



A Biblical response to Neil deGrasse Tyson's rejection on God's Intelligent Design

Pontas Surya Fernandes
Sekolah Tinggi Teologi Erikson Tritt - Manokwari
Program Studi Sarjana Teologi
Email: pontassurya@gmail.com
<https://orcid.org/0000-0003-2546-3012>

Philip Suciadi Chia
Evangelical Theological Seminary of Indonesia - Yogyakarta
Email: pchia275@students.sbts.edu
<https://orcid.org/0000-0003-24537497>

Donna Crosnoy Sinaga
Sekolah Tinggi Teologi Erikson Tritt-Manokwari
Program Studi Sarjana Teologi
Email: crosnoy@stteriksontritt.ac.id
<https://orcid.org/0000-0001-8225-1804>

Doi: <https://doi.org/10.46222/pharosjot.10422>

Abstract

Neil deGrasse Tyson is one of the most famous scientists in the United States. In particular, Tyson has expertise as an astrophysicist and he has written several books and received extraordinary awards as an Astrophysician. Tyson is not only a scientist, he also recognizes himself as an agnostic. Tyson's disbelief in the existence of God by seeing various events such as volcanoes, hurricanes, tornadoes, earthquakes, pestilences, and birth defects that produce suffering is totally against the Nature of Almighty God. Tyson considers God's intelligent Design as a philosophy of ignorance or neglect. The subject raised by Tyson that rejects God's omnipotence and His Intelligent Design is categorized as a Problem of Evil. This article rejects Neil deGrasse Tyson's opinion built on God's teleological and theodicy philosophy as a form of defense of God's intelligent design and God's omnipotence. It is evident that a plan is needed for the existence of every creature by looking at integrated goals and structures. The beauty of the world also shows the existence of God's intelligent design as the Great Creator. Because the universe has been designed for the life of living things themselves, a plan is needed that is produced through a Person for the lives of the living things themselves. God's omnipotence means that God has no limits and He is able to do something that is impossible for anyone else who is limited through one's nature and ability. Evil itself arises from humans who are God's creations, but they have free will. The very existence of Evil cannot detract from God's purpose in the creation of the universe. Evil itself requires the existence of an objective standard of goodness with a metaphysical foundation, namely God himself. Christianity cannot ignore the existence of evil itself. Crime is a reality. Crime itself is divided into three types: moral crime, physical crime and natural crime. Evil is in a sense very dependent on the existence of God who opposes evil. Evil cannot take away the Providence of God who has a wise, good and holy purpose. James has taught that there are different attitudes in the face of trials (James 1:2-18). Believers are encouraged to be diligent in facing trials that make one's personality mature and give one spiritual strength. People who believe Jesus Christ is God, have hope as the children of God to obtain certainty of the afterlife in the future based on striving for ideal conditions in their earthly human life. These notions support the existence of God's intelligent design and His Omnipotence.

Keywords: Neil deGrasse Tyson, intelligent design, omnipotence, malevolence, hope.



Introduction

Neil deGrasse Tyson recognizes himself as a scientist (Big, 2012). Tyson has formal expertise in the universe with all its stars, stellar evolution, and galaxy structure (Tyson, 2007). Jennifer Culp states that : "Neil deGrasse Tyson is an astrophysicist who researches the formation of stars, exploding stars, the structure of the Milky Way and other things" (Culp, 2007: 4; cf Chia 2022). Love for Astrophysics has existed for him since childhood, when Neil had aspirations to become an Astrophysicist (Tyson, 2019). One goal of Tyson's life is to communicate insights about the workings of the universe which is difficult but he conveys insights through simple facts (Tyson, 2007: 17).

