What Is Specific about Humans?

with Paolo D'Ambrosio, "A Heuristic Science-Based Naturalism as a Partner for Theological Reflections on the Natural World"; Lluis Oviedo, "Religion as a Language: Exploring Alternative Paths in Conversation with Postreductionist Anthropologies"; and Ivan Colagè, "The Human Being Shaping and Transcending Itself: Written Language, Brain, and Culture."

RELIGION AS A LANGUAGE: EXPLORING ALTERNATIVE PATHS IN CONVERSATION WITH POSTREDUCTIONIST ANTHROPOLOGIES

by Lluis Oviedo

Abstract. New scientific approaches to religion have delivered a considerable number of theories aimed at explaining it, despite its cognitive and adaptive oddities. These efforts were built on available theoretical frameworks, including those from cognitive science, biology, and anthropology. Many voices have raised criticism against several aspects in the cognitive and evolutionist program, even if recognizing their legitimacy and the fruits collected to date. A pressing issue is whether the problem with the new scientific study of religion is related, to some extent, to the use of outdated views on human evolution, mind, and behavior. If this is the case, then a deep revision concerning current models is required. The new direction proposed should account for more complex aspects of human nature following multilevel models, and a specific human feature—language—that could better explain religion as a meaning system. Understanding religion as a language might open an alternative path inside cognitive studies that is closer to how it is lived by believers.

Keywords: anthropology; cognitive and evolutionary study of religion; consciousness; language

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The last fifteen years have witnessed a proliferation in articles and books devoted to the new scientific study of religion. The same period has brought important developments in the application of science to better understand human nature. From a broad point of view it might be stated that both processes are highly relevant for the dialogue between science and religion, and still more for a theology open to scientific research and inputs.

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Risking to claim the obvious, the new scientific study of religion has an unavoidable impact on the traditional way that religious faith and behavior are understood, including rituals, shared values, and language. The available proposals are aimed at "naturalizing religion," a program that can assume two meanings: to show that religion is a natural way to think and live, with nothing alienating or strange to human nature (J. Barrett 2004; Bulbulia et al. 2013, 403); or to prove that religion is about a set of cognitive mechanisms and behavioral rules, without any "special" or "supernatural" feature beyond our known physical reality, and hence something that can be fully understood and explained inside a scientific framework.

Developments in the scientific study of human nature are very relevant for theology, and even more so for the subdiscipline called "Christian anthropology." Many issues are at stake, depending on how the ongoing research describes human features, their evolution, their specificity, and their constraints. A theology that ignores such developments could become increasingly irrelevant and less plausible in a culture informed by science.

Both research lines—on religion and on human nature—are deeply related. Some dependency can be perceived between the study of religion and the developments in a more scientifically driven anthropology. This influence can be traced back to reveal how the changing views of the evolution and current constitution of human beings have inspired—and still inspire—distinct programs in the understanding of religion and its role in the whole of human history.

The following pages will try to unfold the suggested thesis. To gain perspective, the development in the cognitive and bio-evolutionary study of religion will be placed close to developments in the study of humans in the last decades, to allow parallels and convergences to be shown. Then, inspired by recent contributions in the study of human specificity, a different approach to the study of religion is proposed, based in its convergence with some specific human features, like language. Any revision of the ongoing models in anthropology and science of religion will become, in the short term, relevant for theology in general, providing new opportunities to update our understandings about religious traditions.

Coming to Terms with the New Scientific Study of Religion

The new scientific study of religion is conceived as a very broad label, basically gathering two main lines of research: the cognitive and the biological-evolutionist. A third approach, the neurological, could be added; however the results thus far in the latter field do not yet supply much relevant or useful information that could help to build a "new paradigm."

Often neurological insights or data work as supplementary arguments for the other two approaches.

The last two decades have been very fruitful for academic productions in cognitive and evolutionary studies of religion. A considerable amount of research and theory building have accumulated in this time. This program did lead to what has been called "the standard model": religion would be built upon mental abilities used for different purposes from their original design; and these forms of cognition would have adaptive relevance, especially enhancing internal group cooperation (Smith and Sankey 2012). Besides this, recent scholarly contributions in the field have tried to summarize and classify the main outcomes of the ongoing research (Smith 2014; Turner 2014). At the same time, many critical voices have been raised in recent years, revealing flaws and limits at different levels in that scientific program: concerning its epistemic basis, its theoretical framework, its methodology, and even its empirical and experimental evidence (Day 2007; Laidlaw 2007; N. Barrett 2010; Van Slyke 2011; Visala 2011; Schüler 2012; Turk 2013; Smith 2014; Watts and Turner 2014).

