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THEOLOGICAL INSIGHT INTO THE PHENOMENON OF LIFE: THE *BIOS* AS A *VESTIGIUM DEI*¹

Contemporary discussion on the phenomenon of life is a meeting point for natural sciences and religion. In their dialogue, two extreme opinions prevail, which make us understand life either as a coincidental product of evolution or as an intelligent design created by an external intervention. Both views are reductionist and represent a misunderstanding of the multi-planar character of human cognition. Mature theological insight should not follow this path. Therefore, the article is an attempt to look at the phenomenon of life in a different way. It takes up the theological interpretation of biological life, according to the medieval-originating category of *vestigium Dei*. However, this notion must be reconstructed in such a way that it takes into account the semantic matrix that developed around it in the twentieth century. The newly developed category of *vestigium* is a hermeneutical key that allows us to better understand what it means that life, already in its basic manifestations, has a transcendental reference to God, as His trace.

INTRODUCTION

Is life just a random product of evolution? Or is it a cosmic project – the work of an Intelligent Constructor? Contemporary discussion on the phenomenon of life seems to force us to choose one of these two options. Just as the philosophy of nature used to oscillate between mechanicism and vitalism, many thinkers today

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take extreme and mutually exclusive positions. Some, like Richard Dawkins, reduce biological organisms to the level of *the gene machine* and recognize the evolutionary paradigm as the only acceptable narrative.² Others, wishing to escape this neo-Darwinistic optics, are looking for external intervention which should underpin the genesis of life. Theology, however, does not have to follow any of these paths. Its insight allows us to see the phenomenon of life in a completely new light.

Christianity has always understood life in relation to God revealed in Jesus Christ, who said of himself: I am life – $E\gamma\dot{\omega}$ $\epsilon\mu\mu$ η $\zeta\omega\dot{\eta}$ (Jn 14:6). This applies especially to man and his spiritual life (zoe). Revelation, however, allows us to see the special relationship with God in which there is the whole phenomenon of life, without neglecting its biological manifestations (bios). For example, St. Bonaventure, who besides the category of *imago Dei*, proper for man, introduced a broader concept referring to all living beings: the *vestigial* trace (*vestigium*) of God.³ In this paper, the attempt will be made to rework the theological category of *vestigium Dei*. This will concern three levels: ontological, teleological and relational. The *vestigium* thus presented will constitute the hermeneutical key which will enable the realization of the goal of the article, which is the theological insight into the basic manifestations of the phenomenon of life, hereinafter referred to as *bios*.⁴

"VESTIGIUM": THE ONTOLOGICAL LEVEL

Trace is a concept that often appeared in the literature of the 20th century. It was used by Heidegger in his metaphysical reflections on the difference between existence and being. Freud resorted to this category, describing the unconscious mechanisms of the functioning of the human psyche. Finally, Levinas understood the trace in his existential reflections as a transcendental reference to what is radically Different, but at the same time absent. ⁵ Trace became a term with multiple philosophical implications. It intuitively refers to what is both absolute and elusive; it points to a presence that is silent; it is a sign of hidden meaning. The con-

² R. Dawkins, *The Selfish Gene: 30th Anniversary Edition*, Oxford 2006, p. 46.

³ G.L. Müller, *Dogmatyka katolicka*, transl. W. Szymona, Kraków 2015, s. 224.

Following Paul Davis, it can be said that a simple definition is not enough to capture biological life. However, a number of manifestations can be identified to recognize something as *bios*: separation and unity, self-organization, openness, metabolism, struggle (fight against entropy, natural selection), reproduction, evolution, emergence. P. Davis, *Kosmiczny projekt*, transl. A. Bielaczyc, Kraków 2017, p. 157–162.

⁵ A. Zawadzki, *Obraz i ślad*, Kraków 2014, s. 47.

temporary approach to *vestigium Dei* cannot ignore the philosophical framework that is associated with this concept.

