Article

Forgiveness and the Naturalistic Approach to Religion: A Contextual View of the Problem of Evil

Michał Oleksowicz *[ID] and Tomasz Huzarek

Faculty of Theology, Nicolaus Copernicus University, 87-100 Toruń, Poland; tomhuzar@umk.pl
* Correspondence: michaloleksowicz@umk.pl

Abstract: Cognitive Science of Religion and evolutionary approaches in the study of religion have opened the rapidly developing field of naturalistic explanation of religion. Since its inception, this empirically driven project has undergone a slow evolution, giving rise to the view that explaining religion is not a matter of accounting for a single (cognitive or functional) trait, but rather involves explaining a very complex repertoire of patterns of thinking and behavior. In this paper, we would like to provide a philosophical analysis of the highly complex problem of forgiveness from the Christian religious and naturalistic perspectives. Our analysis demonstrates a crucial way to understand the concepts of guilt, forgiveness and reconciliation as discussed in the context of Christian theology. At the same time, we also discuss certain strengths and weaknesses of the naturalistic accounts. Finally, we formulate some suggestions for advancing the science–religion dialogue on the problem of evil.

Keywords: forgiveness; Cognitive Science of Religion; adaptationist account of religion; evil; wrong-doing; Christianity; science–religion

1. Introduction

Even if it remains uncertain today whether the notions of "self-interest" and "mutual aid" as used to describe the behavior of members of different species are well formulated, it is a fact that the theory of evolution has become a useful tool in explaining the behavior (morality) not only of our evolutionarily closest relatives, chimpanzees, but also of humans (de Waal 2006). The naturalistic and evolutionary accounts of human origins, human behavior and morality are being systematically expanded to cover a wider range of explananda (Cole-Turner 2020; Moritz 2020; Uhlik 2020).

In recent decades, not only the origins of mankind and the human morality, but also religion itself have become challenging topics to study. For the purposes of our inquiry, we understand religion as "a symbolic–cultural system of ritual acts accompanied by an extensive and largely shared conceptual scheme that includes culturally postulated superhuman agents" (Lawson and McCauley 1990, p. 5). Even this brief pragmatic clarification reveals the multifaceted character of religion as a highly complex phenomenon. In recent years, the scientific study of religion has developed in a systematic way, largely inspired by the possibility of observing religion as a natural process in humans that reflects our mental schemas, behavioral expressions and social attitudes (Richerson and Christiansen 2013; Szocik and van Eyghen 2021). It appears that, considering the high complexity of the phenomenon of religion, a naturalistic explanation of the unique functions, components (behaviors, beliefs, values, moods and feelings) and content of religion may be insufficient (Sasa and Roszak 2020). Hence, we would like to demonstrate that a purely naturalistic explanation of the Christian religion can be problematic by discussing the complex problem of forgiveness in the context of Christian theology.

In what follows, we briefly introduce the main tenets of the two dominant naturalistic approaches to religion: the cognitive approach and the evolutionary approach. Those familiar with the literature on this subject can proceed directly to section three, where we provide a philosophical analysis of the complex problem of forgiveness and of the crucial

way to understand the concepts of guilt, forgiveness and reconciliation as discussed in the context of Christian theology. In section four, we juxtapose the religious and naturalistic perspectives on this issue, discussing certain strengths and weaknesses of the naturalistic accounts as they apply to the content of religious behaviors, beliefs and values. In our analysis, we opt for the religious perspective as being more appropriate for discussing the main issue of the paper. Finally, we formulate some suggestions for advancing the science–religion dialogue on the problem of evil.

2. Cognitive and Evolutionary Approaches to Religion

The above-mentioned project to build a new science of religion relies heavily on two major developments in the field of empirical sciences during the last decades. On the one hand, great progress has been made in the cognitive sciences and related fields (Miłkowski et al. 2018), and on the other hand, there have been some ground-breaking advances in the understanding of the multifaceted character of the biological sciences (including such a broad range of sub-disciplines as molecular biology, systems biology, evolutionary biology or developmental biology) (Braillard and Malaterre 2015). Broadly speaking, the application of the achievements in these fields to the study of religion has resulted in advances in the areas of Cognitive Science of Religion (CSR) and Evolutionary Science of Religion (ESR).

Although CSR can be referred to as an evolutionary approach, it is better to separate CSR and ESR. The core difference between the two approaches can be expressed as follows. CSR explains the putative proximate mechanisms that generate and manage religious beliefs. However, in his well-informed defense of CSR, R. McCauley (2020) reviews recent contributions that show the vitality of this research paradigm and its expansion in three main directions: the growing interest in new neuroscientific findings, the cognitive analysis of religious experience and memories of such experience, and the increasing integration of cognitive and evolutionary accounts of explanations. Hence, in the light of recent developments in CSR, religion is not only explained as a phenomenon that is connected with human cognition as a by-product of other cognitive adaptations, but also regarded as an adaptation[1]. On the contrary, according to ESR, the main theoretical means of thinking scientifically about religion are extremely long-term diachronic processes and large-scale distributed systems (such as populations, cultures or religious groups). Within this approach, researchers have primarily concentrated in their accounts of religions on natural selection (arguing that some religious beliefs have evolved as traits because of their adaptive functions or as by-products of normal cognitive capacities), sexual aspects (whereby religions aid in the successful propagation of genes by helping people deal with complexities of the mating process) or cultural aspects (focusing on the gene–culture coevolution that ranges from the transmission of cultural ideas and practices to the enhancement of cooperativeness and prosociality among co-religionists). While differences in the content of research conducted within CSR and ESR are in fact not so clear cut, for our purposes we can stress that CSR is mainly the study of proximate causes (immediate cognitive mechanisms) of religious phenomena, whereas ESR studies their ultimate causes (historical causes, especially the action of natural selection) (Futuyama and Kirkpatrick 2017, p. 7).

We would like to emphasize two explanatory limits of CSR. Firstly, the cognitive sciences themselves have noted a significant shift from the naïve enthusiasm that conscious processes can be thoroughly explained in purely neural terms to the computational paradigm where the concept of information processing seems to be predominant. While cognitive internalist accounts have focused on the "isolated mind," the recent study of cognition has progressed towards building integrated explanations that take into account computing information, the role of emotions and the importance of intersubjective processes and social factors in cognitive experience (Oviedo 2018).

