Conceiving God:
Perversions and Brainstorms

Conceiving God: Perversions and Brainstorms; A Thesis on the Origins of Human Religiosity

By

Ioannis Tsoukalas

CAMBRIDGE SCHOLARS

PUBLISHING

Conceiving God: Perversions and Brainstorms;
A Thesis on the Origins of Human Religiosity,
by Ioannis Tsoukalas

This book first published 2010

Cambridge Scholars Publishing

12 Back Chapman Street, Newcastle upon Tyne, NE6 2XX, UK

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN (10): 1-4438-1738-4, ISBN (13): 978-1-4438-1738-7

We can no more escape the pull of magic inside us than the pull of gravity.
—Arthur Koestler (1964: 405)

TABLE OF CONTENTS

INTRODUCTION

This little book will try to explain the emergence of the God-concept in the dawn of human history.[1] In other words, it will try to find out what made our primordial ancestors start worshiping supernatural beings (gods, ghosts, spirits, etc.). Despite this high-flown objective our approach is down-to-earth: we seek a natural explanation, no metaphysical mumbo-jumbo. To be more precise, we seek an explanation that is commensurate with the findings of neuroscience and evolutionary theory.

The presentation will focus on the origin of the God-concept and not on the practice of religion. There are three reasons for this choice. Firstly, there can be no religious practice without a God-concept; almost all scholars agree on this (see Spiro, 1987b). The starting point of religion is the existence of superhuman or supernatural beings. These entities constitute the object of belief and worship for a community of people. Thus, explaining the existence of the God-concept is a good place to start if we want to understand the origins of religion. A second reason for this choice is that the God-concept is a uniquely human trait; not so the practice of religion. There is no other creature in the animal kingdom known to worship supernatural entities but there are plenty of them that exhibit ritualistic behaviour (Driver, 1991). This of course signals that it is the former, and not the latter, that distinguishes the human race from other animal species. Actually, the emergence of the God-concept may have been one of the early triggers that got the wheels of cultural evolution rolling. The third reason is that we already know quite a lot about the practice of religion. Ritual and ceremonial acts are well-known forms of social behaviour for which we have good explanations, both when they appear under the cloak of religiosity (Driver, 1991; Bell, 1997) or in more secular contexts (Kertzer, 1988; Turner, 1988). Thus, the need to ponder these issues is much smaller. When it comes to the origin and function of the God-concept, however, our knowledge is more limited.

Although we will not adhere to any specific terminology our interest in religious phenomena is not a general one. Our main concern is religious phenomena in the strict sense of the word. These are the kind of phenomena experienced by mystics, converts and the like. This is an established tradition within religious studies and we intend to follow it.

This demarcation, though not absolute, effectively excludes such ordinary activities as church attendance, religious festivals or everyday superstitions.

The thesis of this book is inspired, and builds upon, the thoughts of earlier scholars whom I will quote extensively.[2] They come from various scientific fields and worked under different circumstances and agendas. Despite this their work has interesting, one could even say eerie, affinities with each other. However, and this has to be underlined, this is a new thesis and not yesterdays leftovers served on a new plate; the clever synthesis it achieves is unique. These older materials, supplemented with recent findings, will be the jigsaw pieces out of which a new motif is fashioned. If the reader manages to see the emerging picture in his minds eye, if ever so dimly, I will have accomplished my mission and he will have experienced the satisfaction intellectual revelation.

Before we proceed with our task a few words will have to be said on the choice of subject. Why would anyone want to delve into such a subject? Why commit valuable mental resources, not to mention precious time, to such an intellectual pipedream? The complexity and uncertainty that surrounds it is so large that any attempt to comprehend it could only be described as an exercise in megalomania. Still, as is evident by the enormous literature on religious matters, the subject has been visited by scientists before.

In fact, there are many good reasons for pursuing this subject. One is that today we have access to important new pieces of evidence, the results of decades of systematic research, that may help us finally solve this mystery. Yesterday these pieces were missing and, therefore, the efforts of earlier scientists, however courageous, were doomed to failure. Now the odds are better and this ads a measure of urgency to the matter. A second reason for delving into this age-old conundrum is the deep personal sensitivities and metaphysical questions it taps into. Most people, even convinced atheists, have queries of this kind. What is the use of God (or the experience of God)? Why does every culture have a set of deities they worship? And if these reasons are not deemed enough I would like to echo the words of Leon Festinger (1986: 206) as a final justification: “In spite of the tenuous nature of speculation about prehistoric forms of social organization, the issues are important enough to lure almost anyone into trying”.