Barbara Skarga in her book "Ślad i obecność" ["Trace and Presence"] notes that the discussed category at the ontological level has two basic references: to the past and to (non)presence.⁶ The past is a reality that obviously comes to mind when *vestigium* is mentioned. To be a trace means to point to what has happened and has its effects. The past leaves traces, which is why it is cognitively accessible. To a certain extent, a trace contains the past. St. Augustine in the XI chapter of his "Confessions" pointed to a certain conceptual characteristic of time – it has its extent thanks to the fact that the present has a reference to the past, which is situated in the memory. Reflecting on this issue, he wrote: "Memory is the presence of past things".⁷ One can paraphrase these words and say that the presence of past things is a trace. Even in memory, the past has its position because it has left traces in it. In a way, the past lasts in what is a trace. The past also defines a trace, it gives it a certain framework – it makes it something 'given' and determined. A trace is a reference to the past, and even in some sense is the past in the present.

A trace is also a (non)presence, i.e. a presence in absence. The presence of the author (agent) in a trace can be understood first on the principle of causality. 8 There is a dialectic tension here between the real absence and the influence on the cause-effect level. Following Heidegger's tradition, a trace is the closest and at the same time the most elusive form of existence. It is a presence that hides and reveals itself at the same time – a hidden sense that uncovers itself and at the same time remains impenetrable.9 In order to transpose this concept into theological ground, it is worth referring to the 21st point of the encyclical Verbum Domini, which speaks about the word of silence uttered by God on the Cross of Christ.¹⁰ The Paschal events reveal that in the 'silence' of God one can find his Word and his Presence in the 'absence.' This means that God is not an element of reality, but is its Mystery. Being finds its transcendent horizon in this Mystery, and this horizon on the one hand appears to be unattainable and absent, and on the other hand is its end, its goal and its foundation. The category of trace can serve as a carrier for this metaphysical claim, since it expresses the presence of being in absence in an analogous way.

⁶ B. Skarga, *Ślad i obecność*, Warszawa 2002, p. 30–54.

⁷ St. Augustine, Confessions XI (Wyznania XI, 20, transl. Z. Kubiak, Kraków 1994, p. 252).

The word "author" is used here analogously to the English term "agent", so it does not have to mean a personal factor, but the cause and subject of the action.

⁹ B. Skarga, Ślad i obecność..., p. 44.

Benedict XVI, Post-synodal apostolic exhortation "Verbum Domini" 21 (Warszawa 2010, p. 58–59).

It is worthwhile to make a certain methodological remark here. The thesis was put forward at the beginning that the category of vestigium allows one to go beyond the discourse that makes one choose between evolution and project.¹¹ In most cases, the interpretation of life as a project is the result of a temptation called 'concordism', which threatens any closer encounter between theology and natural sciences. It is a proposal for a simple synthesis of theological theorems and the results of research in the sciences. An example of such an approach is William Paley's eighteenth-century natural theology, often cited today as an example of a mistake called God of the gaps. Paley and his successors understood many phenomena in the natural world as God's direct intervention, which was to serve apologetic purposes. The same mistake would be made today by a theologian who would consider the Big Bang theory as direct proof of God's creative act. There is a confusion here between the planes of explanation, the result of which is also a serious theological error – God's action is reduced to the level of influence of other beings. But God, as transcendent, is not present in the world in the same way as all other beings. God is the basis of reality, not its element. On the other hand, although theology and science are different ways of describing the world, they speak of one and the same reality. The world created by God and the world described by science are still the same world. What is needed, then, is an appropriate hermeneutical key that enables a methodologically correct dialogue between science and theology. Such hermeneutics, called convergence, was presented by John Haught in his book "Science and Faith". 12 It seems that the category of vestigium meets the requirements he postulates. This is because the ontology of trace allows for such an interpretation of biological life that will not be a simple synthesis of different planes of explanation, but a coherent presentation of bios as transcendently grounded in God.¹³

Moving on, the question needs to be asked: what does it mean that biological life can be understood as a 'trace'? A trace, according to the ontology outlined, always refers to a specific past. Its existence requires clearly defined initial conditions and a certain historical framework. From the cosmological point of view, the phenomenon of life can be considered a trace of the cosmic past. More than thirty years ago, the famous publication "The Anthropic Cosmological Principle" was published. This initiated a discussion, continuing to this day, on the meaning

An example of such an approach can be found in Andrzej T. Olszewski's publication, which is valuable in many respects and is aptly entitled "Traces of God." A.T. Olszewski, *Ślady Boga. Przypadek czy zamysł?*, Warszawa 2012, p. 67–111.