The achievements that have been accomplished as a manifestation of how big his influence is, is the number of awards he has received as a scientist such as inter alia: The Tech 100 in 2001, Medal of Excellence in 2001, Nasa Distinguished Public Service Medal in 2004, Winner of the Klopsteg Memorial award in in 2007, Time 100 in 2007, 50 Best minds in science received from Discover magazine in 2008 and Douglas S. Morrow Public Outreach Award in 2009 (Greelane, 2018). Tyson is also the director of The Fredrik P. Rose the Hayden Planetarium at the Rose Center for Earth and Space (Culp, 2015: 8-9). These achievements have confirmed Neil deGrasse Tyson as one of the best astrophysicists in the world (Culp, 2015: 8). There have been several books written by Neil deGrasse Tyson such as: *The Unspoken Alliance Between Astrophysics and Military*, *Astrophysics for People in a Hurry*, *StarTalk: The Book*, *Welcome to the Universe: An Astrophysical Tour*, *The Inexplicable Universe*, *Space Chronicles: Facing the Ultimate Frontier*, *The Pluto Files: The Rise and Fall of America's Favorite Planet*, *Death by Black Hole: And Other Cosmic Quandaries*, and *Origins: Fourteen Billion Years of Cosmic Evolution*. Tyson's expertise with Astrophysics has been well tested.

In terms of belief, Tyson believes more in his existence as an agnostic (Tyson, 2007). In an interview with Joe Rogan, Tyson did not like to be called an atheist (PowerfulJRE, 2018).

In March 2014, Massimo Pigliucci asked Tyson: "What is it you think about God?" Tyson answered: "I remain unconvinced by any claims anyone has ever made about the existence or the power of a divine force operating in the universe" (Tyson, 2014). His reason for denying the existence of God is because when he pays more attention to universe and then sees havoc, volcanoes, hurricanes, tornadoes, earthquakes, pestilences, birth defects which are the result of the nature that produces suffering in the world, this is seen by him as been in stark contrast to the Almighty One who created the Cosmos (God) and all is good (Morning, CBS S. 2017). Thus, it is necessary for this brief paper to try to provide some arguments against the statements made by Neil deGrasse Tyson who, through the Problem of Evil, opposes God's intelligent design and God's omnipotence.

In Tyson's opinion, religion has produced a limit on ignorance. The limitation of ignorance itself results from religious understanding of God's intelligent design. One of the most concrete reasons for rejecting God's intelligent design is the existence of chaos in the universe. The chaos in the universe can be demonstrated by the existence of: "terrifying gamma-ray bursts, deadly pulsars, matter-annihilating gravitational fields, matter-hungry black holes flapping bloated stars, newborn stars burning up in pockets of collapsing gas" (Tyson, 2007). Tyson also sees the existence of the earth as having a bad impact on human health. For example, In every part of the earth, both land, sea, snowy areas, deserts and mountains, nature is not entirely friendly to humans (Tyson, 2007). In addition Tyson explained some of the things that are happening in the world such as: "Viruses that can infect you, parasites suck up your vital fluids, cancer takes over your body, congenital diseases force an early death. And even if you have the luck of being healthy, a swarm of locusts could devour your crops, a tsunami could wash away your family, or a hurricane could destroy your city" (Tyson, 2007). Intelligent design itself is considered a philosophy of ignorance/neglect (Tyson, 2007). This can be categorized



by Norman L. Geisler as a Problem of Evil (Geisler, 1999: 21). This clearly questions the existence of God which is considered as been unreasonable and irrational which is widely and impressively part of natural atheology (Plantinga, 2002: 7). However, the discussion of Tyson is more about natural crimes that are more related to natural things such as earthquakes, tornadoes, diseases that do not originate from human choice (Nash, 2001: 281). Thus, in the next section, the author will provide a defense of God's Intelligent Design and His omnipotence.

Methodology

A literature review was carried on the topic and the researchers surveyed scholarly articles, books, and other germane sources considered to be relevant to the area of research. In the defense, the authors explain that living things and the universe require an intelligent design or divine design, they also discuss God's existence ensuring the existence of moral judgments, the problem of evil, important lessons from the book of James, and hope for the future. These are the things that the writers discuss in order to oppose the views of Neil deGrasse Tyson.

A Defense Against God's Intelligent Design and Omnipotence

In this defense the author explains that living things and the universe require an intelligent design or divine design, the limitations on Almighty God, God's existence ensures the existence of moral judgments, evil, important lessons from James's teachings, and hope for the future.