Finally, a word of caution. As is clearly stated in the title of the book this is a thesis. As such it will try to prove a point of view; my point of view. This means that the presentation will not be a critical review or a general discussion. Those who want such a treatment should look

elsewhere. Still, in its pages the critically inclined reader will find many references that could suit his fancy.

HUMAN EVOLUTION AND CULTURE

One of the towering intellectual achievements of modern science was the publication of Charles Darwin's (1979) *The Origin of Species*. The theory contained within its covers allowed scientists, for the first time, to explain complex historical processes without the need to stipulate an active agent or an intelligent design (human or otherwise). This opened up many new areas of investigation, as well as cleared up many old ones beleaguered by metaphysical speculation, and allowed scientists to conduct systematic and well grounded research. Especially within zoology and biology the theory of evolution under natural selection quickly established itself as the new paradigm and achieved near canonical status (see Morris, 1967; Wilson, 1978; Dawkins, 1989).

So strong was the enthusiasm and self-confidence born out of this intellectual achievement that its champions soon tried to apply the theory outside its "natural habitat". Given the merits of the theory this was a prudent approach.[3] Even though it can be tricky to transfer the received wisdom of one domain of expertise to another domain such metaphorical moves are usually worthwhile. Metaphors, if nothing else, are one of the basic modes of human thought and as such indispensable for any scientific enterprise (see Lakoff & Johnson, 1999). In this presentation we will follow this time-honoured model and try to fit our thesis into an evolutionary context. If it fits in it has a better chance of survival in the annals of science.

The evolution of culture

According to a majority of scholars the Pleistocene period seems to have been the scene for the most rapid and significant evolutionary development of the human species. Its radical changes in climate, land formation and vegetation created ideal conditions for the workings of natural selection and thus pushed various populations of hominid primates either into gradual extinction or into an intensified round of reconstitution and regeneration. It is in this period that humans probably acquired the social and psychological traits – what is summarily called culture – that so markedly separates them from other animals (see Roe & Simpson, 1958).

Even though culture helps explain many facts about human life – and is, therefore, an explanatory force in itself – it is an odd enough occurrence to be left unexplained. No other living organism on the planet possesses such a psychosocial ability. Thus, we must try and account for it. This is a daunting task, and we will only touch upon it briefly, but we can nevertheless offer some plausible scenarios. How, then, did culture evolve? What we should be looking for is a kind of trigger, or set of triggers, that set the wheels of cultural evolution in motion. This trigger was probably a singular biological event – some sort of spontaneous mutation – that altered the somatic structure of the individual and endowed it with a new ability. To the degree that this ability offered an advantage in the struggle for survival it was passed on to the next generation.

Now, what could those triggers be? Over the years scientists have put forth various claims and theories that purport to answer this question. Sifting through this body of literature we can discern a rather limited number of potential mechanisms. What pushed us into the track of cultural evolution was probably: bipedalism and tool-use (Wilson, 1978; Holloway, 1981), infantilization of offspring (Morris, 1967; Holloway, 1981), gestural communication and language (Hewit, 1979; Pinker, 1994; Kendon, 1997), bricolage and improvisation (Lévi-Strauss, 1966; Nachmanovitch, 1990), and the ability to show empathy or theory of mind (Tomasello et al, 1993; de Waal, 1995; Tomassello, 1999).[4]

After the instantiation of this somatic change the work of natural selection gradually produced more and more of this advantageous trait. This trait, when fully established, allowed and facilitated the development of additional somatic changes. The accumulation of such critical somatic changes had an additive and synergistic effect and eventually led to the emergence of what is summarily called human culture.[5] Edward Wilson (1978) has called this kind of synergy *autocatalysis*. At some point in time the cultural activities of humans started to create an environment of their own – a cultural milieu – which gradually supplanted the role of the physical environment and took over its selective function in the continued evolution of the species. According to Geertz (1993) it was from this point and onward that evolution truly became interesting from a human point of view. After this point biological and cultural evolution worked hand in hand to finish off the project of anthropogenesis.

One of the things cultural evolution did with humans is that it gradually divested their organism from a number of deep rooted instincts and substituted them with an array of more or less learned forms of behaviour. This is not to say that animals do not have a lot of learned behaviours – many animals, especially the higher primates, have great

repertories of learned behaviours – or to imply that there are no automatic responses to be found in humans – there are plenty of human behaviours that seem to be over-determined and, thus, out of reach for voluntary control and modification. Even so, however, the difference between human and animal is significant in this respect. In the case of humans the ratio of instinctual to learned behaviours has been heavily tilted in favour of the later. This new "ratio" is one of the distinguishing traits of our species.