J. Haught, Science and faith. A new introduction, New York 2012.

This also applies to subsequent presentations of *vestigium* – teleological and relational, which will be an extension of the perspective presented in this point.

of the fact that the Universe is characterized by the phenomenon of life. The authors of the publication proposed two versions (weak and strong) of the principle, which they called anthropic.¹⁴ To put it simply, the essence of the proposed principle is the postulate that the universe has exactly such properties that life can be created in it. The anthropic principle speaks primarily of man, but it touches upon the fact that biological life exists in general.¹⁵ If the universe had slightly different properties – a different distribution of matter or a different value of the cosmological constant – biological life could never appear in it. Moreover, the probability of accidental 'tuning' of the initial conditions of the cosmos to the values necessary for the existence of life is so low that for many cosmologists it is disturbing. This shows that the phenomenon of *bios* is a problematic issue for science. It carries a certain determinism in itself and appears as something 'given'.¹⁶ These are the contents that find their unique explanation in the category of *vestigium*.

Although from a scientific point of view life is not a necessary phenomenon, it is a sign of a certain determination of the universe. It is easy at this point to succumb to the temptation to identify the theological concept of creation with the category of a design. As has already been stressed, it would be a mixture of ontological and physical orders. Instead, following Gerhard Müller, 'being created' can be understood as a transcendental presentation of the world in the context of a personal relationship with God. ¹⁷ This relationship, in an obvious way, is fulfilled in man who, as a person, can be an imago Dei. It also concerns life at the biological level which, with its transcendental reference to the Creator, is his vestigium. The transcendently presented 'being created' of bios in the ontological sense constitutes its framework and past. Thanks to such hermeneutics, the theological explanation of the phenomenon of life does not have to refer to the external intervention of God in the course of evolution. Nor does God need to be understood as an Engineer who has supernaturally 'set' the initial conditions of the cosmos so that it can give birth to life. This is because the category of Vestigium Dei speaks of God's presence in the phenomenon of life at a different level than the one discovered by the sciences.

God is present in *bios* as its Creator, and is not present as a created thing, He does not constitute an element of the world, but is its foundation. Karl Rahner notes

¹⁴ J.D. Barrow, F.J. Tipler, *The Anthropic Cosmological Principle*, Oxford 1988, p. 16–22.

Williem Drees states: "It would therefore perhaps be more appropriate to talk about a biotic principle than an anthropic principle." W.B. Drees, *Stworzenie. Od nicości do teraźniejszości*, transl. K. Skonieczny, Kraków 2016, p. 37.

K. Sharpe, J. Walgate, The Anthropic principle: life in the universe, "Zygon" 37 (2002), No 4, p. 935.

¹⁷ G.L. Müller, *Dogmatyka katolicka...*, p. 189.

that Christianity understands God as the One who is outside the world. This means a certain ontological distance – God is in relation to the world through the things he causes, and these are always something different from Him. ¹⁸ God is immanent in his creation, but he is also transcendent in relation to it. Classic philosophy uses here the category of participation, which for some theologians is a temptation of panentheism. ¹⁹ Instead, one can refer to the ontology of *vestigium*. God is present in what is living and at the same time He is the horizon of *bios* – its cause, purpose and meaning, slowly revealed. God is the Mystery of life, which is fully revealed in the act of the Resurrection of Jesus Christ. This salvific event explains not only the human nature, but in a sense also the *bios*. In conclusion, God is the Author of life, which is His trace. This trace is more than just a coincidence or even a design. It is a transcendental reference to the Creator and His free act of will that constitutes it. Life is something 'given,' but it is also a task – as a *vestigium Dei* it reveals the Mystery.

"VESTIGIUM": THE TELEOLOGICAL LEVEL

A trace contains a reference to the future. On the language plane, *vestigium* can mean a trail/footprint, i.e. information pointing the way and leading to the goal. Jacques Derrida, a French philosopher who died in 2004, put it in an original way. He believed that the experience of the present is marked not only by the traces of the past, but also contains it itself the pre-determined traces of the future. The present is constituted not only by what it was, but also by what it is not yet, and to what it is 'leaning towards.' For many thinkers, this teleological level is identical to ontology. This was not only the Derrida's opinion, but also the opinion of the creator of the philosophy of process – Alfred N. Whitehead. This is not an ungrounded approach, because even in classical perspective, the *telos* of being is always connected with its nature. However, the complete transfer of ontology to the plane of the future ultimately leads to the loss of concepts such as 'existence' and 'being' and their replacement by the terms 'event' and 'becoming'. To avoid this, in this paper the teleological level will be distinguished from the ontological level. Derrida and Whitehead's position that *telos* somehow constitutes a being

¹⁸ K. Rahner, *Pisma wybrane*, vol. I, transl. G. Bubel, Kraków 2005, p. 161–162.