Many issues have arisen in the specialized literature, and it is not easy to summarize all that criticism. For the scope of this paper, two points need more clarification: the difficulty in defining religion, and the dependency on anthropological and cognitive theories that are under discussion. In the first case, the dominant definition in the field of cognitive science of religion refers to "beliefs in supernatural agents" able to influence our earthly state of affairs. However many scholars in the study of religion would dispute that view (Steadman, Palmer, and Ellsworth 2009). A classical alternative is the definition provided by Clifford Geertz: religion is

> (1) a system of symbols which acts to (2) establish powerful, pervasive, and long-lasting moods and motivations in men by (3) formulating conceptions of a general order of existence and (4) clothing these conceptions with such an aura of factuality that (5) the moods and motivations seem uniquely realistic. (C. Geertz 1973, 90)

In this formulation, religion does not need to assume the presence of "supernatural agents," a point even shared by a sector of theologians and some "religionists." The described cognitivist approach seems to build its definition as a function of its own theory: the need to attribute agency to every event. Even Daniel Dennett seems to recognize that definitions of religion become "circuitous" when resorting to a special agent (Dennett 2006, 9). In this case, attempts to deal with religion have to advance their own understanding, biasing the later development, and generating an unnecessary circularity. The skepticism grows nevertheless in recent years, and "religion" becomes too fuzzy a term to be defined in a useful way (Jong 2015).

The second issue at stake is the dependency of the established model on anthropological and cognitive theories which survive strong scrutiny and revision. This is quite evident concerning scientific studies on human nature. During the nineties the field was still dominated by very reductive positions, stemming from new developments in genetics and neuroscience. In those years Francis Crick could state without hesitation that "You're nothing but a pack of neurons" (Crick 1994, 3). Daniel Dennett could feel confident about eliminating consciousness (Dennett 1991); and the human genome completion could nourish illusions on genetic explanations about everything. Twenty years later the atmosphere has radically changed and most of these extreme positions have been abandoned and sometimes even mocked. New developments in this field resort to more "holistic" and "multilevel" models, assuming clearly the complexity of factors involved in human evolution and its current reality (Jablonka and Lamb 2005).

A similar story can be told regarding developments in cognitive science, which provide the basis for applications to the cognitive science of religion. Dating from the publication of Jerry Fodor's book on the modularity of mind (Fodor 1983; see also Fodor 2000), a parable could be told regarding the changing moods dominant in that field. Again, the current tendencies point to "multi-component" cognitive science and a set of dimensions that need to be taken into account beyond positions that are too reductive. These developments deeply affect any model trying to explain the nature and functioning of religion, and because the available production is based almost exclusively on the early developments in scientific anthropology and cognitive science, the existing proposals badly need revision and updating.

In this state of things it is relatively easy to deduce what needs to be done in order to improve a rather dismal situation. Several suggestions could help in that sense; what is needed are as follows:

- A broader and more inclusive understanding of "religion," not limited to the recognition of "special agents," and able to integrate Geertz's more anthropologically minded definition.
- A more complex model of religious belief and behavior, able to include cultural and historical aspects, together with the genetic, evolutionary, and cognitive ones that have been already accounted for.
- A differentiation between pre- and post-axial religious forms, to avoid confusion and to articulate views that could become more respectful to the historical record and ethnological data.
- A better account of religious cognition in its complexity, able to discern the differences between intuitive and reflective forms, and to involve emotional and social aspects.

- A development of the program that claims more embodied and embedded forms of cognition, that applies to religious cognition as well, and hence includes ritual behavior and expressions, religious development, and socialization, among others.
- A program able to relate religious cognition to symbols, giving rise to meaning and value, as some of its main—and most neglected—functions (Paloutzian and Park 2005).
- A program able to render explicit the hidden codes that rule the religious grammar, the deep distinctions and the subdistinctions, and to formalize them as a recursive system.

In the last few years, fresh developments in this field invite interesting paradigm changes, a point that needs further expansion. It is very encouraging that scholars in the scientific study of religion include issues of meaning, symbols, and reference to culture as unavoidable factors involved in the religious mind and behavior. There is still a long way to go, but this seems to be the right direction (Bulbulia et al. 2013; Norenzayan et al. 2015).

