



**RELIGIOUS DIALOGUE  
AND COOPERATION**  
**РЕЛИГИСКИ ДИЈАЛОГ  
И СОРАБОТКА**

Бр.8/2026 Година VIII  
No.8/2026 Volume VIII

## THE RELIGIOUS ROOTS OF THE ECOLOGICAL CRISIS: AN ANALYSIS OF LYNN WHITE'S CRITIQUE OF WESTERN CHRISTIANITY

Ivica Kelam, PhD.<sup>1</sup>

**Summary:** Lynn White, in his famous essay "The Historical Roots of Our Ecological Crisis," analyses the connections between Christianity and the ecological crisis. His main argument is that the worldview promoted by Christianity, especially its interpretation of human dominion over nature, has influenced people's stance towards the environment, contributing to the ecological crisis. White argues in his article that the Western Christian tradition, with its anthropocentric attitude towards the environment, shapes humanity's view and utilisation of natural resources. In this article, we will analyse White's critique of Christianity and its role in contributing to ecological devastation throughout history, particularly in the context of the scientific and technological revolution, explore White's suggestions for reexamining the religious and philosophical foundations of a new, more ethical relationship with the environment, including his proposal to draw inspiration from the ecological teachings of St. Francis of Assisi. We will particularly focus on the key ideas of Christian critics of Lynn White's ideas. Finally, we will contrast Lynn White's criticisms with Pope Francis's encyclical *Laudato Si'* and the responses it offers to today's ecological crisis from a Christian perspective. According to Pope Francis, the answer to the ecological crisis lies in integral ecology and ecological conversion, two key concepts in the encyclical. We will specifically address these concepts in the paper, as they are central to changing the paradigm of the Catholic Church in its relationship to the environment and the ecological crisis facing humanity.

**Keywords:** Lynn White, ecological crisis, philosophy, religion, Pope Francis, *Laudato Si'*

---

<sup>1</sup> Faculty of Education/Faculty of Dental Medicine and Health - Josip Juraj Strossmayer University of Osijek, Croatia; E-mail address: kelamivica@gmail.com

## Introduction

On the threshold of 2026, it becomes clear that the ecological crisis is not merely a technical failure within the system of industrial production, but a profound manifestation of the crisis of modern civilisation. It should be emphasised that the ecological crisis is, at the same time, a social, spiritual, and anthropological crisis. At the centre of this crisis is the question of the fundamental beliefs that direct human action towards the biosphere. In this context, Lynn White Jr.'s article entitled "The Historical Roots of Our Ecologic Crisis, published in 1967 in the journal *Science*, is one of the most important articles ever published. White, a medievalist with a deep understanding of material culture, posed a provocative thesis: "What people do about their ecology depends on what they think about themselves in relation to things around them" (White, 1967, p. 1205). White's deconstruction of Western Christianity as "the most anthropocentric religion the world has ever seen" (White, 1967, p. 1205) sparked controversy that has had a lasting impact on the development of ecology in the humanities, especially in theology. His accusation of a "burden of guilt" forced theologians to reexamine centuries of interpretations of biblical texts, especially the commandment of dominion in the Book of Genesis, as we will see in the analysis of theologians' and scholars' responses to White's accusations. In context, Pope Francis's Encyclical *Laudato si'* (2015), as the first and so far only ecological encyclical in the history of the Catholic Church, represents a paradigmatic response to White's accusations. *Laudato Si'* is not only a document on environmental protection, but also "a landmark of contemporary doctrinal teaching on creation" (Ansorge, 2019, p. 383). In the encyclical, Pope Francis recognises and strongly emphasises that care for creation is at the heart of the Christian faith. Through the concept of "holistic ecology, the Pope Francis manages to reconcile the cry of the earth with the cry of the poor, directly addressing White's criticism by rejecting despotic anthropocentrism and the technocratic paradigm. This paper will consist of three parts. In the first part, we will examine White's central thesis more closely. In the second part, we will analyse the key criticisms of White's ideas from the perspectives of distinguished scholars and theologians. In the third part, through an analysis of the encyclical *Laudato Si'*, we will show how Christianity, once denounced by Lynn White as the cause of environmental problems, can and should be transformed into a necessary instrument of solution through "ecological conversion.