Secondly, the limits of CSR stem from a careful analysis of recent discussions on cultural evolution and from the explanatory shift in the biological sciences. The basic tenet of the scientific study of culture is that its many aspects should be understood as the ideas,

skills, attitudes and norms that people acquire by means of teaching, imitation and other ways of learning from other people. It seems that the still-dominant "epistemic tool" is to frame the cultural evolution of religion within evolutionary explanations (Richerson and Christiansen 2013). Religion as a cultural factor is essentially interpreted in Darwinian terms as an inheritance system where, as time progresses, different factors impinge upon a population to change the frequency of variant ideas and skills expressed in that population. This reduction of culture or religion to cognitive and biological mechanisms can be seen as highly problematic, since the complexity of human cognition still leaves us with a very incomplete understanding of the neurobiological underpinnings of cultural evolution. In fact, recent developments in biological sciences, such as epigenetics, introduce another level of complexity where the epigenetic system could be seen as "a vehicle for massive cultural influences on gene expression, but it could also be a vehicle for massive contingent epigenetic effects on factors which bias culture acquisition" (Richerson and Christiansen 2013, p. 16). Furthermore, in modern developmental biology and systems biology, successful research strategies have been developed in opposition to the "DNA-centered biology" that focuses on the presumption that all the complex information on an organism and its development is contained in genes alone. The genotype–phenotype relationship is a highly complex co-determination rather than a mere unpacking of "genetic information" (Moss 2003; Robert 2004).

While CSR mainly focuses on cognitive mechanisms and attempts to find correlations between human cognition and acquisition of religious beliefs on the basis of such mechanisms, ESR is a historical–phylogenetic approach that attempts to explain the ubiquity of religious components by their evolutionary functions in the past environment. According to ESR, religious components can be seen as adaptations that increase the chances of survival and reproduction within the population. Essentially, there can be two types of adaptations, namely phylogenetic adaptations (i.e., intra-individual characteristics passed through genes) and cultural adaptations (intra- or extra-individual characteristics).

Although there are theoretical problems when it comes to providing a precise definition of biological adaptations and individuation of adaptive religious components, proponents of ESR argue that one can successfully grasp—in a religious context—the adaptive functions that maximize fitness and increase chances of survival. For instance, one might think of characteristics such as the psychotherapeutic functions of religion (i.e., reducing stress, providing hope or helping overcome the fear of death) or the function of religion as an in-group marker. In the latter case, it is argued that religion confers social cohesion and benefits at the group level. These benefits can range from mutual trust to cooperation, and even to inter-sexual selection based on potentially adaptive traits. As regards the possible correlation between religious components and sexual selection, it can be noted that since sexual selection focuses on looking for the most fitted mate, "religious components can enhance the rate of reputation, and consequently, can work as efficient signals for the most beneficial mate" (Szocik 2018, p. 100). Certainly, ESR is not exempt from counterarguments. For instance, it can be argued that non-religious traits are definitely more accurate adaptive tools than counterintuitive religious components, for example making clothes versus making a petitioning prayer. We are aware that not only religious elements, such as the aforementioned petitioning prayer, but also other human activities—for example in the field of culture and art—which are not directly aimed at constituting social cohesion are an expression of human morality and undoubtedly have a beneficial effect on interpersonal relations. As R. Scruton rightly observes, "not everything that confers a benefit has a function. Entirely redundant behavior—jumping for joy, listening to music, bird-watching, prayer—may yet confer enormous benefits" (Scruton 2017, p. 24). The line of reasoning where only factors which have functions confer benefits as adaptive tools, however, is deeply committed to the Darwinian account, according to which one should evaluate culture, art or religion only in the grid of proximate or ultimate effects.

Progress in explaining religion is possible when large questions are decomposed into smaller questions. When addressed with appropriate methods, this reductive approach in

science is of great benefit to the understanding of the explanandum, as evidenced by the scientific study of religion. In recent decades, a more nuanced approach has been developed that explains the phenomenon of religion in terms of not only biological evolution, but also cultural evolution (Norenzayan et al. 2016). Certainly, looking at religion in the context of the above-mentioned explanatory shift in the biological sciences and in the context of the cultural evolution of humans opens the path to not treating it as an aberrant disease or dangerous delusion present in culture (Dawkins 2008). However, it is important to bear in mind that "our understanding of the linkages between genetic and cultural components is still primitive" (Norenzayan et al. 2013). In fact, it is not straightforward that biological evolution and cultural evolution are guided by the same rules (Szocik 2019). For instance, the difference between the two can be seen in the case of the transmission and acquisition of changes. While biological evolution is the result of variation (genetic mutation and recombination) leading to the extinction of the weakest forms, cultural traits may be acquired and transmitted by social learning, imitation or invention, and humans may intentionally produce the fittest forms. Moreover, while divergence and branching are basic processes in biological evolution (i.e., biological lineages do not mix), cultural evolution seems to work as a blending process (i.e., separated cultural lineages very often mix or merge into one).

Last but not least, a major problem in the biological study of religion is the question of the causal factors of natural selection and cultural traits (including religious ones). There are different possible causal agents of natural selection with regard to the evolution of religious components that favor their development and transmission: the need for social cohesion, the importance of human reproduction, the search for consolation, the capacity for mentalizing, etc. Although, according to some authors, such factors are not a direct cause of religion, as in their opinion it is only a mechanism of natural selection, it seems that—in the light of the current understanding of the process of evolution—we cannot yet fully explain the possible causal contribution of these factors. The obvious risk in the case of presumed causal explanations is that mere correlations might be confused with causal influence. For instance, in the case of prosocial behavior, it is not clear whether religious involvement is the cause of human prosociality, or whether having a prosocial disposition causes one to be religious, or whether there is a third variable (e.g., empathy or altruistic disposition) that causes both prosocial and religious tendencies (Sosis and Alcorta 2003; Feierman 2016). Furthermore, identifying the causal factors responsible for the evolution of religious components proves to be difficult if one considers that, in contrast to genes transmitted vertically from parents to offspring, cultural or religious ideas may be transmitted horizontally to all other members of the community. Such ideas are not necessarily correlated with the maximization of fitness and may be transmitted and acquired independently of it. The latter claim suggests that culture and religion are not narrowly oriented towards reproduction and survival of the fittest, but rather encompass diverse and highly complex phenomena. It seems that one should try to explain changes in cultural traits—including religious traits—by combining various explanatory frameworks instead of using only one.

