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THE RELATIONSHIP BETWEEN RELIGION AND SOCIETY FROM THE EVOLUTIONARY PERSPECTIVE; THE "EVOLUTIONARY WAGER OF RELIGION"

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Abstract

The article analyses the social utility of religion from an evolutionary perspective, identifying some important contributions that religion may have had in the emergence of man and humanity. The article can be interpreted as a reformulation of Pascal's wager in which we bet on the social utility of religion: If God exists, I have won! If God does not exist, but we are immersed in a system of religious beliefs that support community development we have also won! The condition is the social utility of religion. At the same time, we propose "Rotilă's wager": in order to have a chance of survival, religion must bet on the evolutionary approach of its purpose in the history of humanity, namely on the identification of its own domain of competence in the existence of the humane through scientific approaches. Religion risks focusing on issues for which there is no evidence, missing the importance of what it can prove. The chance of religion is to identify its own domain of competence in the existence of the humane through scientific approaches. The truth about religion can be found through the understanding of the emergence and evolution of religion. Religion is based on illusions that have generated useful social institutions; these are part of the category of social fictions, their role being similar to legal fiction. Religion is a precursor to laic institutions, as it is part of their history. We also operate with the "religious mind" hypothesis: the social brain hypothesis includes the hypothesis of the religious brain; if the "dialogue" specific to social existence has led to the increase in the volume (and a form of structuring) of the brain then we can consider that the complex relationships with the deities have played the same role.

Keywords: religious mind; Rotila's wager; evolutionism; social utility; useful fictions; the evolutionary wager of religion;

1. INTRODUCTION

In this article, we do not intend to analyse the impact of a certain religion, by identifying within it each of the contents that justify our hypotheses, but we limit ourselves to suggesting research directions for what might be called the social utility of religion, demonstrated from an evolutionary perspective. We



maintain our initial idea (Rotila, 2018): identifying the evolutionary role of religion, thereby understanding an analysis of the place religion has in the evolutionary path of humanity.

So, we try to identify important contributions that religion might have had in the emergence of human and humanity, exploring both the hypothesis of its evolutionary role and that of religion as a by-product of evolution. Considering that religion is, at the same time, a set of behaviours necessary for the adaptation and an environment that involves adaptation to it, we also consider the hypothesis of adapting to this environment as a survival strategy.

Questioning the adaptive role of religion does not automatically imply stating the necessity of maintaining it. We specify that we do not have an interest in supporting the removal or maintenance of religion. The story is primarily about people and secondly about religion. The starting point is the question of what makes us what we are. In this context, we are interested in the contribution that religion has in developing effective survival strategies. The subject of this article is not the status of religion as a stage that has been overcome in human history (we do not intend to analyse the usefulness/absence of the usefulness of religion at present), but its contribution to the birth of humanity. It is not a goodbye letter addressed to religion, but an attempt to recover what is essential in a relationship that oscillates between inappropriate relationships.

1.2. Some methodological issues

The eidetic reduction suggests that we can find out what the role of religion is (in fact, if it is a fundamental element of the community, something without which the existence of the community would be impossible) if we imagine what happens when we eliminate it. If we could prove that humanity had been impossible without religion, then we would have the strongest argument for a revival of religion in historical order from an evolutionary perspective. We cannot build experimental frameworks to verify such a hypothesis. Apart from the fact that the experimental elimination of religion is a risky intervention, we must keep in mind that this is a society-that-was-religious-and now-it-is-no-more, not a society without religion; in other words, a society over which religion has already exercised its influence, leaving its trace in the mentality. With all these difficulties, the eidetic variation can give us some clues for a first hypothesis check.

A second method of research is the pragmatic analysis of religion, considering that the importance of an idea is given by its contribution to the survival of those who assume it. The approach involves redefining rationality from the perspective of survival interests, justifying the discussion of evolutionary rationality.