Living Things and the Universe Need a Divine Design

In life, all living things must have a design. Pearcey explained it well when he stated that in every living thing there can be found a type of structure that has a purpose and it is integrated so that the structure itself is the result of an intelligent agent (Pearcey, 2008:196). For examples, the use of eyes in humans have the purpose of being used to see, and the fins in fish are used to swim in water. It is clear that the systems that exist in living things have a design by the handywork of God. This design can be seen through the complexity found in the cells and organs of living things. The complexity of living things cannot be reduced to a minimal level of complexity, so there must be an integrated system to fully function. In fact, in David de Rosier's explanation, is that the small molecular machines in human cells resemble a machine designed by humans so that it is clear that humans as living beings have a designer of life itself, namely God (DeRosier, 1998: 17). This argument broke Tyson's view that there were ferocious animals such as sharks and bears that could threaten humans. The designs on these ferocious beasts themselves served a purpose that had been designed by the Divine. Moreover, the absence of wild animals can also cause negative things related to ecosystem changes in certain areas (Yulita & Susiono, 2020). Seeing the rampant Covid-19 Virus, Lennox explained that only 1% of viruses are dangerous, but most viruses are very important for life (Lennox, 2020: 43). These examples suggest that out of everything that looks like it is evil, does in fact have a noble purpose since everything has been created by God.

The extraordinary design of God in the universe is also manifest in the existence of beauty in the nature of nature. The beauty of this world illustrates the beauty of the Grand Creator, namely God. This results of what we see around us in creation show us the beauty of God and His us omnipotence and glory. The limited beauty of the universe we can experience brings a longing to us to find the true beauty of creation and unlimited things. As Paul himself explained : "For what is invisible to Him, namely, His eternal power and His divinity, was visible to minds from His works from the creation of the world, so they cannot make excuses" (Romans 1:20). The beauty we do see in the natural order also shows the extraordinary design of the Divine mind.



The creation of the universe has been for the life of living beings. It must be understood that the universe was ultimately designed to allow living things to live. A balance in the universe is needed for human life and other living things. The universe has a design that leads to God as our creator. Thus a teleological explanation is needed as the basis for the design of the universe in an adequate design, order and suitability that takes place in this universe (Witty, 2001: 11). Moreover, no atheologist has ever given a single reason in favor of the existence of a different world order that would produce more good and less evil than the existing system. The thing that needs to be understood is that all natural objects have the ability to produce something that is harmful as well as something that is beneficial, so that objections to the laws of nature actually raise more problems that need to be resolved.

The teleological argument itself describes the existence of the Divine which has the goal of returning all to the Creator himself. Thus, design itself has the involvement of a divine purpose. Arguments that criticize negative views of the intelligent design of God's existence have been stated by Sproul in that: "Matter that exists independently, is formless, impermanent and impersonal. The impersonal forces lack reason, will, and therefore cannot devise anything" (Sproul, 2011: 152). Therefore, instead of that, we need a design that is produced by a being who has a design for whatever exists in the universe, whether it is considered good or bad by humans.

Agnostics like Tyson think that if God is omnipotent then God can eliminate evil or chaos himself. The assumption that God's omnipotence can create a world without evil or chaos is a mistake (Nash, 2001: 281). Ryrie argues that: "Almighty means that God is all-powerful and able to do anything according to His own nature" (Ryrie, 2012: 57). Omnipotence does not mean that God does not have limits on how he acts. The limitations themselves include things that are not chosen by God to be included in His plans that He may have chosen as long as they do not conflict with His nature (Ryrie, 2012: 57). C.S Lewis said that: "omnipotence means the power to do all that is intrinsically possible, not to do that which is intrinsically impossible." For what and for whom? But it is limited to the existence of His nature and His abilities (Nash, 2001: 281). God's omnipotence is able to create a righteous person and also create beings who have the ability to do evil as they select their own path. God does not simply eliminate evil because He has chosen humans to have free will (Sampels, 2016: 317).

All realities regarding the existence of evil or chaos are the result of human free will or emanate from the fact that our universe operates under natural laws as well as the formation of the human soul so that humans can face reality itself (Nash, 2001: 281). So it can be concluded that when God eliminates evil and chaos itself, He eliminates human free will and also the laws of Nature that have been made. So that with the glorious purpose of God by using evil and that can bring to the glory of God Himself.