Having assessed some of the advantages and limitations of the scientific study of religion, we would like to proceed to discussing the broad question of forgiveness in the Christian tradition. This will enrich our further analysis of the empirical study of religion.

3. Philosophical and Theological Analysis of Forgiveness

Forgiveness is a remarkably complicated, multi-layered and complex phenomenon[2]. Important components of the process of forgiveness are guilt (which is preceded by committing an evil act or causing harm), the act of forgiveness and the reconciliation that usually follows. Forgiveness takes place in a relationship between people; hence, we are dealing with two correlates of this relationship: the wrongdoer and the wronged. All these elements of the experience of forgiveness and reconciliation are present in the formation of social order and communities. One may also distinguish the acts undertaken in the process

of reconciliation by the wronged, namely forgiveness and pursuit of reconciliation, and by the wrongdoer, namely contrition (expression of regret for the evil committed), satisfaction (which consists of two elements: reparation of the damage that is commensurate with the evil inflicted and repentance) and reconciliation itself.

For forgiveness to be granted to the wrongdoer, the wrongdoer's contrition and satisfaction are needed—these acts are prerequisite and sufficient for forgiveness to occur, assuming that there is a will to forgive on the part of the wronged. Importantly, in many cases, satisfaction comprises two elements: commensurate and fair reparation of all damage caused by the wrongdoer and some form of repentance that compensates for the harm done. Griswold distinguishes four elements of satisfaction: "repentance, apology, reparation, and what, for want of a better word, I shall call penance (though not all of these are always required)" (Griswold 2007, p. 60). We can, of course, speak of forgiveness that does not require satisfaction, or unconditional forgiveness, as Griswold further emphasizes. However, as Scruton counters, forgiveness cannot be given to everyone, because it would become a kind of indifference, failing to recognize the distinction between good and wrongful deeds. For it seems that only when "the person apologizes [and] the contrition is proportionate to the offense, a process begins that might have forgiveness as its outcome" (Scruton 2017, p. 85), and what follows is reconciliation.

From that standpoint, the wronged should refuse to forgive the wrongdoer unless the latter displays contrition and makes amends. Conversely, if the wrongdoer does express contrition and make amends, then the wronged would do unwisely to withhold forgiveness. Typically, it is assumed that forgiveness granted to the wrongdoer is a sufficient act in the pursuit of reconciliation: the wrongdoer is absolved of guilt, and the path to reconciliation between the wronged person and the wrongdoer is opened, making it possible for the latter to be restored to their normal place in the community. In truth, however, the matter is much more complicated.

3.1. The Case of John Newton

In his youth, John Newton made several voyages as captain of ships carrying slaves from Africa[3]. Thus, he contributed to the deaths of many of the slaves, and those who survived the journey were then sold. At a certain point in his life, however, Newton had a spiritual conversion as a result of which he later became an Anglican priest and a highly respected citizen. Over time, he realized the enormous amount of evil he had committed as a slave trader. He undertook to make amends: he publicly admitted his wrongdoings, thus putting his hard-earned social status at risk, and began to fight for the complete abolition of slavery. Ultimately, in 1807, his efforts contributed to the prohibition of the slave trade.

In Newton's case, one is presented with true contrition (sincere remorse for the evil he had committed) and satisfaction in the form of reparation of damage—the prohibition of the slave trade to which Newton largely contributed. However, Newton's actions as described above cannot be sufficient to achieve reconciliation. In that respect, two fundamental questions arise. Firstly, if the descendants of the former slaves have regained their freedom as a result of the abolition of slavery, can they grant forgiveness on behalf of those who died on the slave ships? Secondly, is such forgiveness sufficient for reconciliation to occur? In other words, can the wrongdoer be restored to his normal place in the community?

3.2. Forgiveness and Love

Love encompasses two interrelated desires: the desire for the good of the beloved person and the desire for union with that person (ST I-II, q. 26, a. 1). Forgiveness, which has reconciliation as its purpose after all, is connected with love. A refusal to forgive is tantamount to the absence of love, whereas forgiveness always means the existence of some degree of love towards the wrongdoer.

As noted above, love is the desire for the good of the beloved person and for union with that person, which means that the absence of either of these desires precludes the fullness of love. Additionally, insofar as forgiveness presupposes love, the absence of

either of the desires that constitute love also invalidates forgiveness. If this is indeed the case, one may not speak of forgiveness not only when there is no desire for the good of the one who has committed the wrongdoing, but also when the wronged has no desire of being united with the wrongdoer. Following this line of reasoning, forgiveness can be unilateral—without contrition or satisfaction on the part of the offender. It is the wronged person who decides whether they wish good upon (or for) the one who has wronged them and whether they wish to be united with the latter.

At the same time, whether the desires for good and union are fulfilled depends on the wrongdoer's state. How does one deal with the fact that the wrongdoer not only refuses to express contrition towards the wronged, but also continues to do harm? If the wronged wishes good upon the wrongdoer and desires union with the latter, but the wrongdoer intends to continue to harm them, then the desire for communion with the wrongdoer contradicts the wronged person's first desire; that is, the desire for the good of the wrongdoer. This is due to the fact that by allowing themselves to be harmed, the wronged person permits the wrongdoer to do harm towards them. This means that their desire for the good of the loved one is only apparent, which contravenes the ideas of love and forgiveness.

As discussed above, unilateral forgiveness is possible just as unreciprocated love is. However, neither the desire for love in connection with forgiveness nor the desire for love as such is—in and of itself—effective in fulfilling the ultimate goal of union. A person who loves or a person who forgives must always take into account the state of the person towards whom their love or forgiveness is directed; they cannot achieve what they desire (i.e., union) through the power of forgiveness or love alone.

Similarly, if a great evil is committed, then even if the wrongdoer displays contrition and makes amends, this may not be sufficient to erase the guilt or make reconciliation morally acceptable, since the reasons and consequences of the wrongdoing must still be taken into consideration. On the part of the wrongdoer, one may identify the following issues:

(i) Morally wrong states of intellect and will and the corrupt habits from which they stem or to which they contribute (when Newton traded in slaves, he saw no evil in it);
(ii) The fact that even if the wrongdoer feels contrition after a certain amount of time, he may still lack the inner restraint that says "I must not do it" with respect to certain morally wrong deeds;
(iii) The fact that Newton's wrongdoing remains part of his present (since the memory of the evil acts causes suffering).