2. THE "RELIGIOUS BRAIN" HYPOTHESIS OR THE "RELIGIOUS MIND" HYPOTHESIS?

The hypothesis of the social brain opens the possibility of an argument in favour of religion: since the social requires organizational rules, religion has provided the most effective examples in this respect for a considerable period of time. If brain development has been determined to a significant extent by the existence of social groups, as the social brain theory asserts, then the variables that facilitate social existence are included in the brain/mind structure. To the extent that religious beliefs and behaviours contribute to the regulation of social functioning, we can prove the existence of a place of religion in the evolution of man. In a synthetic formulation: the social brain hypothesis includes the hypothesis of the religious brain because moral religious rules streamline the functioning of the society. If the "dialogue" specific to social existence has determined the growth in volume (and a form of structuring) of the brain then we can consider that the complex relationships with divinities played the same role. Perhaps we can even speak of a mixture between the two classes of relationships, the transfers that allow the birth of morality - as exemplary patterns of behaviour - and the preservation of experience - religion as a form of moral codification through rites. Two questions can guide this research direction: Is there a limit to the size of groups the existence of which is possible in the absence of religion? Is Dunbar's (1993) number overrun possible by means of religion mediation? We are not trying to find the answer to this in this article.

We admit, however, that this is a poor hypothesis to explain the emergence of religion, being challenged by the evidence of the existence of moral behaviours in different primates (De Waal, 2013). This this level, we consider the gradual intervention, by developing morals starting from rules

encountered in other primates, in the way De Waal suggests. However, we consider that such a gradual approach, step by step, cannot explain the appearance of religion by itself. That is why we resort to a complementary hypothesis, namely that of the role of the context of meaning (determined by the closings of the speech universe it puts on stage) of religion. In this way we may find ourselves before a strong argument in favour of the evolutionary role of religion (that is, in challenging its character as a by-product of cultural development).

The attempt to identify brain structures that could be responsible for the religious dimension of existence presumes the possibility of "religious brain". Through the "religious brain" we suggest the hypothesis of religion as an important element in the brain/ mind functioning for millennia. Quoting indicates both the limitation of effects in time and the reduction of religion to a brain dimension/ domain of mind. For the first limitation, we only refer to a stage of evolution, understanding this hypothesis as part of the social brain meta-hypothesis. For the latter, we take into account the role the religious mind can play in what we considered to be the structure of consciousness (Rotila, 2013).

The hypothesis of the religious mind is a specific direction of interrogation. We specify that we are thinking of a weak sense of the term, in the sense of a possible formation of the mind by religion, with a likely impact on brain structures. The attempts to identify brain substrates specific to religious beliefs may face the ontological problem of the differences between the brain and the mind (the ontological problem in its entirety is that of the differences between brain-mind-consciousness). The hypothesis of the religious brain in the strong sense of the term (that of a possible formation of the mind by religion, with a likely impact on brain structures) is unlikely, whereas the hypothesis of the religious mind has sufficient grounds to deserve to be researched. The fundamental difficulty for this hypothesis generates overlapping of the different functions of the mind (namely "of different minds") on the same brain structures. The problem is represented by the multiple cognitive solutions and strategies of action, the religion coming with its own systems. Through the religious mind we are thinking of a dominant area of the mind, which generates its fundamental orientations, not a mental structure that excludes any other form of existence. We discuss the dominant orientations according to which meaning is born in a mind, including the various existence enclaves in which questions (and, consequently, links) to the general (religious) context are missing.

3. TWO WAGERS: A REFORMULATION OF PASCAL'S WAGER AND "ROTILĂ'S WAGER"

If the moral role and the effects in support of socialization remain the most important from a contemporary perspective on religion then religion must bet on the evolutionist approach of its meaning in the history of humanity in order to have a chance of survival. This is the first wager we propose ("Rotila's Wager"), considering that the chance of religion to survive is to identify its own domain of competence in human existence through scientific approaches. We have in mind that the concentration of religion on the supernatural brings with it the risks associated with the absence of scientific evidence for its existence. In other words, religion risks to focus on the issues for which there is no evidence, missing out on those it can prove.

The essence of our argument is that society risks being impossible without the contribution of religion. In this context, we propose a reformulation of Pascal's wager in which we bet on the social utility of religion: If God exists, I have won! If God does not exist, but we are immersed in a system of religious beliefs that support community development we have also won! The chance of religion is that through scientific approaches we have to be able to identify its own field of competence in the human existence. Reversing the perspective of Merrigan (1997: 691), which takes on an idea of Smith (1981), the truth of religion can be found through the understanding of the emergence and evolution of religion, not by immersing into a religion through the path of faith.