> Human existence begins when the lack of fixation of action by instincts exceeds a certain point; when the adaptation to nature loses its coercive character; when the way to act is no longer fixed by hereditarily given mechanisms. In other words, *human existence and freedom are from the beginning inseparable*. Freedom is here used not in its positive sense of "freedom to" but in its negative sense of "freedom from", namely freedom from instinctual determination of his actions.
>
> Freedom in the sense just discussed is an ambiguous gift. Man is born without the equipment for appropriate action which the animal possesses; he is dependent on his parents for a longer time than any animal, and his reactions to his surroundings are less quick and less effective than the automatically regulated instinctive actions are. He goes through all the dangers and fears which this lack of instinctive equipment implies. Yet this very helplessness of man is the basis from which human development springs; *man's biological weakness is the condition of human culture*.
>
> From the beginning of his existence man is confronted with the choice between different courses of action. In the animal there is an uninterrupted chain of reactions starting with a stimulus, like hunger, and ending with a more or less strictly determined course of action, which does away with the tension created by the stimulus. In man that chain is interrupted. The stimulus is there but the kind of satisfaction is "open", that is, he must choose between different courses of action. Instead of a predetermined instinctive action, man has to weigh possible courses of action in his mind; he starts to think. He changes his role towards nature from that of purely passive adaptation to an active one: he produces. He invents tools and, while thus mastering nature, he separates himself from it more and more. He becomes dimly aware of himself – or rather of his group – as not being identical with nature. It dawns upon him that his is a tragic fate: to be part of nature, and yet to transcend it. He becomes aware of death as his ultimate fate even if he tries to deny it in manifold phantasies.
> (Fromm, 1942: 26-27)

Despite this "ambiguous gift" humans survived and even became the masters of this planet (as God willed it?). This means that the human race, in its long evolutionary journey, tackled and solved many of the problems that the weakening of instincts gave rise to. Humans, thus, learned to

shelter themselves from the physical elements, learned to protect themselves from wild beasts, learned to raise their children safely etc. They also learned to regulate their group life successfully. This later achievement is especially important for our present purposes. How does an animal species regulate its collective existence in the absence of innate instincts (or with severely weakened innate instincts)? One good answer is with the help of shared *symbolic systems*, systems that enable and structure thought and communication (Brunner, 1990; Geertz, 1993).

God: the ultimate unifying symbol

The symbols produced during the eons of hominid development – whether vocal, iconic or behavioural – came to fill the gap that was left by the successive weakening of primordial instincts. This 'toolkit' of culture can be described as "a set of prosthetic devices by which human beings can exceed or even redefine the 'natural limits' of human functioning" (Bruner, 1990: 21). Of the many symbols produced and used by humans in their evolutionary past some had a peculiar character: they helped unite the group. Among these unifying symbols a special subset came to play a very important historical role. This subset is called *religion*. In the words of Edward Wilson:

> The predisposition to religious belief is the most complex and powerful force in the human mind and in all probability an ineradicable part of human nature… It is one of the universals of social behavior, taking recognizable form in every society from hunter-gatherer bands to socialist republics. Its rudiments go back at least to the bone altars and funerary rites of Neanderthal man. At Shahindar, Iraq, sixty thousand years ago, Neanderthal people decorated a grave with seven species of flowers having medicinal and economic value, perhaps to honor a shaman. Since that time, according to the anthropologist Anthony F. C. Wallace, mankind has produced on the order of 100 thousand religions.
> (Wilson, 1978: 169)

That the symbols and rituals of religion have a socially unifying function is well supported in both the historical and the ethnographic record. Even though scholars disagree about the details of the matter few, if any, deny this important fact (see Pals, 1996). Especially among hunter-gatherers and nomads, were the institution of shamanism can be found, this function is self-evident. The figure of the shaman is here – with the possible exception of the chief – the most multifaceted and important person of the tribe; the guarantor of its collected lore, of its precious community and its

future progress. And, of course, its only link to the world of ghosts and spirits.

Many of the symbols of human culture, especially those fulfilling an authoritative function, draw their power – what John Searle (2006) has called *deontic power* – from some external source. For most social symbols and institutions there is no penultimate external source of justification but only an infinite regress of such sources (this is what revolutionaries discover from time to time and rise against the ruling order). Many of these sources of justification are biological or physical in nature. Thus, for example, the symbols of the police force draw their power from the authority invested in them by the local government; the government, in its turn draws, its legitimacy from the preference and trust of the people who elected them. Law and order, to take a related example, is appreciated by people since it facilitates the performance of various pursuits (e.g. commerce, education, leisure); these pursuits, in their turn, are thought to increase the physical and psychological well-being of the members of society.

However, there is one set of symbols that differ in this respect, those of religion. As a rule religious belief systems do not allow this infinite regress of justification or cut the process very short. Religious symbols and doctrines are infused with a penultimate source of power. This ultimate source of justification is *God* (or a set of Gods). It is God that has given humans their religious symbols and rituals and it is God that guaranties their truthfulness and adequacy. There is no need to look further.