J.A. Bracken, Panentheism in the Context of the Theology and Science Dialogue, "Open Theology" 1 (2014), p. 1–11.

²⁰ A. Zawadzki, *Obraz i ślad...*, p. 76.

A.N. Whitehead, *Process and reality*, New York 1979, p. 208–218.

This is the main postulate of the process philosophy.

will be adopted, which is perfectly expressed by the category of *vestigium*. The trace points to the 'leaning' towards what is being pursued and what is yet to come – it implies a goal and anticipates the future. If the trace is the mode of the presence of what is absent, it also applies to the teleological level.

As John Haught, an American theologian and professor at Georgetown University, notes, modern science is characterized by an approach that can be called metaphysics of the past or archaeological vision.²³ This is the perspective that makes us explain what exists only in relation to what there was. Identifying the cause and effect order with the chronological order is one of the guiding principles of the contemporary paradigm. This is how every researcher who considers himself to be a representative of science in the strict sense acts. Ancient scientists willingly referred to the notion of a final cause, but today it is different. With the discrediting of Aristotle physics, this category has been completely abandoned. It was understood by Aristotelians in an oversimplified way, but a complete resignation from its perspective reduces the view on reality. This concerns first of all the reflection on the phenomenon of life. According to neo-Darwinism, evolution has no direction. However, the observable fact is that bios is characterized by an increase in complexity and diversity – from prokaryotes to humans. Teilhard de Chardin even says that it is a drift towards the consciousness that life achieves in man. ²⁴ From a scientific point of view it is not justified to talk about the direction of life. However, one can refer here to the idea of emergence.

Emergence is a term describing the process of new forms emerging as a result of the influence of simpler elements. As a result of emergence, the whole of a given system is not reducible to its individual parts. The whole of the emergent system is not a simple sum of its elements, but creates a new quality. The idea of emergence assumes that only in the context of an irreducible whole is it possible to fully understand its individual elements.²⁵ Life is characterized by emergence on many planes, and this is most visible in the case of the leap to such qualities as intelligence or consciousness. We can talk about a qualitative leap, a transition from the level of *bios* to a new level of *psyche*. It is easy to notice that the very idea of emergence assumes some top-down causation, and even the influence of the future on the present. This is possible to describe from the mathematical point of view – life as an emergent phenomenon corresponds to a non-linear, open dy-

²³ J. Haught, Resting on the future. Catholic Theology for an Unfinished Universe, New York– London 2015, p. 23–25.

²⁴ P.T. de Chardin, *Fenomen człowieka*, transl. K. Waloszczyk, Warszawa 1993, p. 131.

T. Maziarka, Wiarygodność antropologii chrześcijańskiej w kontekście neurobiologii: Philipa Claytona koncepcja emergentnego umysłu, "Biblioteka Teologii Fundamentalnej" 9 (2014), p. 225–228.

namic system that is far from the state of equilibrium.²⁶ In spite of the recurring criticism of this idea, a growing number of researchers refer to it. On the Polish ground, Józef Życiński dealt with this issue, trying to present the category of emergence in such a way that it did not conflict with the paradigm of contemporary sciences.²⁷ What is important for the current argument is that, according to contemporary discourse, one can speak of the emergent dynamism of *bios* – biological life has its own "leaning" towards the future.