1. 4. FUNCTIONAL / SOCIAL ROLES OF RELIGION

4.1. Adaptive role or side effect?

If we consider that religion is a secondary effect of evolution, there is a variant in which we have not yet emerged from the evolutionary framework of the problem: religion could be a by-product with useful effects. Obviously, in this case the discussion moves to the adaptive role of religion, which exists

in the absence of its adaptation character (Sosis, 2009: 321). From the perspective of a methodological prudence we opt for the need of two lines of argumentation: a) to demonstrate the character of structure of religion that is part of the evolution (proof of the evolutionary role); or b) to prove the possibility of being considered at least a by-product with useful effects. Both supporters of the theory of the evolutionary role of religion and those who rely on its by-product character need to explain why evolution would allow the emergence and perpetuation of something as costly as religious behaviour. The hypothesis of social signification, which we discuss in the next section, seems to provide a satisfactory response, located within the social importance of religion.

4.1.2. Social signalling

To the extent that religion entails very high costs for its practitioners, the principle of disability in the evolutionary selection proposed by Amotz Zahavi (1975: 213) can be applied to it: selection favours individuals displaying high cost signals because they have the least probability to cheat. Mutual altruism designates the ability of mutual help of people who are not relatives, being a prerequisite for the community. To the extent religion promotes mutual altruism doubled by signalling systems, it contributes to optimizing the chances for community formation and development.

The behaviours which are costly from an evolutionary point of view which are assumed by religion are useful from a social perspective, signalling the belongingness to a religious community and observance of its rules (Rossano, 2006: 348). These behaviours thus participate in building trust beyond family relationships. We discuss the cost borne out in order to benefit from the advantages of trust. The model is part of what Cosmides and Tooby (1992: 180) have called *deception detection procedures*: For society to exist, a deception detection system is needed. Alongside the specific mental skills developed throughout evolution, religion could add: a) a system of emphasizing compliance with rules, which can increase the probability of honesty (morality); b) a context that increases the chances of deception detection by: b.1) community support; b.2) the pressure for the manifestation of the signs of deception. It is enough to meditate on the confessional role of Catholicism to observe ways to materialize these social mechanisms. The theory of social signalling also has explanatory power for the hypothesis of religion as a by-product.

4.2. The role of social organizer

The historical evidence tends to suggest that the transition to a superior level of inter-group co-operation is simultaneous with the emergence and development of religion. Even if the evidence of direct individual benefits is weak, the impact of religion on the organization of social existence remains under discussion. While the existence of moral rules in the absence of religion can be imagined within the same group, it becomes more difficult to argue in the framework of inter-group co-operation, which increases the likelihood that religious moral rules prove more effective. The relation to a context of common significance is essential, the personal distance towards it making it more likely to be adapted by other groups as well. Religions provide contexts that enable the consensus on important aspects of existence.

4.2.1. Socially useful knowledge

In the horizon of pragmatic approaches, we must take into account the hypothesis of religion as an intermediary of a series of practical knowledge useful for everyday life. The *Illusion of Knowledge* (Sloman and Fernbach, 2017) indicates the role the community has in supporting individual knowledge. However, religion participates in this form of extension/externalization of knowledge, namely cognitive trust, through its institutions and practices. The context of relevant analysis is social knowledge, within which it is possible that precisely the cognitive contribution is the most important part of the social utility (in evolutionary order) of religion. In this case, there are two levels of evolution. Sloman and Fernbach (2017: 147) argue in favour of shared thinking, that is, a form of *social mind*. To the extent that the assumptions are correct, we believe that an interrogation of what created the possibility of this sharing is justified. Our suggestion is that common visions (most of them of religious nature) could have contributed to this settlement in common cognitive prospects. *The division of cognitive work* (Sloman and Fernbach, 2017: 144-147) may have been facilitated by the type of cognitive specialization that characterized the emergence and development of religion. This direction of investigation assumes the

hypothesis of religion as the first step towards science, both being part of the same collective intentionality.