In addition, one needs to consider the consequences of the offender's morally wrong acts in the external world, that is, the suffering that Newton caused to people (death, captivity, objectification). Newton's contrition alone, his remorse and amends are not sufficient, since there remains the question of the irreversible consequences of his wrongdoing (suffering and death) and of how they can be repaired.

3.3. Forgiveness and Theology

As clearly demonstrated above, the acts of the wronged and the wrongdoer may in themselves prove insufficient to lead to reconciliation, or in other words, to reincorporate the wrongdoer into the network of proper social relations. On the part of the wrongdoer, contrition may remove some of the wrongdoer's guilt, but it has no impact whatsoever on the effects of the evil acts in the world. Furthermore, contrition alone cannot restore the wrongdoer to the standing they had in the community before the evil was committed, and neither can the satisfaction—including both the wrongdoer's commensurate reparation of the damage inflicted and their repentance—invalidate the harm caused and the evil committed, thus leading to reconciliation. The acts performed by the wronged person—that is, forgiveness and love, even if one considers them obligatory[4] (towards those who display no contrition)—do not in and of themselves lead to reconciliation. Bilateral forgiveness can only be achieved in full through reconciliation (Spaemann 2001). If, however, one truly

wants to achieve the union that enables the bond to survive more than does its absence, then from that perspective, humans are obliged to both forgive and love. Incorporating a theological context into the discussion, it is important to expand the distinction between the wrongdoing committed (sin) as a deed/act and its effect (guilt) by considering the fact that the guilt incurred relates not only to the person who was wronged, but also to God. By committing an evil act, the wrongdoer is not only unable to repay his debts to the person whom they have harmed (as in Newton's case), but also, in and of themselves, unable to ever repay their debt to God.

This is due to the fact that the consequences of the wrongdoing are often irreversible from the human point of view, which is evident on a number of levels in relation to the Newton case under consideration:

(a)   The acts in question will not bring the dead back to life.
(b)   The consequences of the evil committed remain present in the perpetrator's memory, causing the perpetrator to have a guilty conscience.
(c)   The consequences of the evil committed affect the relationships that are now being built with the perpetrator.
(d)   The consequences of the evil committed upset the relationship between man and God.

A moral wrong that stems from misused freedom has an "ontic" dimension in that it reaches the depths of being itself, disrupting the creative order and upsetting the harmony between God and creation, and cannot therefore be reversed by man himself (Kałuża 2015).

For example, according to St. Anselm, the redemption brought by Christ is based on the conviction that while humanity has a great debt to repay due to the wrongful acts it has committed, it is unable to repay that debt (Anzelm z Canterbury 2006; Wójcikowski 1992; Kempa 2010). Only Christ—as both God and man, bringing together rather than blending the Divine nature and human nature—can repay the debt owed by man; as a man, He is part of the species that owes the debt, and as God, he has the means to repay it. At the same time, "in the union of these two natures, Jesus Christ is the guarantor and witness of our reconciliation" (Barth 1966). The teaching of St. Paul is very clear in that respect (Ephesians 2:14–17): reconciliation is a free and gratuitous initiative of God who unites humanity with Himself in Christ. The effectiveness of His grace of forgiveness and reconciliation also consists of the fact that in Christ, the dividing wall of hostility between people is torn down. Since reconciliation with God is not possible without reconciliation between people, it is through the Cross of Christ that the way to successful reconciliation with God and man is opened (Sesboüé 2015; ST III, q. 48, a. 1, a. 2 and a. 3).

This was also Newton's understanding, for he was convinced that only the "amazing grace" could have found him and renewed him. Newton's actions were only a response to the grace previously granted by God, and the amends made by Newton became incorporated into the effects of that grace. While it is not easy to set the limits of morality or pronounce what moral wrong is, it appears that—as Newton's story shows—the experience of suffering or misery, and especially misery of the most vulnerable, may serve as a "boundary stone." Limitations—not only physical, but also and above all moral—are statements about man, since they express our fundamental finiteness, fragility and fallibility (Gaitán 2019; Szopa 2021).

It is in this very context of experiencing the different forms of limitations that we would like to emphasize the special role of religion. Against the background of this dissonance between our growing desire to transform the world and our (in)ability to change our moral lives "for the better," the Christian religion seems to act as a belief system that can successfully integrate suffering and evil. It does so not by disregarding the issue of evil and suffering, but by relating these concepts to God and to relationships with other human beings, having in view the reconciliation that can be attained rather than moral justice alone. The Christian religion, and especially the Christian tradition, relates negative facts of life—suffering, failures, injustices and errors—to God's reality, thus making it possible to transform these facts into values which are interiorized and therefore capable of being accepted. Therefore, religion can in a sense be perceived as a

method of transforming empirical facts—such as death or injustice—into values. Thanks to this transformation, a "fact of life" is not merely what it appears in the empirical or phenomenological layer, but above all, a component of a teleologically organized order. The latter statement means that there is a deeply rooted mechanism of "explaining evil" in us whereby we typically perceive fate, suffering, evil, sin, injustice, etc. as pieces of a larger whole, that is, a network of relationships with God and with other people. Religion is the means by which one can acquire a more acute "elucidating" outlook on the problems of evil, suffering or forgiveness.

4. Forgiveness: Naturalistic and Religious Perspectives Confronted

4.1. Unity between People

From a naturalistic, cognitive or evolutionary point of view, human behavior and human moral norms (sense of guilt, duty of forgiveness, desire for reconciliation) can be construed as useful mechanisms through which human beings strengthen their inter-group or intra-group solidarity. Such solidarity is a precondition for the coherence of a given group or society, making humans capable of surviving and effectively defending against external or internal threats. In this context, the studies conducted by Sosis and Ruffle (2003) and by Sacco et al. (2017) are highly relevant to our analysis[5].