Rice supports this by saying that God with his providence can arrange events according to freely operating causes that also operate within the laws of nature (Rice, 2008: 114). Also nothing is missing in the person of Almighty God when He can create bad things. God's omnipotence must not be limited by narrow human wills. In the process of creation in creative work, God has brought order into the disordered cosmos but has not eliminated the disorder itself (Walton, 2017: 241). Also when someone makes the world according to his wishes, it means that omnipotence is in the man himself. Remember that God's Sovereignty can also be demonstrated by the presence of evil. Evil cannot take away God's noble purpose in creating all things in the universe. This is also proof of God's omnipotence which cannot be defeated by evil and chaos in the universe and omnipotence does not disappear with the existence of evil and chaos.



The Existence of God Ensures the Existence of Moral Judgments

Only with an objective moral assessment can one make an assessment of a crime. With the existence of God, one can provide a moral assessment of good and evil actions. In the absence of moral judgment, a person can freely commit crimes or all actions can be justified. This standard of objectivity in morality is also proof of the need for the existence of God. An objective standard of goodness itself requires an adequate metaphysical foundation (Sampels, 2016: 317). As Geisler and Brooks stated : "Good would not exist if God did not create" (Geisler, 2006: 77). It is difficult to deny the existence of God with the existence of evil itself. The divine person has been embodied by the existence of evil which must have a measure of good itself. Timothy Keller also explains that: "The evolutionary mechanism of natural selection depends on the death, corruption, and crime of the strong against the weak. These things are natural... a person who does not believe in God does not have a basis to be angry at injustice which is also his personal reason to reject God in the first place" (Keller, 2013: 43)

One must not demand goodness which is only proof of the existence of God who has become the standard of truth itself. The demand for justice from crimes actually shows the need for an objective assessment of the truth as well as a clear standard in order to judge every action based on the truth. God himself becomes the objective foundation of moral values that cannot be changed by changing human opinions, so that it requires Divine Almighty power to strengthen these moral values (Mcgrath, 2019: 103). The problem of evil itself cannot prove the non-existence of God. Evil itself is in fact proof of the existence of God.

The problem of evil

Evil has a real form in human life in the universe. People who believe in God and those who do not believe in Him, have an understanding about this including the reality of the existence of evil including Neil deGrasse Tyson. This is in contrast to some of the understandings contained in the explanations provided in faiths such as Buddhism, Hinduism and Christian Science which all have different assumptions about evil. Evil, is for Buddhists and Christian Science an illusion (Frame, 2000: 200). Sample says that: "According to Hindu Thought, once a person attains proper mystical awareness, then evil does not exist" (Walton, 2017: 241). Christianity by way of contrast believes in the existence of evil itself. Also, the reality of crime has been conveyed by Neil deGrasse Tyson in that: "Viruses can infect you, parasites suck up your vital fluids, cancer takes over your body, congenital diseases force an early death. And even if you have the good fortune of being healthy, a swarm of locusts could devour your crops, a tsunami could wash away your family, or a hurricane could destroy your city" (Tyson, 2007). So the reality of crime then also really exists.

If we look in the Bible, the main word for evil itself in the Old Testament is "רָעָה" (rā`â) and it can relate to a moral existence, or something that functions as something negative in one's life but it can also indicate something that is disorderly and chaos (Walton, 2017: 240). Whereas in the New Testament the word "πονηρός" (poneros) can refer to a moral or social existence that is bad, worthless, or a physical existence that is not good and generally unhealthy (Bauer, Arndt & Gingrich, 1979: 690). So the evil thing itself is not just a moral existence, but it is also related to conditions and circumstances that are not good or irregular either in certain matters, or in the physical condition of humans. The reality of evils is real to life in the universe. Christianity also sees the reality of evil which cannot be ignored or dismissed as something illusory.

Evil itself can be defined as the absence of goodness that should exist in the will of created beings. Crime can be divided into three, namely: moral crime and natural/physical crime. Moral crime is a crime resulting from an action that is morally reprehensible (Sovik, 2011: 117), and natural crimes are crimes like things such as earthquakes, tornadoes, diseases that are not



caused by human choice (Nash, 2001: 273). There are also those who show the existence of a third crime which shows a mixed crime relationship to natural crimes and moral crimes such as cancer, emphysema, and heart disease as natural crimes, but some of these diseases are due to failure to continue to carry out smoking as an act that produces crime (Nash, 2001: 273-74). Sampel states the conclusion in Augustine's view that: "evil is dependent like a parasite on good, providing a strong argument that the problem of evil accepts the fact that good existed before evil" (Sampels, 2016: 317). The dependence of evil on good is very real. At the same time in the previous explanation that good and evil require a moral assessment proves that there is a need for God.