4.2.2. Mediators of co-operation on a wider scale

The solutions for closing the speech universe proposed by religion had a secondary effect (related to the reason for their occurrence): they generated the set of symbols that allowed the unification of larger groups. It is even possible that the emergence of religious symbols responds to the evolutionary pressure generated by population growth and the need for exchanges, namely the need to identify symbols of common understanding. Before the appearance of writing, forms of symbolic codification of the rules were needed to ensure their transmissibility (often including a symbolic presence of ancestors). Partial proof might be that the sliding of religion to the secondary background was possible only after the explosion that the written codification of the experience recorded anywhere through the appearance of the book. Negative social aspects can highlight the importance of religion's symbols as mediators of socialization. If we consider, for example, the practice of placing the foreign element under the sign of the barbarian / sub-human, we can see that it is always based on the highlight of differences. All existences that do not share the values of a group tend to slip into the imaginary of that group towards the non-human/ the deficit of being area. Misunderstandings caused by linguistic differences are part of the story, as does the absence of language. Entities that do not communicate and those whose communication we do not understand are pushed into the secondary background of existence, being excluded from the strong area of social rules (they do not have the legal status of the person).

The possibility of exchanges is conditioned by the existence of similar value structures. The substance of money is trust. The first currency (understood as a mediator of trust) was religion, managing for the first time to achieve forms of trust catalysation on a large scale. In this context, we might consider that the emergence of the economy was supported by religion.

Religion is a system of guaranteeing social investments made by the individual. The idea of their relation to a superior authority may be the one that has ensured their functionality. From this perspective, it contains the evolutionary settings specific to the second level / group level selection.

We consider the hypothesis that each religion favours certain human types (gives them a more favourable social context of affirmation), disfavouring others, as relevant to the research of the role of religion. It raises an essential question: to what extent do religions have mechanisms of integration/exclusion of individuals whose behaviours are located in the area of deviations from the average? Their exclusion could be thought of as a disruption of pre-social evolutionary mechanisms, as it is equivalent to removing accidental mutations (considering that accidental mutations can provide better adaptation solutions in some cases).

Human existence is based on a system of beliefs in a world structure, which is essential for survival. Religion is one of the integrators of these systems. We believe that the role of religion as *moral worldviews*, described by Teehan (2018), reflects a relevant perspective. Even if we do not share the emphasis on the moral dimension of this perspective, considering the term *welthanshaung* (perspective on the world) to be more appropriate, we must agree that each religion is an ethical system containing the set of minimum rules necessary to ensure a form of social organization. Religion is an atypical social contract: you did not initiate and sign it, but you are born into it, adhering to its provisions through behaviour; alternatives are often few.

4.3. The role of rituals. Rituals before morality and religion as a system

The mediation of social signalling by religion (Teehan, 2018: 277) is an important factor in socialization, regardless of the costs associated with different signalling systems. The hypothesis of the support that the moral obtains from the idea of punishments applied by divinity, even if it is questionable for the initial stage of the development of religion, is at least relevant to morality (Teehan, 2018: 276). Since Supernatural Punishment Hypothesis (SPH) proves to be limited, REACH (Religion-Empathy-Cooperation Hypothesis) becomes relevant: „Prosociality results from the triggering of our empathy system by signalling of in-group status. It does not seem to matter whether such signals are religious or

not.” (Teehan; 2018: 277). Even though all rituals have such a role, the spread of religion shows that it probably played the most pro-social role.

Through rites, religions have facilitated the transfer of experience. It is true that we cannot know for sure what the causal order was: the rites were codification models of the experience, after they were embedded in religious models or religions opened the possibility of rituals? The arguments in favour of the hypothesis of the precedence of rituals in relation to the emergence of religion as a system seem to prevail. For example, analysing 414 societies that span the past 10,000 years from 30 regions around the world, using 51 measures of social complexity and 4 measures of supernatural enforcement of morality Whitehouse et al (2019) came to the conclusion that „powerful moralizing ‘big gods’ and prosocial supernatural punishment tend to appear only after the emergence of ‘megasocieties’ with populations of more than around one million people (...) ritual practices were more important than the particular content of religious belief to the initial rise of social complexity.” (Whitehouse and all., 2019).