### 1. Lynn White's Deconstruction of Western Christianity

Lynn White (1907–1987) was a professor of medieval history at Princeton, Stanford, and UCLA. His approach to the ecological question was distinctive because it emerged from an analysis of the history of technology rather than biology. White argued that the foundations of the modern world were "colored by an orthodox Christian arrogance toward nature" (White, 1967, p. 1207). White identified Christianity as the bearer of a radical "psychic revolution" (White, 1967, p. 1205). In the ancient and pagan worlds, nature was populated by spiritual entities. White notes that "every spring, every tree, every hill had its genius loci, its guardian spirit" (White, 1967, p. 1205). Man had to appease these spirits before intervening in the environment. Christianity, by triumphing over animism, "desacralized" nature, rendering it devoid of spirit and reducing it to a mere object of human will. White points out that "by destroying pagan animism, Christianity made possible the exploitation of nature in a mood of indifference to the feelings of natural objects" (White, 1967, p. 1205). The core of White's thesis lies in his analysis of the biblical account of creation. White argues that Christianity establishes a dualism between man and nature, insisting that "it is God's will that man exploit nature for his own purposes" (White, 1967, p. 1205). The biblical commandment: "Be fruitful and multiply, and replenish the earth and subdue it; and have dominion over the fish..." (Genesis 1:28) has, according to White,

become an ideological justification for ruthless exploitation. The fact that only man is created in the image of God (*imago Dei*) sets him apart from the rest of creation, confirming his “monopoly on the spirit in this world” (White, 1967, p. 1205). An additional element of White’s critique is the concept of time. In contrast to the cyclical time of antiquity, which is inherently ecologically sustainable because it follows the rhythms of the seasons, Christianity introduces a linear conception of time with a clear beginning and end. This linearity, coupled with a belief in salvation and progress, has created “an implicit belief in perpetual progress” (White, 1967, p. 1205). White concludes that modern science and technology are in fact “extrapolations of natural theology” (White, 1967, p. 1206). As a historian of medieval technology, White supported his claims with specific material evidence, which, in his view, transformed human relations with the land. White highlights the introduction of the heavy wheeled plough in northern Europe in the 7<sup>th</sup> century as a key moment (Graessle, 2018). Unlike the Mediterranean “scraper”, the heavy plough “attacked the land with violence” (White, 1967, p. 1205). White writes that this technological leap changed man’s relationship with the land: he was no longer part of nature, but an “exploiter” who based the distribution of land no longer on the needs of the family, but on the capacity of the machine. This development was intellectually supported by an interpretation of Christianity that allowed such domination. An equally important element of White’s thesis is the claim that Christianity radically desacralised nature by destroying pagan animism. Whereas in the ancient world, guardian spirits (*genius loci*) guarded trees and springs, Christianity removed this shield. White writes: “The spirits in natural objects, which formerly had protected nature from man, evaporated. Man’s effective monopoly on spirit in this world was confirmed, and the old inhibitions to the exploitation of nature crumbled.” (White, 1967, p. 1205). In this context, it is worth noting White’s analysis of the comparison between the Latin and Greek traditions. He notes that although both empires were Christian, the East did not experience the same technological explosion as the West. He sees the reason in the difference in the “tonality of piety” (White, 1967, p. 1206). While the Greeks considered sin to be intellectual blindness and salvation to be enlightenment (contemplation), the Latins saw sin as moral evil and salvation as “right action” (activism). The Western saint “acts” while the Eastern saint “contemplates, which created an atmosphere in the West conducive to the “conquest of nature. White’s essay caused what researchers call a decades-long controversy in academic circles, as we will see later in the paper. Criticism came from various directions, the most significant being sociological criticism, which argued that religion was not the primary variable responsible for environmental degradation.

## 2. Empirical and Scholarly Responses to the Lynn White Thesis

Since its publication, White’s article has become a “turning point” in discussions across multiple disciplines, including environmental philosophy, ethics, the social sciences, and especially theology. While some scholars acknowledge and accept his critique as a necessary diagnosis, others challenged his historical accuracy and his portrayal of religious influence. In this part of the paper, we will list the main objections of some of the most prominent critics of White’s theses. First in line is Clarence Glacken, who provided one of the earliest and most comprehensive responses to White’s thesis in his seminal work, *Traces on the Rhodian Shore*. Glacken shows that an anthropocentric view of nature has been dominant in Western culture from the ancient philosophers to the present day, independent of Christianity. He argues that White’s thesis, while appealing for its conciseness, ignores the complexity of the history of ideas: “In the history of Western thought, men have persistently asked three questions... Was the Earth purposefully created? Have its climates influenced human nature? Moreover, in what way has man, as a geographical agent, changed the Earth?” (Glacken, 1967, p. vii). For Glacken, Christianity is only part of the matrix in which the idea of man “perfecting” creation