The Anthropological Question in Its Late Developments

One of the most striking features in the scientific study of human nature during the past thirty years has been the paradigm change from one based in more reductive models toward one built on more holistic, inclusive and plural anthropologies. A central thesis in this paper is that the standard production in the cognitive and evolutionist science of religion has been inspired mostly by reductive orientations in psychology and scientific anthropologies—as has been stated—and hence the need to update the new study of religion assuming more mature developments in these fields.

A summarized reconstruction of the described process could start with E. O. Wilson's *Sociobiology: The New Synthesis* (1975), and Richard Dawkins's *The Selfish Gene* (Dawkins 1976). These essays signed an epoch marked by great faith in the application of sheer biological and genetic studies to untangle the mysteries of human life, after the great success that knew the "new synthesis" in biology. The quick application of biological ideas to many aspects of human nature gave rise to major discussions some years later (Gould 1981; Lewontin, Rose, and Kamin 1984; Segerstråle 2000). The evolution undergone by these theories has pointed to much more nuanced and cautious positions in later years.

The described process has been partly augmented by the irruption—or "disruption"—of cognitive psychology and neurosciences. In this case a similar dynamic can be perceived: from extremely reductive positions toward more open and plural views. Perhaps the quoted opinions by Crick and Dennett could provide a good start to this story. What happened

later was a clear revision of those models and an opening toward more complex views concerning the human mind, among many protests and signs of deep dissatisfaction. One early symptom—highly relevant for the cognitive science of religion—was the complaint by Jerome Bruner, one of the founding fathers of cognitive psychology, in his book, *Acts of Meaning* (1990), in which he contested the view identifying the mind as an "information processing" system, pleading instead for a model of mind as a "creator of meaning," embedded in culture, and beyond computational models.

Much has been published in recent years denouncing an inappropriate application of scientific models when trying to explain human nature. Raymond Tallis, for instance, has been very vocal in this campaign to discredit the faulty use of biological or neurological theories to characterize the human being (Tallis 2011). He is not the only one assuming such a critical tone. A long list of "humanist" thinkers has engaged in such endeavors since the early nineties: John Dupré, Francis Fukuyama, Jürgen Habermas, and Christian Smith, among many others (Oviedo 2006). More recent incorporations can be quoted reflecting deep dissatisfaction concerning a trend that has failed to describe the true reality of human life, ignoring its more distinctive traits, like its conscious thinking, language, and the generation of cultural worlds in which it is embedded (Robinson 2010; Legrenzi, Umiltà, and Anderson 2011; Canter and Turner 2013; Satel and Lilienfeld 2013).

Tallis has harshly criticized the standard cognitive science of religion as well. He connects that research program together with a broad agenda that, in many ways, leads to dehumanizing mankind. Indeed, the impression he gets—at the time he confesses his atheism—is that the departure from religion by many thinkers and the dominant cultures has meant a departure from humanism as well. His defense of religion is quite surprising, coming from an atheist; in his own words: "Irrespective of whether you are an atheist or a religious believer, to naturalize one of the greatest (for good or ill) and most extraordinary expressions of our distinctive humanity [religion] cannot be a good thing" (Tallis 2011, 329). In his opinion, the scientific study of religion misses the point, ignoring its conscious essence and the fact that religious ideas reflect deep human developments, rooted in a mind able to transcend the natural world. It would be a pity to naturalize these dimensions that express in a higher way the distinctive character of human beings. Such an unsatisfied feeling reveals an implicit or latent link between mistreatment of religion and misunderstanding concerning human nature. However, the question still lingers about possible alternatives that could respect the human condition without missing the rigorous requirements that become the trademark of science and its great achievements.

Tallis offers some insights regarding an alternative anthropology that could satisfy the above-mentioned conditions. In his proposal,

consciousness appears as central, together with the characteristic human social structure. Such aspects add new levels of richness and complexity to the more scientific—and often reductive—recent developments. In any case, it is not difficult to find alternative proposals trying to build more comprehensive anthropologies, avoiding the pitfalls of excessive reductionism or ignoring central features belonging to human life. Recent developments point rather to "multilevel" models able to account for distinct aspects of complex human reality. Several scholars have followed proposals like those made by Eva Jablonka and Marion Lamb, (2005). As their book's title clearly states, human evolution has been marked by biological factors and cultural ones as well, in reference to the world of symbols. One of those further developing this model is Agustin Fuentes, who has proposed to take into account processes of "niche construction" that unavoidably influence and further reinforce evolutionary pressures; it is important to remind ourselves that the human "niche" is mostly cultural. This perspective is clearly "holistic" in trying to account for different converging factors that intervene in human evolution (Fuentes 2008). Warren Brown and Brad Strawn offer another example revealing a more holistic and complex model; indeed, their proposal is called "complex emergent developmental linguistic relational neurophysiologicalism." As they state in a recent programmatic paper, "personhood is constituted by emergent properties which are the product of self-organizing processes within the hypercomplex neurophysiological systems of human beings, and which come about progressively over a long period of developmental, linguistic, and relational history" (Brown and Strawn 2015).