An argument in favour of the hypothesis of primordality of rituals towards complex social organizations and moral systems is brought by Di Paolo et al. (2010: 70-72), the authors pointing to the importance of spatial coordination and to the capacity to identify social rhythm as primary forms of meaning generation. The experiments presented by the mentioned authors (Di Paolo and all., 2010: 63-69) suggest that there may be fundamental conditioning of mutual relations applicable to all agents with which it comes into contact whom we might consider as having the value of "transcendentals of cooperation "in this type of environment. One of the explanatory assumptions is to regard rituals and religion as a form of social choreography that belongs to the destiny of the social evolution of humanity, being the intermediaries of the complex socialization level.

4.4. Specific ways to see

Religion brings with it a complex of settings of intentions, opening up specific ways of seeing it. However, it uses a lot of predetermined evolutionary functions (it joins them in a system), in parallel with the launch of new paths of evolution. While the widening of the field of vision, determined by the bipedal position (we do not know the causal relationship here), contributed to the cognitive leap represented by the perception of the future (the entrance into time), then the expansion of the horizon that religion had ensured also had a cognitive contribution.

The whole story of the changes brought about by the shift from animism to theism, presented by Harari (2017: 85-90), is an illustration of the establishment of a way of seeing (and being) useful from a pragmatic perspective. To the extent that the author's perspective can be sustained, we can observe the use of religion to generate cognitive solutions that put man first. In a causal order from the evolutionary point of view, it is difficult to determine whether religion was favoured by the emergence of agriculture, or whether the social bonds favoured by religion enabled the emergence of agriculture. We believe that the correct solution is offered by the hypothesis of the directly proportional relationship between the degree of socialization and innovation.

5. THE IMPERSONAL OF PRESCRIPTIONS AND USEFUL ILLUSSIONS

The dogmas of religion postulate the over-natural character of the foundation to circumvent the difficult social adherence that would be needed to launch them. It is easier to talk about transcendent (or transcendental) rules than to say, "I think that it should be like this!", waiting for everyone to support you. Religions thus implicitly reveal one of the great problems of humanity (another fiction, perhaps): the lack of confidence in its powers. The encounter of humanity with itself has often been mediated by religion. To a great extent, the persistence of religion in the present age is due to the fact that people fear other people (especially people without religion/of other confession). Prudence seems to be justified by the magnitude of the consequences of major contemporary errors. The idea of consensus as the only source of values brings along with it the fear of future changes (emphasized by the examples given by history). In a way, the persistence of religion betrays the lack of confidence in democracy, the fear of the precariousness of the traditional values that the community agreement can generate.

Religion could be a precursor to laic institutions, as part of their history as of right. We have in mind the religious illusions that have generated useful social institutions. These are part of the category of social fictions, their role being similar to legal fiction: they are constructs of the social mind, participating in the generation of what we call an extended mind (in its turn one of the sources of support for the individual mind). An example is the design of a model of social behaviour in gods and the imagination of an agent that pursues continuously the observance of the rules and sanctions deviations from the norm. The road to people trusting themselves goes through the empowerment of the gods with the value-making ability and their use in highlighting the value of the human being. In this variation, religion is a mediator of self-knowledge of humanity.

Religion is a fiction that draws us close to the truth of our existence. Its role as a mediator is essential, religion facilitating social existence, through a) the prosociality given by rituals respectively b) the rules created by morality, and the intuition of something more important than us: This is the evolutionary basis for the felt need of connection to something larger than ourselves.” (Teehan, 2018: 278). But the importance of cooperation is part of the evolutionary rules.

The advantage of religious morality is the foundations they generate, namely the fact that they provide plausible explanations (effective from a pragmatic perspective) for the opening of the cognitive universe that man is going through in this period of evolution. At the limit, we even consider the hypothesis of a limit in cognitive evolution in the absence of closures (the universe of discourse) that religious fictions have provided.