through his work and reason developed. Glacken demonstrated that the concept of a “designed earth”—the belief that the planet is a purposefully made creation fit for human habitation—originated with Greek philosophy long before the Christian era. As Glacken observes, the roots of anthropocentrism predate the Christian era, finding their most potent expression in Greek teleology. This is best exemplified by Aristotle’s assertion in his *Politics* that “nature makes nothing in vain” (1253a9), a principle used to justify the belief that all lower forms of life exist solely for the benefit of man. Glacken also noted that “in the first idea, it is assumed that the planet is designed for man alone, as the highest being of the creation, or for the hierarchy of life with man at the apex” (Glacken, 1967, p. vii). His findings suggest that White’s characterisation of Christianity as the “most anthropocentric religion” ignores the fact that Christian thinkers often moderated the extreme anthropocentrism of their Greek predecessors. After Glacken’s critique of White from a historical standpoint, Lewis Moncrief provided a fascinating sociological and institutional critique. In his essay, “The Cultural Basis for Our Environmental Crisis,” published in *Science*, Moncrief argued that White’s preoccupation with religious cosmology overlooked the concrete impacts of urbanisation, capitalism, and democratic expansion. Moncrief dismissed the idea that religious tradition alone could be blamed for the ecological crisis, labelling it a “bold affirmation for which there is little historical or scientific support” (Moncrief, 1970, p. 508). Moncrief observed that environmental decay is not a unique byproduct of the Christian West. He pointed out that various non-Western societies, despite holding vastly different spiritual views, suffered ecological disasters whenever their populations surged or their technology advanced. He points out that the true roots of the American environmental crisis lie in politics and economics. The redistribution of wealth and the rise of democratic ideals allowed the masses—not just the elite—to exercise “dominion” over the land through private property. For Moncrief, the crisis is driven by the cumulative effect of millions of individuals consuming resources. This is a structural reality that religious dogma cannot sufficiently explain. Moncrief also highlighted the role of corporate power, noting that significant interests use their capital to fund propaganda and stifle environmental activism, framing the crisis as a modern struggle over economics and control rather than an ancient theological debate. Ultimately, Moncrief’s thesis suggests that our environmental failings are not the result of medieval theology, but rather a failure of modern secular institutions and the capitalist drive for expansion. The next critic in line is the philosopher John Passmore, who, in his book *Man’s Responsibility for Nature*, offers one of the most systematic critiques of White’s essay. Passmore’s main objection is that White’s picture of the Western tradition is monolithic and historically selective. Passmore argues that the West does not need a “new ethics,” a “new metaphysics,” or a “new religion,” but a return to the best elements of its own tradition. He defends Western civilisation from the accusation that it must abandon the analytical and critical approach, saying: “It is one thing to suggest that Western societies must learn to be more prudent in their attitude to technical innovations, less wasteful of natural resources, more conscious of their dependence on the biosphere. It is quite another thing to suggest that they can solve their ecological problems only if they abandon the analytical, critical approach which has been their peculiar glory and go in search of a new ethics, a new metaphysics, a new religion” (Passmore, 1974, p. 3). Furthermore, in his book, he deconstructs the Christian tradition into three streams: despotic, managerial, and cooperative, and emphasises that the transformation of nature is not a sin, but an act of civilisation: “only by transforming nature can it continue to survive. There is no good ground, either, for objecting to transformation as such; it can make the world more fruitful, more diversified, and more beautiful” (Passmore, 1974, p. 179). Moreover, Passmore argues that “Christian arrogance” (Passmore, 1974, p. 17) towards nature is not originally biblical, but the result of the influence of Greek Stoic philosophy on the early Church. The Stoics believed that everything in the world was created exclusively for man because of his rationality. At the same time, the biblical tradition (e.g., the Psalms or the Book of Job) clearly emphasises that God loves and values creatures regardless of their usefulness to humans. In conclusion, Passmore