Sampel himself explains the reasons than with the following explanations: 1. God has morally adequate reasons but these are not yet fully disclosed, in allowing evil and suffering to occur, 2. God's sovereignty and glory will be shown through His victory over evil, 3. God allows evil and suffering because both of them will produce greater good (Sampels, 2016: 317). While the purposes of evil and suffering are: 1. God can use evil and suffering to attract the attention of unbelievers and ultimately draw them to Himself (Zechariah 13:7-9; Luke 13:1-5; John 9), 2 God can use evil and suffering to build the moral and spiritual character of His people or to express a father's discipline (Romans 5:3; Hebrews 10:36; 12:4-11). Henry Thiessen himself explained about God's providence in His creation by saying: Providence gets an even more specific meaning, namely the continuous activity of God to make all events in the physical, mental, and moral fields carry out the plan that He has established, that is, the plan that has been established, namely the plan that is the main pattern of God in creating. The cosmos. It is admitted that evil has entered and polluted the universe, but that evil has not been allowed to thwart God's original purpose, namely a wise, good and holy purpose (Thiessen, 2008: 188). However, in the understanding that every suffering is in the Providence of God, there is a great amount of evil that has no reason to exist.

One of the issues that have been raised before is that God's omnipotence is limited by the existence of humans who have free will. Free will itself is the human ability to choose to do the right things or to do evil things. In creating humans with free will, humans cannot be controlled like robots in doing God's will. It is logically impossible for God to give freedom to human beings without someone being given the possibility for them to make some wrong choices (Swinburne, 1998:133). This makes God unable to cause or determine they only do what is right (Plantinga, 2002: 30). Through an understanding of human free will, it creates awareness that the world and the universe have evil in them. Evil, according to Christian beliefs, is the result of a fallen world. It comes out of the free will given to man by God. God, in creating people for love and relationship, also gave them the free will to not love; meaning one can disobey His laid down laws if they so elect. Sin is derived from disobedience toward God and lack of trust in His goodness. The Holy Bible advises us that sin is a heart condition of rebellion against God, which stems from human pride which is the "original sin." God created people in His image, to be like Him, but their pride and rebellion make them fall far short of this purpose of us in His *imageo dei*.

Important Lessons from the book of James

In the letter of James it is taught that there will be various trials that need to be faced in life. However, the proper attitude to consider in this section is to regard it as happiness when experiencing the reality of trials (James 1:2). Obviously temptation itself enters into the explanation of the problem of evil as well. In the trials that are equally experienced by everyone, there are different reasons and different goals conveyed by James in terms of facing these trials. Within the same trial, the first is for a trial of faith that results in perseverance (James 1:3; Chia 2020). Perseverance makes a believer perfect and whole, not lacking in anything. This is a manifestation of James' longing (James 1:4). While the existence of people who experience the same temptation can also be dragged and lured from within themselves (James 1:13), so that sin matures and gives birth to death (James 1:15). Two very different



attitudes indicate the existence of human free will in them. However, humans also cannot say that the trials that exist within or internally come from God. But it requires the right attitude so as to produce perseverance to fight the good fight. It is clear that those who stand the test as the embodiment of those who love God will receive the crown of life promised by God (James 1:12). It can be concluded by several things that temptation which is part of the evil described in the previous section, has and does occur in the life of people. There are two different attitudes and external temptation produces perseverance while internal temptation which is not from God makes a person to be dragged and enticed and then this gives birth to sin and its maturity produces death. From this explanation, James provides very appropriate inputs for believers to face the trials experienced in the world.