John Haught, mentioned before, notes that from a theological point of view, all the dynamism of life has its source in God as the Absolute Future. ²⁸ It is worth noting that there are two words in Latin that signify the future and each of them expresses a different concept. The first is the term *futurum*, which refers to chronology and signifies whatever will be as a consequence of what is. The second term is *adventus* – it describes what is coming, something that is not a consequence of the present, but is on its way to it. *Adventus* is a confrontation of the present with the upcoming novelty – a novelty not reducible to the consequences of what is and was. The future as *adventus* is the condition for true change and guarantees that what will come will be qualitatively different from what was. From a theological point of view, this understanding of the future has an eschatological character and is God Himself. Paraphrasing Jürgen Moltmann's words, one can say that God's existence in relation to the world "is" in His coming and therefore will not pass away when He finally comes (*parousia*). God is theologically connected with the future. ²⁹

God as the Absolute Future defines the creative dynamism of *bios* and enables its true development. If the future was devoid of the signs of coming (*adventus*), it would not be possible to achieve true novelty – life would not be emergent, and evolution would be like shuffling the same pack of cards over and over again. *Bios* is therefore the *vestigium Dei* – the trace of God, "Who is, Who was, and who is to come." (Rev 1:8). The Resurrection of Jesus Christ is the anticipation of this future. Christ in his transformed Body reveals the ultimate destiny of life. Christ saves complete man as a spiritual and bodily being. The human body, which is a biological structure, is also subject to salvation. The conclusion is that the emergent bios as a *vestigium* finds its fulfilment in Christ – in Him it is somehow included in the order of *imago Dei*.

²⁶ M. Heller, J. Życiński, *Dylematy ewolucji*..., p. 259–261.

²⁷ J. Życiński, Wszechświat emergentny. Bóg w ewolucji przyrody, Lublin 2009, p. 35–39.

J. Haught, *Resting on the future...*, p. 26–28.

²⁹ J. Moltmann, *Bóg w stworzeniu*, transl. Z. Danielewicz, Kraków 1995, p. 241.

"VESTIGIUM": THE RELATIONAL LEVEL

A trace is always 'in relation' – at some level 'to be a track' means 'to be in relation.' From a theological point of view, relationships present in the Holy Trinity are the model of all relationships. These relationships define and even partially constitute the Divine Persons. It can be concluded that a relationship as such does not always have to be merely accidental. At a certain level, a relationship can be something that constitutes an entity and gives it its content. This is exactly the case with the vestigium category. Firstly, the trace is in relation with its author (agent) and it is a cause-effect relationship. This is how St. Bonaventure himself understood it. He claimed that the main difference between the image and the trace is that the vestigium Dei is only in the causality relation, i.e. in the up-and-down relation. And imago Dei is also included in the relation of cognition, i.e. in the movement returning to God. God for the trace would be only a cause, while for the image it would be also a subject of cognition.³⁰ It is worth noting, however, that the theological tradition combines the notion of imago with the category of similitudo (similarity). Leaving aside the detailed distinctions, one can say that 'being similar' is a certain reference of the image to its author (agent). In an analogous way one can look at the trace. It is not appropriate to use here the term similitudo in its full meaning. One should, however, speak of an imperfect similarity, which, by the way, is contained in the semantic matrix of the word trace. Vestigium means imprint, mirror image – imperfect reflection of reality.

Barbara Skarga, mentioned above, stresses that the trace has a certain unchangeable feature – inadequacy. This can also be described as diachronicity or non-coincidence. A trace does not faithfully preserve the shape of things. Between the trace and the author (*agent*) there is a tension of ambiguous and imperfect indication.³¹ This inadequacy of the mapping belongs to the very essence of the trace, it is a way of relation that constitutes a trace in relation to its author (*agent*). Such hermeneutics says a lot about *bios* understood as *vestigium Dei*.

From the phenomenological point of view, relationship is an undeniable feature of biological life. The living organism is to a certain extent a being-in-relation, although obviously not in the same way as a person. The relationality [i.e. relational quality] of *bios* results from its being conditioned by the phenomenon

J. Ratzinger, Opera omnia, vol. II: Rozumienie objawienia i teologii historii według Bonawentury. Rozprawa habilitacyjna i studia nad Bonawenturą, transl. J. Marecki, eds. K. Góźdź, M. Górecka, Lublin 2014, p. 280.