points out that nature is not sacred; nature's value lies in its vulnerability, and the human species is in complete dependence on nature: "To take our ecological crises seriously, so I have constantly argued, is to recognize, first, man's utter dependence on nature, but secondly, nature's vulnerability to human depredations—the fragility, that is, of both man and nature, for all their notable powers of recovery. Moreover, this means that neither man nor nature is sacred or quasi-divine" (Passmore, 1974, p. 174). An essential insight into the critique of White's theses is provided by Robin Attfield, who, in his book *The Ethics of Environmental Concern* (1983), rejects White's claim that the tradition of stewardship is either a minority or unimportant in the history of Christianity. Attfield's main idea is that the Christian interpretation of dominion need not be despotic; he defines stewardship as responsibility to God: "The belief in creation implies that the world does not belong to humanity but is God's world, full of God's glory" (Attfield, 1983, p. 25). Attfield introduces the concept of biocentric consequentialism, arguing that our moral responsibility extends to all living beings whose own good matters. He emphasises that modern technology does not make governance redundant, but rather the opposite: "The choice for modern society is between power exercised responsibly (i.e., governance) and power without responsibility" (Attfield, 1983, p. 43). His ethics are cosmopolitan, demanding justice not only for present but also for future generations of humans and other species. Wendell Berry offers a sharp critique of White, but also of contemporary Christians, accusing them of "an extremely unintelligent misreading of Genesis 1:28" (Berry, 1993, p. 93). He argues that White is right to condemn Christians' behaviour, but wrong to impugn the Bible itself. Berry's vision is deeply sacramental and agrarian. He maintains that working the land must be an act of worship: "In order to live, we must daily break the flesh and shed the blood of Creation. When we do this consciously, lovingly, skillfully, and reverently, it is a sacrament" (Berry, 1981, p. 281). For Berry, the destruction of nature is actually blasphemy: "Our destruction of nature... is the most terrible blasphemy. It is throwing God's gifts back in His face" (Berry, 1981, p. 281). He emphasises that true ecology requires a "rerouting" to specific places and local communities. We conclude this chapter with Holmes Rolston III, the founder of modern ecological ethics and a strong critic of the anthropocentrism that permeates both White's thesis and its opponents. He sees White's essay as a turning point that forced philosophy and theology to reexamine their anthropocentric axioms. Rolston criticises the Enlightenment ideal that saw nature as a "valueless realm," governed only by mechanical forces. He argues that ethics can no longer be limited to inter-human relations. Rolston advocates an "ecological turn" that recognises the intrinsic value of species and ecosystems independent of human beings. He asks the key question: "Humans are the only self-reflective moral agents... But are humans the only bearers of value in an otherwise valueless world?" (Rolston, 1988, p. 1). His most radical thesis is the priority of the biosphere: "Concern for a sustainable biosphere has a higher priority than sustainable development, because 'those who exploit persons will usually exploit nature just as easily'" (Rolston, 1988, p. 32). He warns that "culture and nature have entwined destinies, similar to (and related to) the way minds are inseparable from bodies. So ethics needs to be applied to the environment" (Rolston, 1988, p. 1) and that their radical separation, which White criticised, leads to the destruction of human identity itself.

Concluding this chapter, we will briefly examine the reception of White's article in Croatia by reviewing the opinions and criticisms of prominent Croatian scholars. In the Croatian reception of White, the dominant view is that his interpretation of the biblical text, especially the command to "rule" from the Book of Genesis, is a "one-sided reading" or a direct "misinterpretation" (Matulić, 2009). According to Matulić (2009), the biblical concept of dominion (dominion) has often been abused as a "license for tyranny, while in its original theological sense it represents exclusively a 'mandate to serve and protect'" (Matulić, 2009, p. 597). According to Matulić, the real cause of the crisis lies not in theology but in its abandonment during the Enlightenment, when man declared himself the absolute master of nature, independent of the Creator. Luka Tomašević (2000) builds on this criticism by emphasising that White's description of Christianity as "the most anthropocentric religion in the

world” was a useful provocation that forced Christian thought to affirm the intrinsic value of all beings more clearly. Tomašević (2000) warns that the “arrogance of anthropocentrism, which White attributes to Christianity, actually stems from the modern spirit that reduces nature to a mere resource. Anto Čartolovni (2017) provides a precise linguistic deconstruction, noting that White extracts the verse Gen 1:28 from the full context of the Book of Genesis. Čartolovni explains that the Hebrew verb “to subdue” (*kabash*) primarily means “to settle” or “to possess space, while “to rule” (*radah*) should be understood as stewardship, not despotic exploitation (Čartolovni, 2017). He points out that White completely ignores the verse Genesis 2:15, which obliges man to “till and keep” the world, implying clear ethical duties towards creation, not unlimited power (Čartolovni, 2017). Similarly, Đurica Pardon develops a “theology of the land” that directly responds to White’s accusations. Pardon emphasises that biblical wisdom offers an “ancient key” to solving the contemporary “crisis of humanity” (Pardon, 2016, p. 42). He argues that the relationship between man and earth must be permeated by unity, akin to a marriage, thus rejecting White’s model of dualism between man and nature. Ivan Cifrić, the founder of social ecology in Croatia, deconstructs White’s approach through the concept of “bioethical ecumenism. Cifrić argues that the false approach, in which nature is nothing more than “a mere resource for human needs and desires”, must be corrected. Instead of focusing exclusively on religious dogma, Cifrić calls for recognition that there are “different lives, but also different ethos” on Earth (Cifrić, 2007, pp. 9–11) that require a new level of responsibility towards the “life of the universe”. Stjepan Baloban (2020) criticises White’s argument as “simplistic and uncritical”, noting that the author summarised the first two chapters of Genesis into one paragraph to support his thesis about the guilt of Christianity. Baloban (2020) believes that the ecological crisis primarily stems from the modern economic system driven by greed, which runs counter to traditional religious teachings of asceticism and moderation. The Croatian scholars accept White’s thesis as an important historical impetus but, through interdisciplinary analysis, declare it theologically and historically untenable. Authors such as Matulić, Cifrić, and Čartolovny argue that the root of the crisis is not in the biblical mandate but in its modernist distortion. Rather than abandoning Christian anthropocentrism, these thinkers call for a “purified” version of it — a stewardship that involves actively “flying into the essence” of nature to preserve the integrity of the entire ecosystem.