In the case of the first study, the quantitative investigation directly tested the prediction that religiously driven groups, particularly those incorporating costly signals of commitment to the community, exhibit greater intra-group cooperation. Sosis and Ruffle conducted experiments at Israeli kibbutzim that were aimed at measuring individual cooperative decision making. They found that members of religious kibbutzim engage in collective rituals much more frequently than do members of secular ones. The main conclusion from their investigation is that "collective ritual participation influences beliefs (perceived levels of cooperation) and behavior (cooperative decisions) and therefore assume [. . .] that ritual participation enhances the social bonds that connect its participants" (Sosis and Ruffle 2003, p. 721). It is important to note, however, that the data provided in their research, as well as the experimental game data (which captures the notion of cooperation as relevant to the social conditions of the kibbutz), are incapable of distinguishing the causal direction of this relationship.

In contrast to the above study, Sacco et al. do not directly discuss the impact of religious components on human behavior. Nevertheless, they describe certain general rules of a deontological strategy helpful for navigating moral conflicts that seem to confirm the special role of deontological concepts, moral values and ideas in facilitating positive relations among conspecifics. For the purposes of their study, the authors differentiate between deontological decisions, which rely on rule-based logic (e.g., it is always wrong to hurt someone), and moral decisions guided by utilitarianism, which rely on cost–benefit analyses (e.g., it is acceptable to harm one person if it saves several others). Their main idea is that "because deontological moral decision-making is defined by rule-based criterion [. . .], an individual who adopts this moral framework may be perceived as more interpersonally likeable and trustworthy because their moral decision-making strategy is predictable. Conversely, because utilitarian decision-makers primarily engage in cost-benefit analyses when making moral decisions [. . .], individuals may suppress their attraction toward this type of person because one might ultimately become a victim of this person's moral decision-making" (Sacco et al. 2017, p. 130). Thus, their research confirms that the constant sharing of certain ideas and beliefs can provide better chances of survival not only at the level of inter-group competition, but also at the level of intra-group competition. The authors' general conclusion is that "human morality may have evolved to maximize group cooperation by codifying a set of social exchange rules that reduce anti-social behavior of individual group members that would interfere with the effective survival of a particular group" (Sacco et al. 2017, p. 131). A possible extension of the results of their study to the case of religiously driven morality could be based on the fact that religion is one of the best possible cultural candidates for signaling trustworthiness to

other members of a given group. The sharing of religious beliefs—such as the belief that the way to successful reconciliation with God and man is opened through the Cross of Christ—can work as a signal of reciprocal altruism, which is a hallmark of cooperation despite difficulties in resolving moral conflicts between members of the community.

From a theological point of view, the fact that man was created in God's image and after God's likeness (Genesis 1:26) has a number of important implications to the understanding of unity between people. According to Thomas Aquinas, the idea of the "image of God" in man defines the dynamic reality planned out for him in the very act of creation (ST I, q. 4, a. 3), since man was not created by God in some "finite state," but rather endowed with certain immutable elements of nature and is therefore called to strive for a perfection that is yet to be attained. In addition to freedom and reason as the constitutive attributes of man, man's social nature also follows from the fact that he was created in the image and after the likeness of the Triune God. From a theological perspective, the understanding of human subjectivity begins with the acknowledgement of its relational character (Woźniak 2012), since man was created to live in communion with God and in communion with other people (Choromański 2015). Such a vision of theological anthropology also stems from the concept of the Triune God: a community of persons in a relationship of love. The grace that God grants to man does not abolish the relational nature of man, but perfects it and raises the natural powers of cognition and love to the level of supernatural life. In the words of Karol Wojtyła, "man finds in himself a certain imperative to live in community with others and carries this imperative in himself wherever he goes, even when he becomes separated from other people [. . .]. [Living in community with others] is therefore not a matter of choice by will. Man can, to a certain extent, choose the people with whom he socially affiliates more closely, but the very propensity for social affiliation is inherent in him by nature; it cannot be chosen or rejected" (Wojtyła 1982, p. 111). Wojtyła's understanding of moral behavior sheds new light on interpersonal relationships. For Wojtyła, the human person is such a value in itself that the only appropriate relation of a person to a person is the affirmation of personal dignity, and this affirmation is nothing else than love (Wojtyła 2001). A group or community of people is prerequisite for one's existence and development as a person, and living in a relationship with others is an inalienable attribute of a human being (Wojtyła 2011). However, as demonstrated above, the evil committed by a person disrupts the union with others and precludes the fulfillment of the relationality inscribed in the human nature (Kutarňa 2020). As a result, that person falls into a situation where the consequences of his or her own choices prevent him or her from fulfilling his or her own nature. A major question thus arises concerning the role of religion as the factor that enables not only acts of forgiveness, but also acts of reconciliation that make one capable of being fully reincorporated into the network of relationships between people and between man and God.

4.2. Reconciliation and Forgiveness

As we have previously demonstrated, in the moral life of a human person, the evil which that person has committed may prevent reconciliation with the perpetrator, thus precluding complete reconciliation. The question thus arises of where such a strong need for unity, forgiveness and reconciliation in humans comes from. Is this need only a type of cognitive mechanism or rather a social adaptation that makes us capable of creating both complex and stable forms of social life? In our analysis, we do not question the fact that CSR or ESR can, to a degree, describe the neuronal, mental or cultural mechanisms responsible for the biological inheritance of such abilities in our species and their evolutionary development within different civilizations, cultures or religious traditions. We are not denying that it is practically and theoretically possible to reduce various components of religion—such as behavior, beliefs, values, moods and feelings—to phylogenetic or cultural adaptations (Feierman 2009). At the same time, however, we can see that it may be problematic to apply such scientific explanations to the question of reconciliation.

It is our view that in the case of forgiveness and reconciliation, for instance, CSR would mainly try to pinpoint our capacity to seek reconciliation, most probably as a by-product or an adaptation of some cognitive mechanism enabling us to maintain effective intra-group and inter-group cooperation. However, as we have demonstrated above, the semantic content of reconciliation does not necessarily follow from forgiveness. In other words, reconciliation goes beyond what is required by mere forgiveness. ESR, on the other hand, might attempt to analyze the acts of forgiveness and reconciliation as a type of evolutionary adaptation that maximizes cooperation within a group by codifying a set of social and religious rules to reduce members' anti-social behavior which would interfere with the aims and survival of that particular community. Moreover, one's willingness to perform acts of reconciliation may allow one to achieve the status of a fair arbiter or moral exemplar unselfishly committed to the community. Again, we remain puzzled by the fact that mere forgiveness—rather than reconciliation—seems to be sufficient for an evolutionary adaptation aimed at maintaining effective intra-group and inter-group cooperation or eusociality (i.e., humans' capacity to put the welfare of their in-group breeding population above that of themselves).