Hope for the Future

The picture of perfection in which human life does not experience evil things anymore is explained by John by explaining the existence of the new heaven and earth. The situation described at that time was far from evil. The first state of the earth has passed away (Revelation 21:1; Chia 2021). By giving an explanation that there will be no more tears and even no more death (Revelation 21:4), This means that the existence of suffering will cease. Extravagances that are considered extraordinary in today's world will be for all throughout the city of New Jerusalem (Revelation 21:18-20). There will be no more abomination and lying (Revelation 21:27). Regarding food, it has been fulfilled with fruit that always bears fruit and even gives healing and there will be no more sickness (Revelation 22:2). This situation is the most ideal state for humans. This will be obtained by those who become children of God. This hope for a future that is so good makes it important for someone to believe in Jesus Christ who is God. God will give all of this as a certainty for life in the future where this condition is ideal for human life. God's intelligence and omnipotence is shown in the future by providing an ideal place for humans.

Since sin is truly the root cause of all troubles, people need to deal with their sin first if they desire less trouble in their lives. God informs us in His Holy Word that by nature we are "...dead in trespasses and sin;" (Ephesians 2:1) and that we are "...alienated from the life of God..." (Ephesians 4:18). We need to be cleansed from sin and it's ultimate penalty (which is death) and we need a restored fellowship with God. Jesus Christ tells us we "must be born again" (John 3:7). "...Except a man be born again, he cannot see the kingdom of God" (John 3:3). "But God commendeth His love toward us, in that, while we were yet sinners, Christ died for us" (Romans 5:8). "For He hath made him to be sin for us, who knew no sin; that we might be made the righteousness of God in him" (2 Corinthians 5:21). God detests sin because of what it results in for example crime, corruption, war, illness, poverty, etc., but God does love the sinner.

Conclusion

Neil deGrasse Tyson as a well-known astrophysicist has had the wrong view by rejecting God's intelligent design and omnipotence with the problematic of evil. The rejection of God's intelligent design can be proven by the existence of God's intelligent design in His design for living things and the Universe. It must be understood that God has limitations as Almighty God, that is, he cannot do something that is not in accordance with His nature, which in this case is also limited by the existence of human free will and natural laws which are included in God's plan. A person needs the existence of God to give moral judgement. Crime is a stark reality. Crime itself is not just a moral existence, but also relates to conditions and circumstances that are not good or irregular either in certain matters, or in the physical condition of humans. Crime consists of three types, namely: moral crime, natural crime, and mixed crime. God has a reason and purpose for evil which also proves God's intelligent design and God's omnipotence. Good advice from James helps believers to be able to overcome external trials and to be happy by persevering in good things. Non-believers like Neil deGrasse Tyson have to start realizing that there will be times when the world will change,



and it is ideal for humans. Thus, it is necessary to believe in the existence of God in Jesus Christ to obtain the eternal heavenly Kingdom.

References

- Big, T. (2012, 26 April). Neil deGrasse Tyson. [Video Recording] [Available online at <https://www.youtube.com/watch?v=CzSMC5rWvos&t=10s>]
- Chia, P.S. (2022). The Divine Knowledge in Relation to Determinism in the Philosophy of Avicenna. *SOPHIA*, 61, 319–329. [Available online at <https://doi.org/10.1007/s11841-021-00876-y>].
- Chia, P.S. (2022). An Evaluation of the Puzzled Syntax of 2 John 1: 5, *Perichoresis*, 20(4), 123-131. [Available online at <https://doi.org/10.2478/perc-2022-0024>].
- Chia, P. S. (2020). Analysis of the Effectiveness of Jesus' Parable: A Cognitive Psychology Approach, *Journal of Research on Christian Education*, 29(3), 272-284, DOI: 10.1080/10656219.2020.1835593
- Chia, P.S. (2022). What Does the Old Testament Say about Memory Retention: A Cognitive Psychology Approach, *Journal of Research on Christian Education*, 31(2). DOI: 10.1080/10656219.2022.2071513
- Chia, P. S. (2021a). An analysis of Isaiah 62: 6–7 – A psychology of religion approach, *Verbum et Ecclesia* 42(1): a2206. <https://doi.org/10.4102/ve.v42i1.2206>.
- Culp, J. (2015). *Neil deGrass Tyson*. New York: Roses Publishing Group.
- Enns, P. (2008). *The Moody Handbook of Theology*. Malang: Literatur SAAT, Jilid 1.
- Frame, J. M. (2000). *Apologetika Bagi Kemuliaan Allah*. Surabaya: Penerbit Momentum.
- Geisler, N. & Brooks, R. (2006). *Ketika Alkitab Dipertanyakan*. Yogyakarta: ANDI Offset.
- Geisler, N. L. (1999). *Baker Encyclopedia of Christian Apologetics*. Grand Rapids: Baker Books.
- Greelane (2018). Pelajari Semua Tentang Astrofisikawan Amerika Neil deGrasse Tyson. [Available online at <https://www.greelane.com/id/sains-teknologi-matematika/ilmu/neil-degrasse-tyson-biographical-profile-2698747/>].
- Keller, T. (2013). *Rasio Bagi Allah*. Yogyakarta: Penerbit Momentum.
- Bauer, W., Gingrich, W. & Danker, F. W.. *A Greek-English of The New Testament and Other Early Christian Literature*. Chicago: The University Chicago Press.
- Lewis, C. S. (1996). *The Problem of Evil*. Pymbale: HarperCollins Publishers.
- Lennox, J. C. (2020). *Where is God in a CoronaVirus World?* Surabaya: Literatur Perkantas Jawa Timur.
- Mcgrath, A. E. (2019). *Apologetika Dasar: Bagaimana Menolong Para Pencari Kebenaran dan Orang-Orang Skeptis untuk Percaya pada Iman Kristen*. Malang: literatur SAAT.