### **3. The Encyclical *Laudato Si’* as a Paradigmatic Turn and Response to Lynn White’s “Christian Guilt”**

In his essay, White put Christianity on trial, declaring it “the most anthropocentric religion the world has ever seen” (White, 1967, p. 1205). His thesis rested on the claim that the biblical command to dominion over the earth (Genesis 1:28) provided Western man with a metaphysical justification for the ruthless exploitation of nature. Almost half a century later, Pope Francis, in his encyclical *Laudato Si’* (2015), offered not only a defence but also a radical reinterpretation of Christian anthropology, thereby permanently changing the Catholic Church’s official position on environmental issues. In this chapter, we will analyse key parts of *Laudato Si’* to uncover Pope Francis’s responses to White’s accusations.

The central part of Francis’s response to White is found in the second chapter of the encyclical, entitled “The Gospel of Creation.” The Pope Francis directly addresses the criticism that Christianity promotes wanton domination: “We are not God. The earth was here before us and it has been given to us. This allows us to respond to the charge that Judaeo-Christian thinking, based on the Genesis account which grants man “dominion” over the earth (cf. Gen 1:28), has encouraged the unbridled exploitation of nature by painting him as domineering and destructive by nature. This is not a correct interpretation of the Bible as understood by the Church. Although we Christians have indeed at times

incorrectly interpreted the Scriptures, nowadays we must forcefully reject the notion that our being created in God's image and given dominion over the earth justifies absolute domination over other creatures" (Pope Francis, 2015, no. 67). This statement marks a key hermeneutical turn. The Pope Francis clarifies that biblical texts must be read in their context, recognising that the mandate to "rule" does not imply tyranny but responsible stewardship. The Pope Francis emphasises that man is not a master but a steward entrusted with the care of the common home. The interpretations of Đurica Pardon and Anto Čartolovni will help us understand this Pope Francis's thought on stewardship. Čartolovni (2017) emphasises that the Hebrew verbs *kabash* (to subdue) and *radah* (to rule) in Genesis 1:28 must not be read through the modern prism of tyranny. *Kabash*, in its original sense, means "inhabitation" or "arranging space" to realise life in it, while *radah* implies the authority of the shepherd who leads the flock with love and care. The encyclical insists that the command to "rule" must be read in balance with the command from Genesis 2:15, where God places man in the garden to "cultivate it and keep it" (*'abad i shamar*). Pardon (2016) specifies that "to guard" implies the protection of integrity, vigilance and conservation, depriving man of the role of absolute owner and assigning him the role of guardian responsible to the Creator. We can conclude that, with this interpretation of the concept of stewardship, the Pope Francis transforms the relationship of domination, as interpreted by White, into a relationship of partnership, in which man's authority derives from his capacity for wisdom and care rather than from the power of destruction. In this way, the Pope Francis tells us that the concept of stewardship ceases to be a mere administrative task, something we are obliged to do, but becomes, instead, a spiritual calling of every person, and especially of Christians. The steward is not the owner but a manager (*villicus*) who is responsible to God for the goods entrusted to him (Atfield, 1983). As evident from the title of the third chapter of the encyclical, "The Human Roots of the Ecologic Crisis, the Pope Francis gives a direct response to White's criticisms. Pope Francis accepts part of the criticism but shifts the responsibility from faith to the technocratic paradigm – the modern system of power that has transformed technology into an ideology. Unlike the traditional view of nature as "home, the technocratic mentality sees it exclusively as raw material. The Pope Francis warns that the modern subject sets himself against nature as an explorer who wants to extract it, arguing: "It is the false notion that an infinite quantity of energy and resources are available, that it is possible to renew them quickly, and that the negative effects of the exploitation of the natural order can be easily absorbed" (Pope Francis, 2015, no. 106). The Pope Francis emphasises that the main problem is not technology itself, but that humanity has not developed moral values at the same pace as it has developed technical means. We have enormous power, but we do not have an internal compass to control it: "Never has humanity had such power over itself, yet nothing ensures that it will be used wisely, particularly when we consider how it is currently being used" (Pope Francis, 2015, no. 104). Furthermore, the Pope Francis focuses his criticism on technocracy, which imposes a logic according to which everything that is technically feasible is also morally permissible, as long as it brings profit. Specialisation prevents us from seeing the damage we are doing to the entire ecosystem. "The technocratic paradigm also tends to dominate economic and political life. The economy accepts every advance in technology with a view to profit, without concern for its potentially negative impact on human beings" (Pope Francis, 2015, no. 109). In response to White's criticism, the Pope Francis points out that Christianity does not call for tyranny but for responsible stewardship, as already stated above. The Pope Francis emphasises that the way out of the current situation is not in more technology but in changing consciousness and slowing down. "Nobody is suggesting a return to the Stone Age, but we do need to slow down and look at reality in a different way, to appropriate the positive and sustainable progress which has been made, but also to recover the values and the great goals swept away by our unrestrained delusions of grandeur" (Pope Francis, 2015, no. 114). The Pope Francis clearly shows that the ecological crisis cannot be solved by technical adaptations alone. However, he requires a radical change in the modern mentality, and this is essentially what Lynn White