Religious cosmologies, thus, are not just any kind of cultural "stuff". Believing in a supernatural being is not the same thing as baking a cake or reciting a poem. Given their unrealistic and often paradoxical character religious cosmologies require a very special kind of mindset and training in order to be accepted and believed in; and this from both a phylogenetic and ontogenetic perspective. Without such a critical pre-adaptation religious stuff would never acquire their persuasive and contagious character. How does this pre-adaptation look like? Keep reading.

TRIANGULATING GOD

It is now time to address our main question. How did the God-concept arise among humans? What process prepared our species for the apprehension of transcendental agency? The answer that will be presented here is not of the singular kind. We will not present the reader with a single cause. We believe the complexity of the issue does not really lend itself to such monolithic statements. Instead we will follow a more multifactorial approach. Such an approach, even though it will not deliver clear-cut answers of the kind cherished by devoted truth seekers, will nevertheless offer plausible hypotheses and tentative support that may satisfy the needs of scientific inquiry.

Accordingly, the theory presented below claims that the God-concept emerged through the interaction of three pre-existing phenomena. These three phenomena are: the mental world of the child, the ability to dream, and the over-excitability of the cerebral cortex. Traces of these conditions can be found elsewhere in the animal kingdom. It is only in Homo sapiens, however, that they reached the "critical mass" necessary for a successful merger to take place. This fortuitous evolutionary process, a "transubstantiation" of sorts, led to the gradual emergence of the God-concept.

The perversions of infancy: a source of omnipotent and omniscient beings

The first element of our model derives from the peculiar developmental conditions of the human infant. The perceptual and cognitive systems of the infant take a very long time to unfold and mature. They are calibrated through an excruciatingly slow and arduous process that takes almost a decade. This has a number of interesting consequences. One consequence is that the human infant has an utterly twisted view of reality. For a very long time (comparatively to other animals that is) it understands very little of what is going on around it. Whatever cognitions it has they are rudimentary and fuzzy, and remain so for a long time. Another consequence of this developmental deficiency is that it forces upon the child a prolonged period of dependency on its parents.

In recent times we have become accustomed to hearing stories about the newly discovered abilities of human infants. Undoubtedly a measure of celebration has been justified. Studying the psychology of prelinguistic children is extremely difficult and many ingenious methods had to be devised for this endeavour to bear fruit. Still, these advances should be seen in their proper context; we should not miss the forest for the one tree in front of us. The physical and neurological *deficiencies* of the human infant by far outweigh any rudimentary abilities it might have. These deficiencies actually circumscribe the early psychological development of the child. We must not forget that.[6]

But if the child has a radically different understanding of its surrounding world, both physical and social, how does this understanding look or feel like? Although we will never know for sure we can make some well grounded guesses. In this case the best help we can get comes, rather unexpectedly, from the adult world. The cruelty of life sometimes finds its expression in the staging of illustrious, if heartbreaking, life destinies. Some of these destinies have even made it into the annals of medical history. We are talking about "natural experiments" in which adults miraculously recovered some basic faculty which life had previously denied them (often from birth). When this happens the adult is forced to discover the world "for the first time", like children do. Oliver Sacks, for example, describes a number of blind people who recovered their sight in such a way. Their first-hand accounts are befittingly dramatic:

> During these first weeks [after surgery] I had no appreciation of depth or distance; street lights were luminous stains stuck to the window-panes, and the corridors of the hospital were black holes. When I crossed the road the traffic terrified me, even when I was accompanied. I am very insecure while walking; indeed I am more afraid now than before the operation.
> (Sacks, 1995: 114)

> Seeing light and shape and movements, seeing colours above all, had been completely unexpected and had had a physical and emotional impact almost shocking, explosive.
> (Sacks, 1995: 119)

> As Virgil explored the rooms of his house, investigating, so to speak, the visual construction of the world, I was reminded of an infant moving his hand to and fro before his eyes, waggling his head, turning it this way and that, in his primal construction of the world. Most of us have no sense of the immensity of this construction, for we perform it seamlessly, unconsciously, thousands of times every day, at a glance. But this is not so

> for a baby, it was not so for Virgil, and it is not so for, say, an artist who wants to experience his elemental perceptions afresh and anew.
> (Sacks, 1995: 120-121)

Even though the above examples cannot be taken as perfect equivalents to the experiences of children – the grownup brain is much less plastic than that of the infant and also contains a bulk of, potentially interfering, knowledge – they are very good approximations of what it feels like to see the world for the first time. And the different accounts blend into a morbid chorus: it is a terrifying feeling that shakes the organism. It is no wonder that infants spend much of their first years crying and sleeping... However, with time this situation changes and the child learns to perceive, understand and manipulate its world successfully.