One might argue that for cohesion and cooperation to occur, the norms in the form of a punishment and reward system must have a sufficient impact on social cohesion. However, in the anthropological vision we are presenting, externally imposed obligations are a necessary condition for building social relations, but not a sufficient one (Wood 2020). From the point of view of morality, our relationships do not merely function in terms of punishment and reward. On the contrary, personal relationships are often of the greatest importance to the foundation of conventional affordances: family relationships, responsibility, honor, sense of duty, love, friendship, etc.

Although we do not disregard the fact that moral acts of forgiveness and reconciliation (as defined above) may be partially heritable and evolutionarily driven at the social and cultural levels, it does not follow that such acts, when analyzed from a theological and philosophical point of view, are simply genetically heritable or produced by certain cognitive or adaptive mechanisms. The Christian moral experience of reconciliation is not the same thing as a propensity to cooperate with others and abide by established social rules, although such experience is not at odds with the natural cooperativeness that we are discussing below. Moreover, it seems to us that to treat the historical continuity of the Christian faith and the powerful and amazing role of forgiveness and reconciliation in human life (as in the case of Newton) merely as a useful fiction or a by-product of human cognition is explanatorily insufficient.

In the case of the above argument, holding the view that religiously driven reconciliation is a by-product of selection, a backward reasoning can in fact be suggested. Belief in the moral value of reconciliation may not have been merely produced by our brains or genetic heritage. Instead, by referring to the historical and, at the same time, supra-historical salvific event of Christ's death and resurrection as the absolutely unique yet universal path of reconciliation between God and humanity and between men, Christian tradition opens a path for believers in Christ to engage in social (community) learning of such religious behavior. Such a reference in the Christian tradition to the need for forgiveness and reconciliation is evidence of not only the role of deontologically based moral rules (i.e., the difference between moral good and evil), but also the immutable meaning of the Christian teaching on reconciliation. If the moral or religious act of reconciliation was to be treated as nothing more than a result of the evolutionary process of natural selection or a by-product of some cognitive mechanism, then one should provide some inductive scientific research that shows a positive correlation between potentially adaptive or cognitive features of the experience of forgiveness and reconciliation and the reproductive success of their bearers.

The main message that can be taken from our analysis is that there is an invariant value in reconciliation as seen from a religious point of view. Even if the issue of reconciliation is contextually and culturally driven in its different contingent expressions (i.e., various religious traditions, different theological models or explanations, etc.), it nevertheless

remains difficult to explain the powerful influence and insistence of the Christian idea of reconciliation on so many aspects of human morality from a cognitive or evolutionary perspective alone. The difficulty stems from the fact that acts of reconciliation are very costly from a psychological or emotive point of view. If the religious elements have arisen as evolutionary by-products of cognitive functions or as an adaptation or something that possesses adaptedness, the insistence on the importance of reconciliation seems to be an explanatory puzzle for the two reasons discussed below.

Firstly, if natural selection essentially maximizes fitness, it is puzzling why it has not stopped the development of religious components such as reconciliation, which are both costly and counterintuitive. Acts of reconciliation are costly in terms of time, energy and emotions. From one's long-term existential perspective, they may become highly useful and adaptive (offering such benefits as a sense of relief, reintegration of the wrongdoer in the network of social relationships, rediscovery of the meaning of life, etc.). Initially, however, they are too extravagant in comparison with other possible cultural tools, such as the basic sense of justice or acts of forgiveness.

Secondly, we notice at the same time that forgiveness does not always seem to be costly. In some cases, forgiving appears to be a quick and inexpensive way to restore harmony or cooperation. It appears that forgiveness may allow for less stress and anxiety within religious communities and societies. If one considers the Christian religion, they may note that certain kinds of rituals (such as the confession of sins) or moral norms (such as "love your enemies and pray for those who persecute you" (Matthew 5:44)) regarding forgiveness are very effective tools in the process of restoring community or social structure. This easiness and quickness of experience of forgiveness may, from an evolutionary point of view, be due to the fact that costly acts can be chosen because the evolutionary benefits outweigh the costs in the long run, which, at the same time, seems to be compatible with the theological view. In fact, from a theological perspective, grace does not nullify nature, but perfects it. Therefore, even the natural facility to forgive and reconcile is not something that would exclude the action of grace.

Regardless of whether we want to explain the emergence of religious beliefs through the lens of CSR or through the lens of ESR, these explanations remain incomplete and rely on certain implicit anthropological assumptions, such as viewing human beings as being self-conscious and as bearers of advantages at the group level. In fact, as a rule, CSR considers religious content to be a by-product of other cognitive mechanisms and therefore treats cognition as the most primitive human function, thus essentially reducing the understanding of a human being to his or her cognitive functions; a similar approach, although from yet another entirely different perspective, was taken by Edmund Husserl (Galarowicz 2000). Additionally, as regards ESR, it sees religion as a carrier of certain adaptive functions that increase individuals' chances of survival by ensuring social cohesion and providing advantages at the group level. However, our analysis indicates that this perspective may at most explain the obligatory nature of acts of forgiveness in different religions, but does not differentiate between such acts and acts of reconciliation. At the same time, it appears that it is the acts of reconciliation that can fully restore a wrongdoer to proper social relationships.

5. Conclusions

Among the many modern empirical approaches to the study of religion, two clearly come to the forefront: the cognitive approach (CSR) and the evolutionary approach (ESR). Although the two methods attempt to explain religion through the application of, respectively, cognitive and neurological or biological/evolutionary means, it has to be noted that from the current point of view, explaining religion is not a matter of accounting for a single (cognitive or functional) trait. Instead, it involves explaining a very complex repertoire of patterns of thinking and behavior where any given religious belief is affected not only by cognitive or functional traits, but also by the cultural and social context and by the

pragmatic power of the content of supernatural beliefs (e.g., the concept of supernatural agents or the concept of an afterlife).