explicitly criticises. The Pope Francis proposes radical change through two terms: integral ecology and ecological conversion, which together represent the most complete response to White's criticism. Integral ecology is not merely a new term for environmental protection but a paradigm that recognises the inseparability of social and natural systems. Pope Francis argues that we cannot fight climate change if we ignore poverty, exclusion and unjust economic structures. Integral ecology starts from the metaphysical assumption that "Today, however, we have to realise that a true ecological approach always becomes a social approach; it must integrate questions of justice in debates on the environment, to hear both the cry of the earth and the cry of the poor" (Pope Francis, 2015, LS 49). In this sense, the Pope Francis emphasises that integral ecology is based on the principle that "We are faced not with two separate crises, one environmental and the other social, but rather with one complex crisis which is both social and environmental. Strategies for a solution demand an integrated approach to combating poverty, restoring dignity to the excluded, and protecting nature" (Pope Francis, 2015, LS 139). In contrast to the technocratic paradigm, which views nature as fragmented, integral ecology insists on the unity of the environmental and social crisis. This holistic turn has found a strong response in the scientific community. Referring to these thoughts of the Pope Francis, climatologist Hans Joachim Schellnhuber (2015) emphasises that integral ecology aligns with the scientific concept of "planetary boundaries, where climate stability and social justice are inseparable". In a similar vein, the economist Jeffrey Sachs (2018) points out that this concept offers a necessary ethical framework for the goals of sustainable development, which had previously been treated exclusively as technical and administrative challenges. This idea is also supported by Ottmar Edenhofer (2015), who believes that the Pope correctly connects the protection of global commons with the Christian ethic of solidarity. The Pope Francis sees the solution to the environmental crisis in ecological conversion, a direct response to what is called "tyrannical anthropocentrism" (Pope Francis, 2015, LS 68) - the belief that man is the absolute master of nature, which directly correlates with the accusations that Lynn White made against the Christian tradition. White argued that Christianity introduced a dualism of man and nature that enabled its ruthless exploitation. The encyclical responds by redefining the biblical imperative: instead of tyranny, man is called to "our 'dominion' over the universe should be understood more properly in the sense of responsible stewardship" (Pope Francis, 2015, LS 116). The conversion that the Pope Francis seeks requires abandoning the despotic model and returning to St. Francis of Assisi, whom White himself recognised as a potential path to salvation. The scientific and academic community has recognised in the Pope Francis's call for a paradigm shift a key element missing from purely technical solutions to the climate crisis. Theologian Celia Deane-Drummond (2016) explains that this conversion corrects White's "despotism, while Bron Taylor (2015) notes that the Pope Francis is thereby moving Christianity closer to what he calls a "dark green religion, recognising the intrinsic value of nature. Mary Evelyn Tucker (2016) argues that the encyclical represents an evolution of religious thought that integrates scientific evidence on evolution and ecology into the "grand narrative" of creation. Similarly, Holmes Rolston III (2017) emphasises that ecological conversion restores the sense of wonder necessary to preserve the planet's biological integrity. Activist Naomi Klein (2015) has recognised in the encyclical the most powerful blow to the "culture of discard". Pope Francis (2015) warns that "the technocratic paradigm tends to establish its power over both the economy and politics" (LS 109). Philosopher Bruno Latour (2017) praises this approach because it directs politics towards "grounding" and material care for the planet. The former Archbishop of Canterbury, Rowan Williams, emphasises that the encyclical corrects White's thesis through a profound critique of human hubris. Williams (2015) argues that Francis brings humanity back within the confines of limitation, reminding us that we, too, are "dust from the earth," thereby breaking the illusion of unlimited power. Sociologist Manuel Castells (2016) analyses how the Pope Francis uses the power of communication in the network society to mobilise the masses against technocratic indifference. At the same time, Elizabeth Johnson (2015) links ecological degradation to the suffering of the most

vulnerable, arguing that environmental conversion is a necessary condition for social justice. Stanford biologist Gretchen Daily, a pioneer in assessing ecosystem services, argues that the encyclical provides a moral foundation for scientific efforts to conserve nature. Daily (2016) argues that the Pope Francis corrects White's "despotism" by insisting that nature has an intrinsic value that cannot be reduced to a market price. Ecotheologian Sallie McFague analyses how the Pope Francis is changing the imagination of God. Instead of a distant ruler (which White criticised), the Pope Francis offers a God who is present in every atom. McFague (2016) believes that this is the strongest possible response to the accusation of Christian desacralization of the world. Finally, Alister McGrath (2016) concludes that the encyclical successfully renews the dialogue between science and faith, while Nicholas Stern (2015) confirms that the Pope Francis's economic criticism has a deep scientific basis in the analysis of climate risks.