This situation has direct relevance to our question. According to some scholars such a predicament has a *formative influence* on the human brain and predisposes it to form a number of significant concepts (see Campbell, 1969: 61-88). Among these concepts we also find a rudimentary God-concept. If this is so, a study of child development and socialization could tell us a lot about human religion. But let us listen to anthropologist and psychotherapist Melford Spiro, one of the proponents of this theory:

> …I would suggest this cognitive preadaptation is derived from two biological (hence universal) characteristics of childhood – prolonged helplessness and extended dependency… Beginning from birth – hence prior to the acquisition of language and the *culturally-constituted* conceptions of the world which language makes possible – children develop what might be called *socially-constituted* conceptions as a consequence of (prelinguistic) transactions with parents and other parenting figures. Hence, long before they are taught about the powerful beings who inhabit the mythicoreligious world young children have persistent and prolonged experiences, often accompanied by intense affect, with these powerful beings who inhabit their family world. Entirely helpless from birth, and absolutely dependent on these beings, young children form highly distorted, exaggerated, and even bizarre representations of these parenting figures. To be sure, as they grow older most (but not all) children relinquish these representations – often, however, after considerable struggle – in favor of more realistic conceptions of them. At first, however, these bizarre and distorted images, the products of primary process cognition, are unconstrained by the secondary process cognition characteristic of mature ego-functioning; that type of cognition which depends on the achievement of 'object constancy,' language competence, and 'reality-testing'…
>
> Clinical data suggest that these same cognitive confusions may be found in the mental functioning of the prelinguistic child, not because his

reality-testing is impaired, but because it is still underdeveloped. Thus, for example, the young child's mental images of his parenting figures, just like dream images, may be reified, and thereby experienced as autonomous agents. Since, moreover, the boundary between inner and outer experience is blurred at this age, these reified agents may be experienced as located within himself (where they are labelled, in the terminology of psychoanalysis, 'introjects'), or they may be externalized and located in the outer world (in which case they are labeled 'projections'). Although as the ego develops reifications are gradually given up, they are nevertheless not relinquished easily, as is indicated by the projections which form the basis for the imaginary playmates of children, and by the introjects which are the basis for spirit possessions. (Those few adults who never give up these reifications suffer severe psychopathology; for example, psychotic depression, in the case of persistent introjects, and paranoid delusions, in the case of persistent projections.) Rather than being relinquished, however, the externalized reifications of the early parental images may instead undergo a transformation, and it is this vicissitude of these projections with which we are concerned here…

[T]he child's early experiences with his parents may lead him to construct mental representations of them which, structurally, at least, are isomorphic with the mental representations of the superhuman beings of the mythicoreligious world whose characteristics are only subsequently conveyed through the verbal and visual symbols of his culture. If one considers the typical mythicoreligious world – with its gods and demons, saviors and satans, redeemers and destroyers – then it becomes apparent that the *socially-constituted* images which young children form of the powerful beings comprising their family world are highly similar to the *culturally-constituted* images which, at a later age, they form of the powerful beings comprising the mythicoreligious world. Since, then, the former images, with all their bizarre distortions and exaggerations, represent and signify actual beings whose reality they have personally experienced, we may say that children are cognitively preadapted to believe in the reality of the superhuman beings that are represented and signified in the external collective representations of mythic narratives and religious ritual, as well as in the mental images which children form of them.

But given the fact that the child's early mental images of his parenting figures are reified and externalized, I would claim even more. For, I would suggest, when the child constructs his mental representations of the superhuman figures of the religious world, they may be merged (identified) with the corresponding representations he had previously constructed of the parenting figures of his family world, thereby forming a singe representational world. When this occurs, the child's projections of his parental images may be retained without any psychopathological entailments, for they are then assimilated to his images of the superhuman beings whose existence is taught by religion and myth. At the same time,

> this process assures the belief in the external reality of these superhuman beings, for they are now merged with the reified and externalized images of those powerful human beings whose external reality he has himself experienced.
> (Spiro, 1987a: 173-176)

These representations have another interesting quality; they are permeated by feelings of trust and devotion. This is due to the fact that both mother and infant (and possibly the father as well) have elevated levels of the hormone *oxytocin* in their blood and brain tissues. This neuropeptide is secreted in response to parturition and lactation and helps promote a whole array of affiliative feelings and behaviours. In particular, oxytocin is of central importance for the development of parent-child attachment and also seems to play a role in sexual mating and pair bond formation. It has therefore been called the "love" hormone (see Marchini & Stock, 1996; Nelson & Panksepp, 1998; Kirsch et al., 2005; Kosfeld et al., 2005; Feldman et al., 2007; Zak et al., 2007; Theodoridou et al., 2009).