In our article, we pointed out the important differentiation—both philosophical and religious—between forgiveness and reconciliation. This differentiation helped us identify certain advantages and limitations of the empirical study of religion as it applies to our case study. On the basis of our analysis of the modern approaches to religion, we are convinced that in the context of CSR or ESR, we could propose to undertake an empirical study of the phenomenon of forgiveness that aims to determine whether religious components have an impact on the disposition to forgive. For instance, such a study could analyze how engaging in religious practices influences people's beliefs (the perceived importance of forgiveness in social life) and behavior (the decision to forgive). Alternatively, it could attempt to describe the mechanisms behind deontological decisions that rely on rule-based logic (i.e., "forgive us our trespasses as we forgive those who trespass against us"). At the same time, we endeavored to underline the fact that acts of reconciliation as presented by the Christian religion remain a great explanatory puzzle for the CSR or ESR accounts.

The latter conclusion does not mean that we assume a priori that an empirical study of religion cannot, to some degree, adequately explain the role, development and transmission of such religious components. We are not "protectionists" (McCauley 2020, pp. 100–3) who simply have objections to and try to displace comparatively successful scientific theories of religion. We assume the legitimacy of explaining religious phenomena in nonreligious terms in light of the explanatory principles employed in the social and natural sciences as well as in phenomenological or supernaturalistic terms. Our aim in making critical remarks about the empirical study of religion essentially concerns the fact that the reduction of biology to genetics is responsible for certain difficulties in explaining the evolution of religious components or the inadequate formulation of what needs to be explained. We consider it highly pertinent to move the debate on the study of religion beyond general concerns regarding "reductionism," towards a discussion on how to provide proper explanations of religious phenomena. Since religion and religious components cause a diverse and highly complex spectrum of effects (from direct impacts on survival, reproduction, social bonds and cooperative attitudes to spiritual or mystical experiences that do not maximize fitness or reproductive success), it can be suggested that religion should be treated as more than a reservoir of genetic or behavioral "tools" designated by natural selection for enhancing humans' chances survival and reproduction. The evolution of religion is driven not only by genes, but also by human choices and consciousness. One of such choices, as discussed above, is to "forgive those who trespass against us" (cf. Matthew 6:12) and "be reconciled to God" (2 Corinthians 5:20). In this context, religion seems to be a way of acquiring something that transcends moral (social or individual) abilities, rather than simply a domain of transmitting that which was inherited.

Notes

[1] For the purposes of our discussion, we have adopted the definition of adaptation as "a structural design feature, which when possessed, confers a reproductive advantage (also known as "fitness" or survival value) to its bearer in a specific environment" (Feierman 2009, p. 52).

²　The starting point for the analysis provided below is Professor Eleonore Stump's lecture entitled "Sunflower: Guilt, Forgiveness and Reconciliation," which was delivered on 22 June 2018 at the Thomistic Institute in Warsaw.

³　John Newton (1725–1807)—slavery abolitionist known as one of the co-founders of Evangelicalism and the author of the hymn "Amazing Grace".

⁴　It is also worth pointing out that if forgiveness is mandatory, then there exists a clear asymmetry where the obligation to forgive on the part of the wronged person is not matched by any right to forgiveness that the wrongdoer might claim (Spaemann 2001, p. 287).

⁵　Although in our analysis we mainly focus on the fact that religion has played a role in human social evolution by serving to unite groups into coheisve, functional social units, we are nevertheless aware that at least two important aspects are in need of further analysis, which is beyond the direct aims of this paper: on the one hand, the evolutionary role of cohesion or trustworthiness signalling can also result in violence or other evil acts, and on the other, both cohesion and cooperation can also be achieved by excluding wrongdoers or calling for reparation or compensatory suffering (Teehan 2016; Eyghen 2021).

References

Anzelm z Canterbury. 2006. *O Wcieleniu. Wybór pism*. Translated by Adam Rosłan. Poznań: Fundacja św. Benedykta.

Barth, Karl. 1966. *Dogmatique IV/1 (La Doctrine de la Reconciliation)*. Geneva: Labor et Fides.

Braillard, Pierre-Alain, and Christophe Malaterre. 2015. *Explanation in Biology: An Enquiry into the Diversity of Explanatory Patterns in the Life Sciences*. Dordrecht and Heidelberg: Springer.

Choromański, Andrzej. 2015. Osoba ludzka jako "byt relacyjny"—Antropologiczne fundamenty eklezjologii Soboru Watykańskiego II. *Studia Teologii Dogmatycznej* 1: 58–87. [CrossRef]

Cole-Turner, Ron. 2020. New Perspectives on Human Origins: Three Challenges for Christian Theology. *Theology and Science* 18: 524–36. [CrossRef]

Dawkins, Richard. 2008. *The God Delusion*. Boston: Mariner Books.

de Waal, Frans. 2006. *Primates and Philosophers: How Morality Evolved*. Princeton and Oxford: Princeton University Press.

Eyghen, Hans Van. 2021. Biases for Evil and Moral Perfection. *Religions* 12: 521. [CrossRef]

Feierman, Jay R. 2009. How Some Major Components of Religion Could Have Evolved by Natural Selection? In *The Biological Evolution of Religious Mind and Behavior*. Edited by Eckart Voland and Wulf Schiefenhövel. Berlin and Heidelberg: Springer, pp. 51–66.

Feierman, Jay R. 2016. Religion's Possible Role in Facilitating Eusocial Human Societies. A Behavioral Biology (Ethological) Perspective. *Studia Humana* 5: 5–33. [CrossRef]

Futuyama, Douglas J., and Mark Kirkpatrick. 2017. *Evolution*, 4th ed. Sunderland: Sinauer Associates.

Gaitán, Leandro. 2019. Heaven on Earth: The Mind Uploading Project as Secular Eschatology. *Theology and Science* 17: 403–16. [CrossRef]

Galarowicz, Jan. 2000. *Człowiek jest osobą. Podstawy antropologii filozoficznej Karola Wojtyły*. Kęty: Wydawnictwo ANTYK.

Griswold, Charles. 2007. *Forgiveness: A Philosophical Exploration*. Cambridge: Cambridge University Press.

Kałuża, Krystian. 2015. Odkupieni w Jezusie Chrystusie? Soteriologia chrześcijańska wobec wyzwań islamu. *NURT SVD* 2015: 29–55.

Kempa, Jacek. 2010. Metafizyczne podstawy Cur Deus homo. *Teologia w Polsce* 4: 305–15.