B. Skarga, Ślad i obecność..., p. 31.

of entropy.³² Science recognizes that besides black holes, it is precisely biological life that is characterized by the smallest entropy in space. From the point of view of physics one can attempt to define bios as an antientropic process.³³ Metaphorically speaking, life is a struggle with entropy. In order for this fight to be possible at all, bios must be characterized by a certain openness. Isolating the organism from the environment will cause its death in a short period of time. Physicist Erwin Schrödinger stated that the biological organism 'feeds on' negative entropy – it draws energy from the outside in order to preserve its structure. 34 *Bios* must be characterized by openness in order for its metabolism to be possible. This openness also means something more, it is openness to the 'other.' At the cellular level, an example of this openness is the widely accepted hypothesis of the formation of mitochondria, derived from prokaryotic bacteria that were combined with other bacteria, becoming part of the eukaryotic cells that make up our bodies. Every living organism enters into certain correlations with other organisms. Isolation always means death. This is manifested primarily at the level of organisms with greater biological organization. Research conducted on primates shows that one of the consequences of natural selection is not only competition, but also cooperation. Through research on rats it was observed that in certain situations they show semi-empathic behaviors, which, admittedly make them vulnerable to loss, but increase the chance of survival of a group or even another individual.35 Bios is therefore a process of a 'joint' struggle against entropy. Although, on the one hand, living organisms are physically separated from others (e.g. cellular membrane), on the other hand, the life phenomenon itself is characterized by a tendency towards unification.

The relationship quality of *bios* as openness and 'common' opposition to entropy is of great theological significance. It can be interpreted in regard to the postulated feature of *vestigium*, which is *similitudo*. As mentioned earlier, the similarity of a trace has not so much analogous character as diachronic and non-coincidental one. Living organisms strive to meet the challenges of entropy in many ways that

According to the second principle of thermodynamics, every closed circuit has a state function called entropy. When a system reaches its maximum entropy, its thermodynamic 'death' occurs. This is an important feature of reality, in which *bios* is also included. Life, however, 'contrasts' with the universal law of entropy. P. Davis, *Ostatnie trzy minuty*, transl. P. Amsterdamski, Kraków 2017, p. 23–35.

³³ M.E. Price, Entropy and Selection: Life as an Adaptation for Universe Replication, "Hindawi Complexity" (2017), p. 2.

M. Heller, J. Życiński, Dylematy ewolucji. Czy fenomen życia da się zredukować do praw fizyki?, Kraków 2016, p. 59–63.

F. de Waal, *Bonobo i ateista. W poszukiwaniu humanizmu wśród naczelnych*, transl. K. Kornas, Kraków 2018, p. 165–212.

are burdened with the weight of inadequacy. Natural selection often forces them to brutal rivalry. For most living beings, the death of another one is the main source of energy. Although this phenomenon is inscribed in the nature of biological life and is not subject to moral evaluation, it is a manifestation of the inadequacy of *vestigium*. Nevertheless, from time to time there are attempts to interpret the evolutionary process as a way of the Trinity revealing itself. ³⁶ The definition of evolution as revelation is a very far-reaching analogy. If, however, *bios* can perform such a function, it is because it has a relationship to God on the basis of being a trace. Regarding the phenomenon of life as a *vestigium* makes its inadequacy cease to be something blatant and discrediting and become comprehensible.

Australian theologian Denis Edwards stresses in his trinitology that the existence of God is a 'communion,' that is, it has a relational and interpersonal character. ³⁷ God is not loneliness, but a community of Persons, so Saint John the Apostle can say: God is love – ὁ Θεὸς ἀγάπη ἐστίν (1 Jn 4:8). The Divine Persons are in a state of openness to each other, in mutual perichoresis. Classical theology draws attention to God's nature as a principle of unity in the Trinity. This unity, however, has not so much a static as a dynamic character. It is a loving interpenetration, resulting from mutual relations within the Trinity – it is a communion. Edwards is not the only representative of the *communio* trinitology, which in its roots goes back to the Cappadocian Fathers or Richard of St. Victor. Edwards believes, however, that Trinitarian communion has its reflection in creation, and especially in the phenomenon of life. The theologian expresses this in the following words: "The social image of the evolution of life is perfectly in line with the way in which a social, relational God could perform the creative act."38 It can be said that the mutual openness of living organisms is a trace of the inner life of the Trinity. However, this does not yet exhaust the category of vestigium.