The predisposition of the child to deify its parents also helps explain some interesting terminological phenomena. It is a well-known fact that in most religions the major deities are denoted as "father" or "mother". In Christianity, for example, it is common to speak of "Father in Heaven" or "Holy Mother". What is even more interesting is that it is almost *unthinkable* to call a major deity by any other familial denotation. In the annals of religious history there are no major deities going under the names of 'brother', 'sister', 'cousin', or 'uncle'. This situation is a direct result of the influence of the immature mind on the formation of the world's religions.

This peculiar origin of religious beliefs necessitates the use of a *double hermeneutic* when trying to understand the motives of religious devotees. In particular, it demands a separation between the meaning of an action or utterance at the surface level and that at a deeper level.[7] Thus, for example, when a believer exclaims "Heavenly Father" this sentence has, at least, two simultaneous meanings. At the surface level the meaning of the exclamation is apparently metaphorical – the particular deity is seen *as if* it was a parent – while at the deep level the meaning is literal – the believer is invoking the presence and protection of his *real* parent. This double meaning, according to Melford Spiro, also has implications for understanding the functions of religion.

> …I have argued thus far that underlying the cross-cultural diversity in the surface meanings of culturally parochial religious symbols, there are universal deep processes and meanings. If this is so, these cultural symbols effect three important psychological transmutations in the religious actors:

> transmutation of infantile into adult conceptions, of individual into public meanings, and of unconscious into conscious concerns. The satisfaction of these adult, public, and conscious concerns – especially those related to the explanation and conquest of suffering – constitutes, so I have argued, the most important manifest function of religion, providing a powerful motivational basis for the belief in the reality of the mythicoreligious world.
>
> However, if religious symbols also have deep meanings, then religion not only has manifest functions related to the surface meanings of these symbols, but it must also have latent functions related to their deep meanings… I wish to argue that religion attends not only to the conscious and public concerns of the actor's adult-like experience, but also to the unconscious and private concerns of his child-like experience. For if religious symbols are associated with unconscious infantile mental representations, it can only be because in addition to their conscious, adult concerns, social actors retain unconscious, infantile concerns, and it is their satisfaction that constitutes the latent function of religion. The intention of satisfying these concerns constitutes yet another – an unconscious – motivational basis for the belief in the reality of the mythicoreligious world. (Spiro, 1987a: 178)

So the helplessness of the human child pushes it into a prolonged dependency on its parents and promotes the development of a very peculiar worldview. During this early period the child is allowed to indulge itself in intense and contradictory emotions: intimate physical contact, love, devotion, defiance, rage, aggression, and trance-like states. As the child grows, however, an increasing number of restrictions are being placed on this, almost symbiotic, relationship. What is particularly relevant for our purposes is that after a certain age (sometime around puberty) there is a clear *reversal* of this situation; the child is increasingly required to manage on its own and become independent. In many cultures we even find rules – for example taboos – that prohibit the display of dependency and aggression towards ones parents. The reasons for this reversal are obvious. Firstly, the continued expression of dependency and aggressive behaviours within the family would have a disruptive effect on its integration and obstruct its vital, individual and social, functions. Secondly, the long-term survival of offspring requires that they outgrow their dependency on the family of origin and, after becoming independent, establish a family of their own in which they themselves parent a new generation of children. This reversal, however, has a number of interesting consequences. Melford Spiro has the word again:

> This being so, every social actor and every society are confronted with an acute existential dilemma. Although his parents are the objects of the child's most intense dependency and aggressive needs and wishes, they are

> also the persons concerning whom their gratification is eventually most strongly frustrated. For although as children grow older and become adults, they learn to comply with the cultural norms prohibiting the overt display of aggression toward and dependency upon parents, this does not mean that these infantile needs are extinguished. That the contrary is the case is indicated not only by an abundance of clinical evidence, but also by commonplace observations of everyday life which indicate that these emotions and wishes are capable of arousal – and not only in a displaced form – in certain contexts, at least, and under certain provocations.
>
> In sum, then, I am arguing that the intense dependency and aggressive wishes of children concerning parents, though seemingly extinguished, continue to exist in a repressed state in adults. Like all repressed wishes, these too seek gratification, and like them they are typically gratified – if they are gratified at all – in symbolic disguise. In addition to dreams, repressed wishes may be represented and (partially) gratified in the many privately constructed symbolic forms (including symptoms) which have been described and classified by psychiatrists. Typically, however, such wishes, particularly if they are widely shared, are represented and gratified in culturally-constituted rather than privately-constructed symbolic forms. Although many cultural systems – from games through politics – can be and have been used for this purpose, I would argue that religion is the system, *par excellence*, which is used for the disguised representation and gratification of the repressed wishes with which we are concerned here – dependency and aggressive wishes with regard to the parents of childhood. This is certainly the case in traditional societies, and if newspaper reports and television broadcasts can be taken as evidence, it is also the case, to a larger extent than we usually credit, in certain strata of modern society as well. That religion should be a focal system for the gratification of these wishes is hardly surprising if the explanation which I have offered for the meaning of its symbols is valid. For if the cultural symbols which represent the superhuman beings of the mythicoreligious world signify, in their 'deep' meaning, the reified and externalized mental representations of the parents of childhood, what better way to express and gratify unconscious rage toward and dependency longings for these parents than through the vehicle of religious beliefs and rituals?
> (Spiro, 1987a: 181-182)