Kutarňa, Andrej. 2020. Hierarchy and Likeness—Ways to Union with God in Pseudo-Dionysius and Aquinas. *Biblica et Patristica Thoruniensia* 13: 189–98. [CrossRef]

Lawson, E. Thomas, and Robert N. McCauley. 1990. *Rethinking Religion: Connecting Cognition and Culture*. Cambridge: Cambridge University Press.

McCauley, Robert. 2020. Recent Trends in the Cognitive Science of Religion: Neuroscience, Religious Experience, and the Confluence of Cognitive and Evolutionary Research. *Zygon* 55: 97–124. [CrossRef]

Miłkowski, Marcin, Robert Clowes, Zuzanna Rucińska, Aleksandra Przegalińska, Tadeusz Zawidzki, Joel Krueger, Adam Gies, Marek McGann, Łukasz Afeltowicz, Witold Wachowski, and et al. 2018. From Wide Cognition to Mechanisms: A Silent Revolution. *Frontiers in Psychology* 9: 1–17. [CrossRef]

Moritz, Joshua M. 2020. Are Hominins Special? Human Origins as the Image and Likeness of God. *Theology and Science* 18: 537–51. [CrossRef]

Moss, Lenny. 2003. *What Genes Can't Do*. Cambridge: MIT Press.

Norenzayan, Ara, Joseph Henrich, and Edward Slingerland. 2013. Religious Prosociality: A Synthesis. In *Cultural Evolution*. Edited by Peter J. Richerson and Morten H. Christiansen. Cambridge: MIT Press, pp. 365–79.

Norenzayan, Ara, Azim F. Shariff, Will M. Gervais, Aiyana K. Willard, Rita A. McNamara, Edward Slingerland, and Joseph Henrich. 2016. The Cultural Evolution of Prosocial Religions. *Behavioral and Brain Sciences* 39: 1–19. [CrossRef]

Oviedo, Lluis. 2018. Explanatory Limits in the Cognitive Science of Religion: Theoretical Matrix and Evidence Levels. In *New Developments in the Cognitive Science of Religion. The Rationality of Religious Belief*. Edited by Hans van Eyghen, Rik Peels and Gijsbert Van den Brink. Cham: Springer, pp. 15–34.

Richerson, Peter J., and Morten H. Christiansen, eds. 2013. *Cultural Evolution*. Cambridge: MIT Press.

Robert, Jason Scott. 2004. *Embryology, Epigenesis, and Evolution. Taking Development Seriously*. Cambridge and New York: Cambridge University Press.

Sacco, Donald F., Mitch Brown, Christopher J. N. Lustgraaf, and Kurt Hugenberg. 2017. The Adaptive Utility of Deontology: Deontological Moral Decision-Making Fosters Perceptions of Trust and Likeability. *Evolutionary Psychological Science* 3: 125–32. [CrossRef]

Sasa, Horvat, and Piotr Roszak. 2020. Is Religion Only Utilitarian? Evolutionary Cognitive Science of Religion through a Thomistic Lens. *Theology and Science* 18: 475–89.

Scruton, Roger. 2017. *On Human Nature*. Princeton and Oxford: Princeton University Press.

Sesboüé, Bernard. 2015. *Jezus Chrystus Jedyny Pośrednik. Rzecz o odkupieniu i zbawieniu*. Translated by Agnieszka Kuryś. Poznań: W Drodze, vol. 1, pp. 533–49.

Sosis, Richard, and Candace Alcorta. 2003. Signaling, Solidarity, and the Sacred: The Evolution of Religious Behavior. *Evolutionary Anthropology* 12: 264–74. [CrossRef]

Sosis, Richard, and Bradley J. Ruffle. 2003. Religious Ritual and Cooperation: Testing for a Relationship on Israeli Religious and Secular Kibbutzim. *Current Anthropology* 44: 713–22. [CrossRef]

Spaemann, Robert. 2001. *Osoby. O różnicy między czymś a kimś*. Translated by Jarosław Merecki. Warsaw: Oficyna Naukowa.

Szocik, Konrad. 2018. Adaptationist Accounts Can Tell Us More About Religion Than Cognitive Accounts Can. In *New Developments in the Cognitive Science of Religion. The Rationality of Religious Belief*. Edited by Hans van Eyghen, Rik Peels and Gijsbert Van den Brink. Cham: Springer, pp. 93–108.

Szocik, Konrad. 2019. What is Right and What is Wrong in the Darwinian Approach to the Study of Religion. *Social Evolution & History* 18: 210–28.

Szocik, Konrad, and Hans van Eyghen. 2021. *Revising Cognitive and Evolutionary Science of Religion*. Basel: Springer.

Szopa, Rafał. 2021. Is transhumanism heading towards redefinition of human being or towards Utopia? *Scientia et Fides* 9: 197–214. [CrossRef]

Teehan, John. 2016. Cognitive Science, Evil, and God. In *Advances in Religion, Cognitive Science, and Experimental Philosophy*. Edited by Helen de Cruz and Ryan Nichols. London and Oxford: Bloomsbury, pp. 39–60.

Uhlik, Marcin Edward. 2020. Could There Have Been Human Families Where Parents Came from Different Populations: Denisovans, Neanderthals or Sapiens? *Scientia et Fides* 8: 193–221. [CrossRef]

Wojtyła, Karol. 1982. *Elementarz etyczny*. Wrocław: Wydawnictwo Wrocławskiej Księgarni Archidiecezjalnej.

Wojtyła, Karol. 2001. *Miłość i odpowiedzialność*. Lublin: Towarzystwo Naukowe KUL.

Wojtyła, Karol. 2011. *Osoba i czyn oraz inne studia antropologiczne*. Edited by Tadeusz Styczeń, Wojciech Chudy, Jerzy W. Gałkowski, Adam Rodziński and Andrzej Szostek. Lublin: Towarzystwo Naukowe KUL.

Wood, Connor. 2020. Antistructure and the Roots of Religious Experience. *Zygon* 55: 125–56. [CrossRef]

Woźniak, Robert. 2012. *Różnica i tajemnica. Objawienie jako teologiczne źródło ludzkiej sobości*. Poznań: W Drodze.

Wójcikowski, Adam. 1992. Nauka o odkupieniu św. Anzelma z Canterbury. *Studia Theologica Varsaviensia* 30: 55–87.