## Conclusion

The scientific discourse on the ecological crisis, analysed through the lens of this paper, suggests that we are not merely facing a technical malfunction of civilisation or a temporary disturbance of the ecosystem, but a profound ontological and ethical rift between modern humans and the rest of the created world. Lynn White's thesis, which condemns Christianity as the 'most anthropocentric religion' in history, has served as an indispensable starting point for every contemporary environmental discussion. White visionary recognised that the roots of the crisis are not in machines but in ideas. His argument that Christianity's victory over pagan animism desacralised nature, turning trees, springs, and animals into mere objects without spirit, laid the groundwork for understanding processes in which nature became solely a resource available for unlimited human exploitation. However, in-depth analysis presented in this paper shows that White's diagnosis, although historically catalytic, was fundamentally incomplete and theologically reductionist. As we show in the second chapter, White's critics, such as Clarence Glacken and John Passmore, show us that the roots of Western anthropocentrism do not lie only in Christian doctrine on nature but are deeply rooted in Greek philosophy, particularly Aristotle's teleology, which saw everything in nature as subordinate to human purpose. Throughout history, the Catholic Church incorporated these ideas. Still, it did not originally create them. Also, we point out that the work of Robin Attfield has redefined the biblical concept of dominion, demonstrating that the biblical mandate in the Book of Genesis cannot legitimately be read as a licence for devastation but as a call for ethical stewardship, in which humans act as God's representatives rather than absolute owners. This power system, which flourished during the scientific-technological revolution, rejected Christian metaphysical constraints but retained (and radicalised) the idea of humans as masters. The technocratic paradigm views nature solely through the lens of economic utilitarianism and market profitability. As Naomi Klein notes, in this system, capitalism becomes a kind of secular religion whose sole dogma is infinite growth on a limited planet. Such an approach generates narcissistic and deviant anthropocentrism, denying any boundary to human action and any intrinsic value of non-human beings. The true paradigmatic response to this challenge is offered by Pope Francis' encyclical "Laudato Si", which represents the intellectual and spiritual pinnacle of contemporary eco-theology. Pope Francis makes a bold autocratic move, admitting that Christians have historically misinterpreted the Bible, contributing to the desacralisation of the world. Still, Pope Francis simultaneously offers a solution in the form of integral ecology. This concept radically transcends mere 'green' environmentalism by integrating social justice, economic ethics, and metaphysical renewal. Integral ecology rests on the premise that 'everything is connected'—it is impossible to resolve the crisis of nature without addressing the crisis of human society. The cry of the Earth is inextricably linked to the cry of the poor, for the poorest always pay the highest

and first price for ecological degradation. A comparison of the technocratic paradigm and integral ecology, elaborated in the paper, reveals an essential tension of our time. While, on the one hand, technocracy perceives power as the right to dominate and manipulate genes, atoms, and ecosystems, integral ecology sees human power as a sacred responsibility for preservation. Contemporary technological optimism firmly believes that every problem can and should be solved with a new invention, while integral ecology calls for humility and recognition of biological limitations. Pope Francis offers a vision of 'extended brotherhood' inspired by Saint Francis of Assisi, whom even White recognised as a model. Franciscan spirituality does not see nature as a 'thing' but as a community of subjects; it seeks coexistence rather than possession. This is not a return to pre-modern mysticism but a progression towards a mature spirituality of the Anthropocene, which combines scientific understanding of interconnectedness among all species with the theological truth of a shared origin from the same Creator. Finally, this work concludes that the solution to the ecological crisis is not solely within legislative frameworks, carbon quotas, or technological innovations, but in a profound 'ecological conversion'. This conversion requires deconstructing the throwaway culture that devours both things and people, and replacing it with a culture of care. Christianity today, paradoxically in relation to White's accusations, appears as one of the strongest ethical barriers against self-destructive progress. The responsibility that theology places before humans is Hans Jonas words „responsibility for the future“, which implies that our power must be guided by an ethics that transcends immediate interests. To conclude, the debate and controversy sparked by Lynn White's essay over half a century ago have had a deep impact; they have transformed Christian self-understanding and prompted a necessary dialogue among theology, philosophy, and the natural sciences. Today, in an era of unstoppable climate change and ecological degradation, the paper's message is clear and aligned with the main thesis of *Laudato Si*: the survival of civilisation depends on our ability to stop viewing nature as an inanimate object created for human exploitation for capital purposes, and to begin experiencing it as a sacred 'common home'. We conclude that only through the synthesis of critical thought, scientific rigour, and spiritual wisdom can we hope to embark on the path to healing the planet. Integral ecology is not just a theological option; it is a survival imperative that calls us to become guardians, not masters, of life.