This correspondence between infantile fantasy and religious representations has far reaching consequences and influences a number of important social functions – from childrearing, through public relations, to conflict resolution.[8] This should not surprise us. Psychologist have for a long time suspected that childhood experiences have a formative influence on the development of the adult personality. What is new in Melford Spiro's theorizing is that he extends this influence to the religious domain – the

metaphysical beliefs and practices of people – and carefully elucidates its many implications. Let us listen to him again:

> As a cultural system, religion attends… [to] the believers' adult experience, especially their concern with suffering in both its intellectual and existential dimensions. That is, it attends to the needs to both explain and overcome suffering. To achieve the latter end, the religious actor engages in ritual transactions with the superhuman beings comprising the mythicoreligious world. Some of these beings, kindly and benevolent, he turns to for assistance and aid in his attempt to cope with suffering. Others of them, aggressive and malevolent, are often viewed as the cause of suffering, and these he attempts to drive out or drive off. The former type arouses his wishes for and emotions of dependency and succorance; the latter type arouse his aggression, fear, and hatred…
>
> [W]hen religious actors invoke the assistance of benevolent superhuman beings, or exorcise malevolent superhuman beings, they are not only *consciously* gratifying dependency and aggressive needs in regard to beings who are their *culturally appropriate* objects and targets, but they are also doing more than that. For if the actors' mental representations of these benevolent and malevolent superhuman beings are merged with the reified and projected representations of their kindly and hateful parents of childhood, then, they are simultaneously, but *unconsciously*, gratifying their dependency and aggressive needs in regard to their childhood parents, their *culturally inappropriate* objects and targets. That religion-in-use serves this (latent) function explains at least one of the unconscious motivational bases for the belief in the reality of the mythicoreligious world. I might add that if this argument is valid, religion also serves an equally important latent function for society. For if religion-in-use is a means for the symbolic gratification of these powerful infantile needs, society is thereby spared the highly disruptive consequences of their direct gratification.
>
> (Spiro, 1987a: 180-183)

So simply put, God is borne in the minds of prelinguistic children as a reaction to their special predicament. [9] Besides giving a plausible explanation to the emergence of the God-concept, Spiro's model also elaborates some of its logical consequences. Thus, the readiness to accept superhuman beings as "real", which is established during infancy, helps underpin the religious systems that are to be found in the world of the grown-ups. Similarly, peoples repressed energies and forbidden wishes have a tendency to "migrate" to the religious realm, an analogue to the world of infantile fantasy. There, in their preternatural habitat so to speak, they can be symbolically treated and creatively released.

Melford Spiro's theory is one of the most straightforward explanations of the God-concept.[10] He tries to both explain and understand why humans

believe in superhuman entities. Many other religious theories do not even address this issue directly, and when they do usually evidence their limited knowledge of the human psyche and its workings (see Pals, 1996). However, the biggest merit of Spiro's theory, beside its explanatory power, is that it establishes a number of constructive interfaces to other, closely related, issues.

Morality is one important issue that the theory touches on. As we saw above Melford Spiro points out a number of social prohibitions that either directly emanate from the God-concept or logically follow from it. Another issue implicated is the prevalence of metaphorical and analogical thinking during infancy and its potential consequences for later development, both personal and societal. Interestingly, morality and metaphorical thinking interlock in intriguing ways.

Recently George Lakoff and Mark Johnson (1999) claimed that the fundaments of human morality are to be found in the family. This basic morality is conceptualized with the help of a number of *metaphorical models*. The most important ones according to the authors are the "Strict Father" and "Nurturant Parent" metaphors common to virtually all known cultures. These two metaphors are supplemented by a third one – the "Family of Man" metaphor – which helps enlarge the moral obligations of people so as to include the whole of society or humanity. This is a very interesting claim with far reaching consequences. What is most interesting for our purposes is that it has direct affinities with the ideas of Melford Spiro. Most moral codes in human history have either directly sprung out of religious systems or been heavily influenced by such systems. If the God-concept has its roots in the childhood experiences engendered within the family it is hardly surprising that the moral codes attendant to such a transcendental authority will have a similar source.