The main challenge confronted by contemporary anthropology consists of the integration into a broad pattern of many dimensions that clearly belong to human nature. These traits have influenced human evolutionary history, and they have hardly been accounted for in former scientific reports. The list should include, at least, the following: conscious processes, language, meaning, and cultural context. An abundant literature in recent years points in these directions, as for instance studies on symbolic capacities; studies pointing to genetic and cultural co-evolution, or considering the cultural dimension as central in the understanding of the human; the attempts to deal with language as a specific human feature; and the studies on meaning and decision making. It is significant that a recent discussion between evolutionary biologists reveals how the anthropological case could re-shape the evolutionary landscape. The point is that, when human beings are integrated, then it is not the standard evolutionary process that helps to understand human nature, but the study of humans that helps to better understand and broaden the narrow case for genetic adaptation (Laland et al. 2014). It may be stated as a consequence of this research that science, trying to understand human nature, becomes in the long run a more "humanized science" when it feels the duty to include dimensions

that were absent in the study about other evolutionary processes. Although science apparently "dehumanized" its subject of study, its attempt to come to terms with that special being has attuned it to the human, making a place for other conceptual frameworks.

This body of research clearly points to a change in the framework of the scientific study of religion, once these new developments have been integrated. The central idea is that a more "human" anthropology allows for a renewed and updated approach to religion.

The first relevant development points to the role played by symbols as the definitive markers of human cognitive capacities. This move has been promoted since the mid-nineties by authors like Merlin Donald (2001), Edwin Hutchins, Terrence Deacon (1997), Michael Tomasello (2014), Andy Clark (2008), George Lakoff (1999), and Gilles Fauconnier and Mark Turner (2002). Their work proposes a more externalist understanding of the mind, and points to activity that combines conscious and unconscious processes. It is clear that the pool of symbols available in the human mind is broadly enriched by social and cultural provisioning, and that the culturally available symbols co-evolve with a cognitive architecture adapted to their use and management.

Second, some new developments in biological and evolutionary studies need to be accounted for in any anthropology intending to be more faithful to real human beings. An example is the repeatedly mentioned principle of co-evolution affecting genetic and cultural entities. This idea is already present in many authors quoted in the former paragraph, and has been elaborated more by scholars like Laland, Odling-Smee, and Myles (2010) in biological terms; by Richerson and Boyd (2005) in social terms, and many others who have followed that paradigm. What is central to this model is the role played by cultural information, often intermingled in social or institutional units. That dynamic constitutes a second "line of information" that cannot be separated from the genetic information. The application of this principle to the study of human nature points clearly toward a more complex reality that cannot be cut off from the cultural elements in which it is embedded.

The third important development is the greater awareness concerning the "special nature" of human language, to the point of becoming a specific characteristic, one that better helps to define human nature. This point has been stressed for several decades by many authors, especially Charles Hockett (1960) and Noam Chomsky (1965). More recent studies address the challenge that such a specific trait poses (Hurford 2004; Moro 2013). A general impression is that ignoring such a faculty means missing a central point about human nature; it is deeply linked to the symbolic capacities and to cultural scaffolding.

The fourth necessary reference in any comprehensive anthropology is the issue of meaning. It is linked to all the other three already mentioned: to the symbolic ability, to cultural mediation, and intrinsically to language. What we are speaking about is a "package" of intimately related faculties or features that are more specific to humans, even if some precursors can be perceived in animals. Such faculties endow human persons with singular and highly determining traits, helping to explain much more about the human mind and behavior than other biological traits.

Now the problem arising after this description is that, because all these traits are more associated with human nature, they become harder to explain in sheer evolutionary or physical terms. They appear so "extraordinary" as to deserve a distinct treatment: their continuity with other natural-evolutionary processes is less obvious, and hence they become a conundrum for the traditional scientific program applied until recently to anthropology, such as those in sociobiology or evolutionary psychology. Several solutions to explain that diversity have been proposed in the last years, including, for example, the merging of thoughts and words to increase communicative range (Bickerton 2013); imagination plus the capacity to link with others (Suddendorf 2013); and cooperative and social interaction (Tomasello 2014). Some other scholars claim that these seemingly "extraordinary" traits of human beings are simply "accidental" and nothing "special" (Gee 2013). In a different vein, linguists following Chomsky insist on the special character of language, which cannot be explained by any precedent, nor reduced to biological faculties; its "uniqueness" justifies a rather "mysterian" stance (Hauser et al. 2014). Then, we find authors pleading for "middle ways" between reductive evolutionism and an unmanageable complexity of the quoted specific human features (Pievani 2014).