The dialogue of love in the Trinity has a kenotic character. If we believe that Jesus Christ is the fullness of Revelation, we cannot exclude the humility of the Incarnation and the Paschal Events from this order. The term *kenosis* comes from the Christological hymn written in Philippians (Philippians 2:6–11) and means love which is humble and suffering. As the ancient text states: Christ emptied and humbled himself, took the form of a servant and became obedient until death. The reason for this submission was love for the Father and for people. In the center of the Good News there is the mystery of *kenosis* – submission and humility of the Son of God. Hans Urs von Balthasar considers the concept of *kenosis* to be the key to

J.F. Salmon, N. Shmitz-Moormann, Evolution as revelation of a Truine God, "Zygon" 37 (2002), No. 4, p. 853–871.

D. Edwards, *Bóg ewolucji. Teologia trynitarna*, transl. Ł. Kwiatek, Kraków 2016, p. 40–46.

³⁸ Ibidem, p. 42.

understanding the inner-Trinitarian, selfless love of God. ³⁹ The submission of Christ is the revelation of the mystery of God's life – the mystery of humble love ready for sacrifice.

As already mentioned, the relational quality of bios is the answer to the reality marked by the growth of entropy. This relational quality is a manifestation of common struggle with the cosmic law of disintegration and death. Suffering is inscribed in this struggle in a necessary way. However, it does not yet have the character of kenosis. Often it is rather the suffering 'because of' or 'against' some other entity than the suffering 'for' the other. But it is always suffering 'with' the other, it is never isolated and characterizes the whole phenomenon of life. Bios by its openness and struggle is a distant trace of the Divine communio and kenosis. However, this trace gains significance because of the Incarnation and Resurrection. The Son of God, taking on the human nature, has united not only with man, but to a certain extent with the whole bios; after all, the human body is a biological organism. By being resurrected, he transformed the whole nature of man, and therefore also his biological element. In this way God entered into the universal struggle of life and gave a full response to its openness. So it is not exactly as Bonaventure would like it to be - vestigium is more than just a one – sided relationship. Bios is included in the creative and saving dialogue of God's love. In man, bios is able to accept the coming God to a certain extent. Once again it turns out that the phenomenon of life as the vestigium Dei finds its fulfilment in imago Dei, that is in Jesus Christ, who "is an image of the invisible God". (Col 1:15).

CONCLUSION

Since St Bonaventure called living beings vestiges (*vestigium*), the term has undergone a certain transformation and has gained a new connotation and meaning. Today it is a philosophical concept that must be understood in the context of Heidegger, Levinas or Derrida's thought. It turns out that the modern semantic matrix gives it an additional theological value. The article has been an attempt to transpose the category of *vestigium* into the field of theology and to interpret biological life in its light. The theological insight carried out in this way led to many interesting conclusions. The most important of these is that the phenomenon of

K. Szwarc, Wewnątrztrynitarna kenoza Boga źródłem i możliwością kenozy człowieka w świetle teologii Hansa Ursa von Balthasara, "Warszawskie Studia Teologiczne" 24 (2011), No 2, p. 351–364.

life does not have to be analyzed according to the popular narrative, which dictates a choice between chance and design. *Bios* is a trace of God, and this concept means much more than just a coincidence or a design. *Vestigum Dei* refers to other planes of reality, which were defined in the article as: ontological, teleological and relational. Biological life is something 'given' and partly determined, has its openness and is a 'struggle,' it is also characterized by emergence and a 'lean' towards the future. These features of *bios* have their transcendental reference to God and make the living phenomenon understandable as a *vestigium Dei*. It is noteworthy that each of the analyzed planes has led to the Person Jesus Christ, the perfect image of God. This means that the *bios* as a trace of God is ultimately fulfilled in *imago Dei*. Jesus Christ – true God and man – as the *Omega* of creation is the revealed Mystery of the phenomenon of life.

BIBLIOGRAPHY

Barrow J.D., Tipler F.J., The Anthropic Cosmological Principle, Oxford 1988.

Benedict XVI, Post-synodal apostolic exhortation "Verbum Domini", Warszawa 2010.

Bracken J.A, *Panentheism in the Context of the Theology and Science Dialogue*, "Open Theology" 1 (2014), p. 1–11.

Chardin P.T. de, Fenomen człowieka, transl. K. Waloszczyk, Warszawa 1993.

Davis P., Kosmiczny projekt, transl. A. Bielaczyc, Kraków 2017.

