposites are harmonized. The harmony of the world consists of a combination of tensions and attenuations, as in the case of a bow or a lyre (when the string is stretched and weakened). The rejection reaction between the opposite terms brings them closer. The perfect harmony is born of the clash of opposites. Everything is due to dissension’.

[3] With the meaning that it is about the scientific objectivity of the act of faith, in the sense of experiencing the content of faith.

[4] For example, in the case of combating heresies.

[5] The fact that it is in the proper sense and not figuratively stated about material goods of earthly life, is also strengthened by the interpretations of the Saint John Chrysostom: ‘For he that desireth to be rich and to live richly prefers the everlasting instead of the fleeting, the not diminished instead of the wasted, the many instead of the few, the incorruptible instead of the corrupt. So it will be with some and with others. But he who seeks the earth instead of heaven loses the earth; while he who prefers heaven to earth enjoys plenty of both heaven and earth. For this to happen to us, let us despise all here and seek the good things to come (heavenly goods – our comment). This is how we will acquire some and others’ (emphases added) (Saint John Chrysostom 1994, p.75).

[6] Let us recall the (symbolic) notation we operate with:

- the term \( A \) defines the notion of merciful impoverishment powered by love;
- the term \( \text{non}-A \) defines the notion of non-impoverishment out of love, or the alternative notion of renouncing to the impoverishment out of love;
- term \( B \) defines the notion of enrichment;
- the term \( \text{non}-B \) defines the notion of non-enrichment, or the alternative notion of renunciation of enrichment.
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References


Comșa, Petre (2003), Cunoașterea lui Dumnezeu la Sfântul Vasile cel Mare, Bucharest: ASA Publishing House.

Elder Paisie Hagiorite (2000), With pain and love for contemporary man, Holy Mount Athos.


Saint Basil the Great (1986a), ‘Omilia a-XII-a, La începutul proverbelor’, in Writings. Part I, Bucharest: EIBMBOR.

Saint Basil the Great (1986b), ‘Omilia 1 la Hexaimeron’, in Writings. Part I, Bucharest: EIBMBOR.


Stăniloae, Dumitru (1979), ‘Fiinţa şi ipostasurile în Sfânta Treime, după Sfântul Vasile cel Mare’, *Orthodoxy*, XXXI (1), 53-74.

Topan, Mihai-Vladimir (2013), *Întreprinzătorul în firma internaţională. O teoretizare în tradiţia Școlii Austriece*, Bucureşti: Editura ASE.

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