6. COGNITIVE SUPPORT POINT

Divinity must be seen from the perspective of a point of support of knowledge. The cognitive support point proposed by religion can be transcendent or imminent, there or here. But, every time, people have relied and rely on it, being a form of common encounter and thinking that often extends over generations. This form of outsourcing of the mind, of sharing is essential, as it ensures the development of humanity. Implementation solutions appear to be secondary. Since some have proven to be more effective than others, we need to remember the need to identify the mechanisms that generated the efficiency and the contexts that supported their success. One of the dimensions of the analyses is the historical one, the forms of development and evolution over time being under discussion.

Certainly, the cognitive horizon specific to each age and every place has its role (albeit to a varying extent), as there are several choices. However, only some options were chosen, some of them proving to be particularly effective for humanity. How could we call the set of characteristics of the Divinity (doubled by the whole systemic system) that proved to be effective, since the creators of the solution called it God (in its different forms)?

7. RELIGION, PHILOSOPHY, SCIENCE

The attempt of philosophy to take the place of religion, started about 2500 years ago, failed in a first phase, in that context. Even if its possibilities were optimized by the advance of Roman law, it was not enough. The struggle took place on the area of cognitive solutions, on the forms of closing the speech universe and on the understanding of what knowledge means (reflexive relation of knowledge to oneself). Philosophy would have ended by remaining an alternative to religion, but not sharing the social success of the latter. However, the preoccupation for knowledge staged by philosophy succeeded after approx. 2000 years after its appearance to generate a "daughter", namely science, the pragmatic success of which made it a winner before religion. The success was not so much the richer imagination in inventing causal mechanisms but rather the *use of the method* in the investigation. Perhaps the success of identifying more and more challenging causal contexts would not have been sufficient if it did not bring about the pragmatic technology-specific results.

8. RELIGION PREPARED THE EMERGENCE OF SCIENCE

This is a hypothesis that requires the construction of an experimental framework capable of verifying it. It could be born in the horizon of mistaking succession for causality. Here we are trying to point out some arguments that might support it.

Preparing for invisibility could be one of the important social contributions of religion. We are mindful of the mental exercise that religion has created throughout its existence through the veneration of invisible deities. The idea is also suggested by Horton (1993), the invisible being part of the comparison criteria of religion and science. Guthrie (1980: 190) indicates he agrees with Horton on the fact that there is no difference in the relation to the invisibility of religion as compared to the one postulated by science. The cognitive relation to the invisible is a human practice, as in some cases is assumed to be an existential strategy (the various reasons why people resort to camouflage). The invisibility of deities could be a good strategy to address the issue. A partial argument is represented by the effects of confusion experienced by the Aztecs when they met Cook and Cortez (Guthrie, 2002).

The orientation towards the invisible and the attempt to guess its contribution to the existence and behaviour of the visible ones has prepared the mind for the "invisibles of science." The existence of this orientation is often related to the behaviour of the mind in the face of cognitive ambiguities, namely its expectations of seeing agents / intentions coupled with false positive signals. By analysing the possible similarities between religion and science, Guthrie (1980:186) indicates that both are struggling with the ambiguity of the world. From this perspective, both are ordering systems that protect against chaos. Removing ambiguity is the key role of *useful illusions*, beyond their pragmatic effects (which has to be analysed to identify their level of effectiveness). This function can be understood as one similar to the assumptions in science: these are testable theories by means of the pragmatic effect, having a degree of precariousness measured by different variables (all of which are part of the evaluation of the success of these illusions).

9. LIMITS AND DIFFERENCES

The thesis of establishing the social hierarchy concomitantly with the development of religious meta-narrative, thus indicating the co-belongingness to the same way of understanding and adjusting reality (Rossano, 2006) seems to be supported by the present way of being of knowledge: the religious academic discourse is based on the cultivation and indication /quoting of personalities, that is, on a form of elitism. Instead, scientific knowledge is mainly focused on the community of scientists (somewhat similar to that of hunter-gatherers). Religious academic discourse is focused on thinkers while scientific discourse is community-centred, emphasizing experimental verifiability of assumptions and assertions. The religious discourse does not favour effective knowledge, but rather the authors' suitability to the expectations of the audience.