It is not necessary to review the positions that have been proposed in past years pointing toward "eliminativism" or—in a milder way—a tendency to ignore or dismiss conscious aspects in the human mind, including symbols, meaning, or language, in order to focus only on those features which are well established and can be explained on a biological and neuronal basis. The discussion has divided those who emphasize more human "specific" features, and those who take a more reductive stance, as could be expected from applying rigid scientific methods. The long debates on how much free will, or determinism; how much conscious reflection or automatic intuition, could explain human behavior have greatly enriched our knowledge and appear impossible to settle with our current methods and research. Often, the assumed presuppositions or convictions bias and determine the final results and insights concerning human nature.

After this brief itinerary through developments and discussions inside contemporary anthropology, and the scientifically inspired attempts to deal with human beings, a conclusion appears quite evident: any study about a human feature or behavior needs to assume in a conscious way the

framework that is deemed more fitting or adequate for one's own research program. To this respect, the scientific study of religion, like that of morality or love, needs to render explicit the anthropological framework serving one's own research program, whether reductive applications of biological or neurological insights or one more holistic and complex. This is a very risky choice, and a hard dilemma. The research during the last fifteen years in cognitive and bio-evolutionist study of religion has grown mostly inside the reductive model, and this is apparent when the published studies by its main authors are analyzed; they have tried to "explain religion" at the cost of missing the true nature of human beings. Now, this exercise is clearly legitimate, as long as you admit that this is an approach based on what could be designed as a *ceteris paribus* method, or "all other things being equal or kept constant." If you can isolate some cognitive mechanisms or biological rules from all the other complex human factors and social interactions, then you can get some explanation about how the religious mind and behavior proceeds in that narrow case. Then, it is expected that the researcher give further steps to integrate other factors that intervene in the process; otherwise, ignoring them, he or she would dismiss their importance or real effect. However this step means a conscious choice for a reductive anthropology, or a limited assumption regarding human complexity.

The described approach could be compared with some imaginary games, as for instance the so called "flatland" game, which consists of an attempt to envision reality when reduced to just two dimensions. This can be of great help in better understanding the nature of a more complex reality, which can be reconstructed step by step, one dimension after another. This is acceptable when practitioners assume that theirs is just an exercise helping to better grasp the complexity seen in real processes, in which more dimensions are involved. Applied to the study of religion, the point is that we can conceive of a "religious flatland" and imagine how it can work when several other dimensions are ignored or left out, but only as long as we remain aware that this is not "the real thing." By the same token, reductive anthropology does not describe a real human being, but its "flatted" version. It helps to better grasp individual factors involved in human behavior, trying to isolate them; nevertheless further steps need to be undertaken in order to reconstruct all the complex dynamics, or to assemble different factors into a whole that could more closely reflect human life.

Now the main challenge consists in building a rigorous and accurate approach to religion that can profit from the described developments, pointing to a "holistic anthropology" after assuming the limits in former programs. Possibly such an approach should assume the quoted aspects: symbols, culture, language and meaning, as building blocks for this different program. Several attempts in that sense have already been

made. A recent collective essay has gathered many names in the cognitive study of religion trying to integrate culture into the basket of variables to be taken into account (Bulbulia et al. 2013). Other scholars are exploring the fields of symbols and meaning (A. Geertz 2008; Doner 2013); or the demanding field of meaning and values (N. Barrett 2010). Furthermore Harvey Whitehouse, echoing Jablonka and Lamb (2005) and other studies, proposes a multi-level approach to religious evolution: epigenetic, cognitive-developmental and socio-historical (Whitehouse 2013). The general feeling is that, again, the study of religion is being attuned for the good with the ongoing anthropological research.

Religion as a Language: Trying an Alternative Path

Religion can be observed from many different perspectives, or inside distinct theoretical frameworks. Looking at it as a "language" is by no means a new move; several precedents can be found. This new effort is connected with the substantial changes in our understanding of the factors that explain human specificity. Religion is assumed as a human aptitude, despite attempts to identify its precursors in chimpanzees (Harrod 2014). Articulate language shares a similar character: despite precursors and protolanguage forms, it is broadly recognized as specifically human in its current form. As a consequence, it is justified to inquire how much both features might be related, helping to better highlight human mind and behavior.