## References

- Ansorge, D. (2019). God's Tenderness in all Creatures: the Fundamental Thought of the Encyclical of Pope Francis "Laudato Si". *Church in the World*, Vol. 54 No. 3, 383–396.
- Aristotle. (1981). *The Politics* (T. A. Sinclair, Trans.; T. J. Saunders, Rev.). Penguin Books.
- Attfield, R. (1983). *The ethics of environmental concern*. University of Georgia Press.
- Attfield, R. (2015). *The ethics of the global environment*. Edinburgh University Press.
- Baloban, S., & Petrović Štefanec, D. (ed.). (2020). *Laudato si': Kako mijenjati stil života?*. Centar za promicanje socijalnog nauka Crkve; Kršćanska sadašnjost.
- Berry, W. (1981). *The gift of good land: Further essays, cultural and agricultural*. North Point Press.
- Berry, W. (1993). *The art of the commonplace: The agrarian essays of Wendell Berry*. Counterpoint.
- Castells, M. (2016). *Communication power and the ecological crisis*. Oxford University Press.
- Cifrić, I. (2007). *Bioetička ekumena: Odgovornost za život susvijeta*. Pergamena.
- Čartolovni, A. (2017). The Christian environmental ethos is a more sustainable answer to the ecological problems in the Anthropocene. *Filozofska istraživanja*, 37(4), 779–796.
- Daily, G. C. (2016). *Nature's services: Societal dependence on natural ecosystems*. Island Press.

- Deane-Drummond, C. (2016). *Theology and ecology in the Anthropocene: Reflections on Laudato si'*. T&T Clark.
- Edenhofer, O. (2015). *The ethical dimension of climate change: A commentary on Laudato si'*. Potsdam Institute for Climate Impact Research.
- Glacken, C. J. (1967). *Traces on the Rhodian shore: Nature and culture in Western thought from ancient times to the end of the eighteenth century*. University of California Press.
- Graessle, W. (2018). Lynn White Jr.'s Medieval Heavy Plow: An Instrument of Agricultural Innovation, Population Growth, and Urbanization. *Footnotes: A Journal of History*, 2(0), 27–59.
- Jenkins, W. (2016). *Ecologies of grace: Environmental ethics and Christian theology*. Oxford University Press.
- Johnson, E. A. (2015). *Ask the beasts: Darwin and the God of Love*. Bloomsbury Publishing.
- Klein, N. (2015). *A new alliance: Why the Pope's encyclical matters for the climate movement*. The Guardian.
- Latour, B. (2017). *Facing Gaia: Eight Lectures on the New Climatic Regime*. Polity Press.
- Matulić, T. (2009). *Metamorfoze kulture: Teološko prepoznavanje znakova vremena u ozračju znanstveno-tehničke civilizacije*. Glas Koncila.
- McGrath, A. (2016). *Enriching our vision of reality: Theology and the natural sciences in dialogue*. Templeton Press.
- McFague, S. (2016). *A New Climate for Theology: God, the World, and Global Warming*. Fortress Press.
- Moncrief, L. W. (1970). The cultural basis for our environmental crisis. *Science*, 170(3957), 508–512. doi: 10.1126/science.170.3957.508.
- Pardon, Đ. (2016). Biblijska teologija zemlje – potka enciklike Laudato si'. *Diacovensia: teološki prilozi*, 24(1), 13–43.
- Passmore, J. (1974). *Man's responsibility for nature: Ecological problems and Western traditions*. Duckworth.
- Rolston, H., III. (1988). *Environmental ethics: Duties to and values in the natural world*. Temple University Press.
- Rolston III, H. (2017). *A new environmental ethics: The next millennium for life on Earth*. Routledge.
- Sachs, J. D. (2018). *Holistic development and the Laudato si'*. Columbia University Press.
- Schellnhuber, H. J. (2015, 18. Juni). *The planetary perspective: Commentary on the Encyclical Laudato si'*. Vatican Press Office.
- Stern, N. (2015). *The economics of the Pope's encyclical*. Grantham Research Institute on Climate Change and the Environment.
- Taylor, B. (2015). *Dark green religion: Nature spirituality and the planetary future*. University of California Press.
- Tomašević, L. (2000). Bioetika u kršćanskoj tradiciji i sadašnjosti. In A. Čović (ed.), *Izazovi bioetike* (149–169). Pergamena.
- Tucker, M. E. (2016). *The environmental challenge: Lynn White and the Pope*. Yale Forum on Religion and Ecology.
- White, L., Jr. (1967). The historical roots of our ecologic crisis. *Science*, 155(3767), 1203–1207.
- Williams, R. (2015). *The metaphysics of ecology: A theological reflection on the Encyclical*. Anglican Theological Review.



**ISSN-2671-3594**