Symbolically speaking, the problem of meaning is that it must be present in the direction of sight (of cognitive concern). The absence of a meaning in an area of our interrogations is likely to generate cognitive fears. The solution (of satisfying the need for meaning) put on the stage by religion raises another problem: it does not just consist only of the closing of the speech universe (meaning context), it also brings with it a change in the direction of sight, limiting the alternative possibilities of interrogation. In other words, religion highlights the same meanings (the same causal mechanisms with explanatory role) wherever the believer turns his/her attention and, at the same time, limits the possibilities of focusing attention on the world specific to religion (it's true, this cognitive closure is specific to any world). It is no surprise that innovation in such societies has such a low impact, such a narrowing of the cognitive horizon being added to the investment of ingenuity in religious explanations.

Since one of the social features of meaning is accessibility, in case of alternative meanings for the same fact, the most accessible one will gain. However, one of the characteristics of science-specific meanings is the difficulty of accessing them (if we add the character of the provisional, emerged on the backdrop of the skepticism that characterizes the truths of science, we are no longer surprised that they

are not very accepted). Which makes it easy to explain the social success of religious explanations as compared to those of science.

10. DANGERS. ABOUT THE NEGATIVE CONSEQUENCES OF RELIGION

There are some limits to the effectiveness of being immersed in a system of religious beliefs. One of the most visible is the Talibanism. Religious fundamentalism could be determined rather by a cognitive-imaginative incapacity of restructuring the context of meaning (namely the world reality thesis) to the new information. Adherence to the old world generates comfort. Fundamentalists may manifest an inability to bear the burden of meaning of the world, denying their own role in the genesis of the meaning of reality. The aggravation is the incapacity of indifference towards the threats to the reality thesis of the consecrated world. Synthesizing, we discuss about the determination of religious fundamentalism by the absence of cognitive flexibility.

Enlightenment, rationalism, Marxism are some examples of trends that have the claim to identify the negative effects of religion. Beyond these argumentative frameworks based on systematic approaches, we can mention some relevant examples.

Cacioppo (2008) considers that *learned helplessness* (Seligman concept, 1975) is characteristic of all systems the operation of which depends on the level of dependence they manage to determine. This would be an obvious secondary effect of religion. *The orientation of energy in inappropriate directions* is part of a similar picture, with energy consumption exceeding in some cases the acceptable levels according to signalling theory or being invested in directions other than signalling.

Harari (2016: 72-73) suggests that monotheistic religions have broken the approach of hunter-gatherers to the rest of the animals (maintained by the animist ones), the *distancing the world of the living* mediating the possibility of agriculture. In this case, we can talk about the losses generated within the evolutionary path of religion or, more precisely, the sacrifices necessary for the birth of humanity (assumed inhumanity).

Some possible solutions: a) the relation between contributions and dissolutions may be the analysis criterion; b) there are multiple scales and analysis contexts: namely which seems useful at this time could prove negative effects on the long-term.

11. CONCLUSION

The omnipresence of religious behaviours in all communities situated at certain levels of evolution suggests that the direction of search for the causes/reasons for their occurrence is that of identification of the common elements existing either in individuals or in the results of their co-operation. To the extent that we admit that religion participates or has significantly participated in social regulation, we have to admit the existence of differences between the success levels of each religion, which means to implicitly admit the existence of differences between their cognitive intakes in relation to the humane and to the social. In this case, the social differences generated by religious diversity have the character of exceptions to the common denominator to which religion seems to have contributed: humanity.

If the social brain's hypothesis is correct and if the existence of society in its initial forms was fundamentally supported by religious structures, then the social brain hypothesis includes the hypothesis of the religious brain. In other words, the religious structures have contributed to the development of the brain/mind by participating in the emergence of the current human type.

Within the analysis of the relation between religion and society from an evolutionary perspective we used two alternative levels to argue the evolutionary role of religion: a) demonstrating the character of the religion as evolutionary structure (the proof of the evolutionary role); or b) proving the possibility of being considered at least a by-product with useful effects. Our suggestion is that demonstrating b) is a necessary and sufficient condition in order to speak thoroughly about the "evolutionary wager of religion".