When describing religion as a language, several different possibilities come to mind. A first one is suggested by Wittgenstein and his use of the expression "linguistic game" to better represent religion's distinctive features. He recognized religion as a specific development that should not be submitted to the controls of standardized and demanding forms of rationality, but to be understood through its context and the practices that render it meaningful, at least for those involved. The meaning of religion could not be described through argument and analysis, but attending to the practices and the standard use of its expressions in living communities.

The German social theorist Niklas Luhmann (1977) described religion as a "communication code," moving at the symbolic—or (better) semantic—level. That code is built on the contrast between immanence and transcendence, or "this-worldly" and "other-worldly" dimensions, respectively. Furthermore, those that consider religion as a "symbolic system," like Clifford Geertz, could describe it as a special language aimed at providing some "ultimate meaning" (C. Geertz 1973). More recently, some proposals have pointed to morality as a language that could even be based on a "universal grammar," as does for instance Mark Hauser (2006). By the same token, religion could be seen as a language built on some kind of grammar or "set of rules" driving a specific form of communication.

At some level of generality a language can be described as "a system of communication built on symbols." This can apply to the conventional natural languages and to the so called "specialized languages" or those linked to professional praxis (like the legal field) or to academic disciplines, with their own set of rules and their own forms of application. Mathematics, for instance, has been described languages; computing programs are built languages. These descriptions assume a vocabulary composed of terms or symbols; a grammar with a set of rules that allows them to be combined as meaningful constructions; and a syntax that helps to organize symbols in a linear structure. Special languages need to delimit their application range or the area of meaning they can cover.

An important contribution to understanding the connection between language and social institutions has been made by John Searle (Searle 1995; 2010). He explains these institutions in terms of linguistic conventions or "declarations." That principle clearly applies to churches and other religious institutions: language is what renders possible the emergence of such social forms. Performative language institutes religious conventions; that is, they "carry a deontology of rights, duties, commitments . . . creating a social and institutional reality" (Searle 2010, 88).

Specialized or derived languages depend on a natural language for their own implementation. What is important in every case is to assume that human language, once in place, can generate an infinity of specialized or sectoral languages that better help to conceptualize a field, or to address some activity, or simply to understand some cultural productions. They can be designed as "second order" languages as well. Such multiplicity is linked to the values and the practices that characterize a field of social activity. As Searle indicates, they "institute" that field, generating values, duties, and commitments. For example, regarding architecture and building, stability, economic viability, aesthetic value, habitability, and even social and ecological factors need to be accounted for and arise through the practice of building, generating a complex code that combines all these elements and renders possible the communication between the producers and users involved.

Let us try to briefly outline what could happen when religion is seen as a language. Basically, the main claim is that religion is a specialized means of communication that helps to transmit information relevant for those who look for an "alternative" or "ultimate" dimension, only for that scope and only for them. This very broad description can find different expressions. The first has been coined by Luhmann, who points—as stated—to the distinction between *immanence* and *transcendence* as the best description of a religious code (Luhmann 1977); however that distinction does not necessarily entail metaphysical assumptions, and could possibly be connected with Karl Rahner's concept of the "human horizon of self-transcendence" (Rahner 1941). A second proposal to avoid the

shortcomings in that description could resort to Peter Beyer's analysis. He insists on the convenience of building the dual code presenting religion in terms of positive vs. negative concepts, like the distinction between *blessed* and *damned* (Beyer 2006, 82–87). Following that path, the religious code could be generalized as the difference between the positive and negative in its ultimate or absolute expressions. A third way to understand the religious code could follow the suggestions made by James Beckford: "religion" is a personal subject's construction that reflects what everybody feels as " religious" or perhaps, in some sense, very special or absolute, in contrast with what is ordinary and relative, being then socially shared and arranged (Beckford 2003).

Charles Hockett's list of "language design features" becomes in our case very useful to better characterize how religion is articulated following similar features. Several among the sixteen listed features that apply to human language describing its specific traits can be applied to religion as a language, as happens with arbitrariness, discreteness, openness, tradition, duality, prevarication, reflexiveness, and learnability. Some examples will be shown in the next paragraphs to highlight the model's utility (Hockett 1960, 1966).