Morning, CBS S. (2017, 30 April). Neil deGrasse Tyson on God . [Available online at <https://www.youtube.com/watch?v=I0nXG02tpDw>].

Nash, R. H. (2001). *Iman dan Akal Budi*. Momentum: Surabaya.

Pearcey, N. (2008). *Kebenaran Total*. Surabaya: Penerbit Momentum.

Plantinga, A. (2002). *God, Freedom and Evil*. Grand Rapids: Wm. B. Eerdmans Publishing.

PowerfulJRE. (2018, 23 Agustus). Pengalaman Joe Rogan#1159-Neil deGrasse Tyson [Available online at <https://www.youtube.com/watch?v=vGc4mg5pul4&t=73s>].

Rice, A. W. (2008). Kosmologi Sains Modern dalam *Membangun Wawasan Dunia Kristen*. Edited by W. Andrew Hoffer dan Gary Scott Smith. Surabaya: Penerbit Momentum.

Rosier, D. J. (1998). The Turn of The Screw: The Bacterial Flagellar Motor. *Cell*, 92(3) April

Ryrie, C. (2012). *Teologi Dasar*. Yogyakarta: ANDI Offset. Jilid 1.

Sovik, A. O. (2011). *The Problem of Evil and the Power of God*. Leiden: Kononklijke Brill NV.

Sampels, K. R. (2016). *Without a Doubt*. Malang: Literatur SAAT.

Sproul, R. C. (2011). *Defending Your Faith An Introduction to Apologetics*. Malang: Literatur SAAT.

Swinburne, R. (1998). *Providence and The Problem of Evil*. Oxford: Clarendon Press.

Thiessen, H. C. (2008). *Teologi Sistematis*. Edited by Vernon D. Doerksen. Malang: Penerbit Gandum Mas.

Tyson, N. deGrasse. (2019). *Letters from an Astrophysicist*. New York: W.W. Norton Company.

Tyson, N. deGrasse. (2007). *Death By Black Hole*. New York: W.W. Norton & Copany.

Tyson, N. deGrasse. (2014). Interview with Massimo Pigliucci and Julia Galef, *Rationally Speaking podcast*. March, 9, 2014.

Walton, J. H. (2017). *Old Testament Theology*. Yogyakarta: PBMR ANDI.

Witty, R. G (2003). *Alkitab: Fakta atau Fiksi*. Surabaya: YAKIN.

Yulita, N. & Susiono, D. E. (2020). Nilai Ekologi Value Hiu Hasil Tangkapan Nelayan di PPN Brondong Lamongan Jawa Timur. *Biotropika Journal of Tropical Biology*. 8(1). [Available online at <https://doi.org/10.21776/ub.biotropika.2020.008.01.04>].

Conflict of Interest Statement: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.



This article is open-access and distributed under the terms of the Creative Commons Attribution Licence

The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