BIBLIOGRAPHY:

- [1] Cacioppo, J. T., Patrick, W., *Loneliness: Human Nature and the Need for Social Connection*. New York: W.W. Norton Co; 2008. 317.
- [2] Cosmides, L., & Tooby, J. Barkow, *Cognitive Adaptations for Social Exchange*. In *The adapted mind: Evolutionary psychology and the generation of culture*. New York, NY, US: Oxford University Press; 1992. 163-228.
- [3] De Waal, F., *The Bonobo and the Atheists. In Search of Humanism Among the Primates*, New York: W.
- [4] W. Norton & Company; 2013. 289.
- [5] Di Paolo, E. A.; Rohde, M.; De Jaegher, H., *Horizons for the Enactive Mind: Values, Social Interaction, and Play*. In *Enaction: Towards a New Paradigm for Cognitive Science*, J. Stewart, O. Gapenne, and E. A. Di Paolo (Eds), Cambridge, MA: MIT Press; 2010. 33-87.
- [6] Dunbar, R. I. M., *Coevolution of neocortical size, group size and language in humans*. In *Behavioral and Brain Sciences* 16 (4); 1993. 681-735.
- [7] Guthrie, S., *A Cognitive Theory of Religion*. In *Current Anthropology*, Vol. 21, no. 2, Aprilie; 1980. 181-203.
- [8] Guthrie, S., *Animal Animism: Evolutionary Roots of Religious Cognition*, In: *Current Approaches in the Cognitive Science of Religion*, eds. Pyysiäinen, Ilkka, and Veikko Anttonen. London & New York: Continuum; 2002. 28-67.
- [9] Harari, Y. N., *Homo deus. A Brief History of Tomorrow*. New York: Random House; 2016. 450.
- [10] Horton, R., *Patterns of Thought in Africa and the West: Essays on Magic, Science, and Religion*. In *Africa: Journal of the International African Institute*, Cambridge: Cambridge University Press; 1993. 155-187.
- [11] Merrigan, T., *Religious Knowledge in the Pluralist Theology of Religions*. In *Theological Studies*; Vol. 58; iss. 4; 1997. 686 – 707.
- [12] Rossano, M. J., *The Religious Mind and the Evolution of Religion*. In *Review of General Psychology*, Vol. 10, No. 4; 2006. 346-364.
- [13] Rotilă, V., *The Evolutionist Role of Religion; Some Arguments*, In *International Multidisciplinary Scientific Conference on the Dialogue between Sciences & Arts, Religion & Education*, 2; 2018. 160-167.
- [14] Rotilă, V., *The Structure of Consciousness: The Concept of Domain of Consciousness. Dilemmatic Restructuring*, Cluj-Napoca: Argonaut. 2013. 54-69.
- [15] Seligman, M. E. P., *Helplessness: On depression, development and death*. San Francisco: Freeman; 1992. 250.
- [16] Sloman, S., Fernbach, P., *The Knowledge Illusion: Why We Never Think Alone*, New York: Penguin Random House; 2017. 304.
- [17] Smith, W., *Towards a World Theology. Faith and the Comparative History of Religion*, London: Westminster Press; 1981. 206.
- [18] Sosis, R., *The Adaptationist-Byproduct Debate on the Evolution of Religion: Five Misunderstandings of the Adaptationist Program*. In *Journal of Cognition and Culture*, 9; 2009. 315–332.
- [19] Teehan, J., *The cognitive science of religion: Implications for morality*. In *Unisinos Journal of Philosophy* 19(3); sep/dec 2018. 272-281.
- [20] Zahavi, A., *Mate selection—A selection for a handicap*. In *Journal of Theoretical Biology*, Volume 53, Issue 1, September; 1975. 205-214.
- [21] Whitehouse, H.; François, P.; Savage, P. E.; Currie, T. E.; Feeney, K. C.; Cioni, E.; Purcell, R.; Ross, R. M.; Larson, J.; Baines, J.; ter Haar, B.; Covey, A.; Turchin, P., *Complex societies precede moralizing gods throughout world history*, In *Nature*. Mar 20; 2019.