Religion is supported by a natural language, a spoken one, but at the same time it introduces specific categories that require a proper semantic field and a grammar able to order the contents that need to be expressed. At the same time, religion is supported by a broader system of references comprising external symbols, rituals, images, a calendar, a set of social roles and rules, and established behavior codes. Religion as a language is not just the "religious language" but a complex system integrating all these elements and giving rise to a functional whole assuming often an institutional shape. As already stated, it is a "second order" language born from or through a specialized social activity.

Following a pattern often proposed by the main authors in the cognitive study of religion, when religion is seen as a language we are clearly pointing to the need to resort to previous mental structures that are common to natural languages and to every symbolic system. Recent neurological research has firmly established that grammatical linguistic forms reflect neuronal circuits developed to that end (Glenberg et al. 2008). Since this is a specific human faculty, well embedded in the human neurological structure, religion as a language surely follows similar neurological paths and avoids "impossible grammars" (Moro 2008). The point is that religion reveals a possible process described as the "re-use" of mental circuitry for a new scope—a kind of "exaptation"—extending the range covered by that very versatile communication system. If this premise is accepted, we are allowed to extend the model coined by the early cognitivists' insights to indicate how religion really rests on previous general-scope mental mechanisms, but at

such a level—as in the case of language—to render it highly complex and flexible, reflecting most of the traits we already find in natural languages.

Like every language, religion can assume simple expressions, discriminating a few traits of a limited number of possible distinctions (as in the elementary religious forms); or can become very elaborate and complex, introducing many more nuances (as happens with theological reflection). Its basic semantics can be reconstructed, exposing pairs of contrasting concepts like God and world, life and death, eternal and temporal. But to have a language we also need a grammar and a syntax that allows and limits the possible combinations of words and the concepts they refer to. Such a grammar should establish how the terms used in that language can be articulated to provide meaningful expressions helping to transmit information, or to deal with the available data. This point can be easily made by looking at how computing languages assist in the elaboration of complex languages necessary for the designed computing functions. Hockett's features of "productivity" and "openness" and Chomskyan idea of "recursivity" would apply to that language too, helping to explain how religious representations can be built by adding coordinate or subordinate sentences, summing up nuances or new distinctions to simple expressions like "God exists." One example of how recursivity works in this case could be "God exists" + "He loves humans" + "but we have to obey His will" + "He can reward and punish" + "However He forgives." We know from the historical record how many combinations these concepts can undergo, giving rise to many different positions and nuances, and still more, to new institutions or "churches."

As natural languages assume an indefinite number of expressions or current spoken languages, religion as a language follows the same pattern: we find currently a huge number of professed "religions," each one with its own ways of combining beliefs—or semantics—and rules—or grammar. Every religious form can be examined like a specified language that has evolved—like any other language—through natural and cultural circumstances to better deal with current challenges and historical demands. Like natural spoken languages, religion evolves incorporating new terms and rules to better cope with new situations (Hockett 1966; Fitch 2010). Probably, because religion in most cases is part of a cultural whole through human history, the course of natural language evolution and that followed by religion have gone in parallel and have moved through mutual influences, enriching each other. Something similar can be said regarding other "cultural languages" such as morality, art, technology, and law. Indeed religion combines with other specialized languages to better develop higher order expressions: religion and morality, religion and art, religion and law: their languages are clearly combined, giving rise to more complex expressions that enrich each other.

Some linguistic features, like "productivity" and "openness" (Hockett 1966) find interesting applications in religion. "Productivity" is a morphological property in a language able to give rise to new words, following similar patterns as those characteristic of used words, for instance regarding conjugation. Such feature could be perceived in the rise of new cults, devotions, and the way religious forms can be applied to secular ceremonies, or civil religion events. A new cult usually applies similar morphological structures as those found in traditional and well codified religions, showing how religious structures become productive when being extended and applied to new expressions.

Like any language—even the specialized ones—religion occupies a semantic field, one dealing with the experience of ultimate meaning (Doner 2013), or with the several expressions already proposed, and that could configure that field. Like other languages, following Searle (2010) it organizes its own field introducing rules and facilitating meaningful communication, aimed at enriching it with new possibilities and providing information and orientation to individual minds and to social entities. In parallel to natural languages, religion cannot render an arbitrary or "impossible" grammar (Moro 2008), a detail revealing some "universal rules" associated to a "generative grammar" that constrains the way that religious experiences or ideas might be transmitted (Chomsky 1965). An example that comes to mind is how the basic distinctions articulating a religious communication code entail differences in the way that ritual behaviors are performed; or the way humans relate ultimate meaning to current attitudes in interpersonal relationships and other settings. Such communications provide the base on which ritual scripts can be designed and in which they unfold, such as the right to attend and the regime of taboos or behavior regarding what is deemed as sacred. They allow what are seen as ultimate values and the consequences they entail to be exchanged.