Davis P., Ostatnie trzy minuty, transl. P. Amsterdamski, Kraków 2017.

Dawkins R., The Selfish Gene: 30th Anniversary Edition, Oxford 2006.

Drees W.B., Stworzenie. Od nicości do teraźniejszości, transl. K. Skonieczny, Kraków 2016.

Edwards D., Bóg ewolucji. Teologia trynitarna, transl. Ł. Kwiatek, Kraków 2016.

Haught J., Resting on the future. Catholic Theology for an Unfinished Universe, New York–London 2015.

Haught J., Science and faith. A new introduction, New York 2012.

Heller M., Życiński J., Dylematy ewolucji. Czy fenomen życia da się zredukować do praw fizyki?, Kraków 2016.

Maziarka T., Wiarygodność antropologii chrześcijańskiej w kontekście neurobiologii: Philipa Claytona koncepcja emergentnego umysłu, "Biblioteka Teologii Fundamentalnej" 9 (2014), p. 217–243.

Moltmann J., Bóg w stworzeniu, transl. Z. Danielewicz, Kraków 1995.

Müller G.L., Dogmatyka katolicka, transl. W. Szymona, Kraków 2015.

Olszewski A.T., Ślady Boga. Przypadek czy zamysł?, Warszawa 2012.

Price M.E., Entropy and Selection: Life as an Adaptation for Universe Replication, "Hindawi Complexity" (2017), p. 1–5.

Rahner K., Pisma wybrane, vol. I, transl. G. Bubel, Kraków 2005.

Ratzinger J., Opera omnia, vol. II: Rozumienie objawienia i teologii historii według Bonawentury. Rozprawa habilitacyjna i studia nad Bonawenturą, transl. J. Marecki, eds. K. Góźdź, M. Górecka, Lublin 2014.

Salmon J.F., Shmitz-Moormann N., *Evolution as revelation of a Truine God*, "Zygon" 37 (2002), No 4, p. 853–871.

Sharpe K., Walgate J., *The Anthropic prnciple: life in the universe*, "Zygon" 37 (2002), No 4, p. 925–939.

Skarga B., Ślad i obecność, Warszawa 2002.

St Augustine, Confessions [Wyznania, transl. Z. Kubiak, Kraków 1994].

Szwarc K., Wewnątrztrynitarna kenoza Boga źródłem i możliwością kenozy człowieka w świetle teologii Hansa Ursa von Balthasara, "Warszawskie Studia Teologiczne" 24 (2011), No 2, p. 351–364.

Waal F. de, *Bonobo i ateista. W poszukiwaniu humanizmu wśród naczelnych*, transl. K. Kornas, Kraków 2018.

Whitehead A.N., Process and reality, New York 1979.

Zawadzki A., Obraz i ślad, Kraków 2014.

Życiński J., Wszechświat emergentny. Bóg w ewolucji przyrody, Lublin 2009.

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WGLĄD TEOLOGICZNY W FENOMEN ŻYCIA: "BIOS" JAKO "VESTIGIUM DEI"

Streszczenie

Współczesna dyskusja nad fenomenem życia jest miejscem spotkania nauk przyrodniczych i religii. W ich dialogu przeważają dwie skrajne opinie, które każą rozumieć życie albo jako przypadkowy produkt ewolucji, albo jako inteligentny projekt powstały dzięki zewnętrznej interwencji. Obydwa spojrzenia są redukcjonistyczne i stanowią przejaw niezrozumienia wielopłaszczyznowości ludzkiego poznania. Dojrzały wgląd teologiczny nie powinien podążać tą ścieżką. Dlatego artykuł jest próbą innego spojrzenia na fenomen życia. Podjęta zostaje w nim teologiczna interpretacja życia biologicznego według wywodzącej się ze średniowiecza kategorii vestigium Dei. Pojęcie to musi być jednak przebudowane tak, by uwzględniało osnowę semantyczną, która narosła wokół niego w XX wieku. Opracowana na nowo kategoria vestigium stanowi klucz hermeneutyczny, który pozwala lepiej zrozumieć, co to znaczy, że życie już w swoich podstawowych przejawach posiada transcendentalne odniesienie do Boga jako ślad.

Słowa kluczowe: nauka i religia, stworzenie, ewolucja, projekt, teologia przyrody