However, despite the required set of rules, and probably building on language's generative capacity, theological sophistication can subvert many of those rules, playing the games of paradox and metaphor. These are literary figures too, and hence could be part of an advanced stage in the evolution of religious systems. Such a practice suggests a higher level of reflexivity, a kind of "third order" language that can only be used and applied with more abstraction and by specialists.

Human languages are clearly linked to symbolic capacities and to their development in a long historical process. Probably the process has followed dynamics of "blending" and "distinguishing" in order to obtain new expressions and to deal with new needs. Building on Terrence Deacon's insistence on the role played by symbols in human evolution (Deacon 1997), scholars like Gilles Fauconnier and Mark Turner reveal how humans have grown a capacity to "blend" symbols and scenarios into new ideas or representations, which serve as material for new conceptual blendings, like

metaphors, or the ability to invest with new meaning a former simple idea or term, rising to new levels of complexity and better possibilities to represent a very complex world (Fauconnier & Turner 2002). The progressive enlargement of that language conforming religion could be followed through historical change, and the process that brings a steady universalization of once limited categories. Such a qualitative growth that can be perceived, for instance, in the way the divinity is represented, enlarging more and more its influence to become universal.

Obviously, when religion is regarded as a language we are moving more to the side of the conscious and to reflective mind and concerned less with the intuitive or spontaneous. However, as happens with every human language, most of the linguistic abilities acquired during a long learning time become spontaneous and less reflective in their use and understanding. As in many other cognitive processes, religion as a language assumes a double model, intuitive and reflective, and both contribute in an almost "specialized" way to the mind's right functioning. Reflection, in any case, requires language as a means to deepen arguments and to foresee possible scenarios, to take some decision path or to build more complex social organizations.

The advantages of studying religion as a language are several. It probably better reflects the complexity and richness of current religious forms, but at the same time allows for a "scientific" approach to the study of religion that avoids the traps of excessive reduction and unmanageable complexity. If religion is studied as a language, its subjective or cognitive side can be better understood by looking for its deep structures in the human mind, and its external or cultural side, when religion becomes a fixed code, becomes available for use and application by members of a social group. In this way, principles of co-evolution between mind and culture can be freely applied to religion and its many expressions.

A research program could try to reconstruct the peculiarities of religious language and to distinguish them from "impossible ones" and to determine how religion works in the mind and culture when it assumes such a format. However, we need to be aware that in understanding religion as a language we will have to cope with the conundrums and big issues that still assail linguistics of any kind, and especially those arising around the origins and first evolution of human language and those related to its neurological basis. In my opinion, this problematic state of things constitutes not an inconvenient but a healthy challenge. After all, in the same way as happens to language, religion is indeed one of those problematic aspects in human evolution and actual constitution, one that deserves closer attention and much more research.

Conclusion

These concluding remarks are intended to highlight the strong relationship between the study of religion and anthropological research. When human

nature is represented according to a reductive and limited set of features, then we can expect that religion will go through a similar treatment. Such correlation could result from the application of similar methods and models in the general and the particular case of study. By the same token, the reductive treatment of religion is often a symptom revealing anthropological reduction as well. That tendency can be unveiled in many modern programs, and is evident in the new scientific study of religion. Reversing the approach, we can expect that a more comprehensive and holistic anthropology would help to build a more complex model of the religious mind and behavior. A more accurate and nuanced study of religion will entail at the same time a broader understanding of humans and their world.

A pressing issue arising at the close of this analysis is whether its questions could be traced back to a hermeneutic choice, that is, to the need to decide which interpretive framework might be more fitting and for which scope. The issue—in those terms—invites us to decide about the best approach to better know both human beings and religious phenomena. To some extent, the problem consists in finding a balance between the unavoidable levels of reduction that science needs to practice, and the convenient assumption of more variables and a multi level approach.

Ultimately, the real problem is epistemological and even metaphysical, in the sense that there are unavoidably previous epistemic and metaphysical options that bias the entire research program. The expectation is that deepening the discussion might help to overcome those biases and to reach a better and more scientific understanding regarding both human nature and the religious attitude. Theology should take stock of all these developments as a condition that allows it to expand its own subject, and to become more plausible in an ever more scientifically inspired culture.

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