All these implications are leads for future studies to follow up and investigate in detail.[11] Fortunately, some researchers have already started to look into this fertile paradigm (see Kirkpatrick & Shaver, 1990; Dickie et al., 1997; Nuckolls, 2001; Birgegård & Granqvist, 2004; Granqvist et al., 2007). One of the principal findings of this newer research is that the patterns of *attachment* between parent and child have a profound influence on the kind of religious beliefs that are developed latter in life.

Could this have been what Jesus had in mind when he told his disciples that "Unless you change and become like children, you will never enter the kingdom of heaven" (Matthew, 18: 3)?

Dreaming: the realm of fantasy and phantasms

The second factor that influenced the emergence of the God-concept was the peculiarly human ability to dream. Dreaming is especially relevant for our purposes since, one way or other, it figures prominently in most human religions. It is in dreams people receive revelations from God or see ghosts and spirits. If we want to unravel the secrets of human religiosity we cannot afford to ignore this important phenomenon.

The ability to dream is somehow, though we do not know exactly how, connected to the transition from cold-bloodedness to warm-bloodedness. Thus, only warm-blooded animals can dream and among them primarily the mammals. Humans are, with the exception of the domestic cat, the biggest dreamers of all. Actually, dreaming is one of the basic conditions of human existence along wakefulness and sleep. When people dream they enter a very special kind of brain activity called REM sleep – the main biological substrate of dreaming – and engage in a highly pictorial and metaphorical way of thinking (see Jouvet, 1999).[12]

For the early hominids dreaming must have been one of those marvellous and unexplainable phenomena that perplexed the mind. For even though their intelligence was limited and their culture rudimentary they still could not escape noticing this *intrapsychical spectacle* and ponder over its significance. Some researchers even believe that parts of the famous paintings in the Lascaux cave represent dream material. Michel Jouvet, one of the pioneers of dream research, suggests that the experience of dreams might have prompted and prefigured the budding religious feelings of our ancestors.

> I wonder how long it was before this nightly repetition of fantastic imagery led him to the essential conclusion that marked the dawn of humanity? That some immaterial element, some "spirit" or "soul" must exist, fundamentally different from the material body, an untiring and invisible spirit *that stays awake during sleep*. It wanders freely through space and time and delivers oneiric images of its voyage to the brain while the tired body is deep in sleep. *Soul* implies immortality… the fantastic nature of dreams was at the origin of belief in the spirit and the soul that we find in various forms at the dawn of all civilizations and in all religions.
> (Jouvet, 1999: 27-28)

The human dream can be described as an amalgamation of real and fantastic experiences that challenge the limits of ordinary reality; the reality experienced by the waking subject (see Hartmann, 1998; Jouvet, 1999). In a dream the laws governing the physical universe and the laws governing social and psychological life are either altered or suspended.

Thus, humans may suddenly start to fly around, animals speak in human tongues, objects appear or disappear mysteriously and familiar characters change beyond recognition. The world of dreaming, when it is not totally bizarre and alien, is therefore a topsy-turvy kind of world; very much like the one we find in *Alice in Wonderland*. In this, dreaming shows strong affinities to "the magic type of causation found in primitive societies and the fantasies of childhood" (Koestler, 1964: 180).

Dreaming thus differs radically from the waking condition. While waking thought is generally focused, sequential and goal-directed dreaming is more diffuse, multifaceted and open-ended. This difference can be conceptualized in two basic ways: one in terms of the brain regions involved and one in terms of the mental processes involved. Thus, it seems as though waking primarily utilizes the tightly woven portions of the brains neural network and leads to rapid processing of information and the execution of, usually over-learned, responses. Dreaming, on the contrary, seems to rely more on the loosely woven regions of the neural network and produces slower and more varied mental operations. At the same time dreaming is more "wild" and thus connects more disparate and distant parts of the human brain. Simply put, waking thought is a problem-solving enterprise while dreaming is an explorative venture (see Hartmann, 1998).

The difference between waking and dreaming can also be conceptualized in terms of different mental processes. Waking thought generally follows a straightforward sequential route which eventually leads to the reaching of a goal or the solving of a problem. In the language of connectionist networks we could say that waking thought has the character of a "fed-forward-net". Such a network consists of a number of units placed in layers that interact with each other in a unidirectional way; interaction flows forward, from input to output. Dreaming on the other hand uses a more parallel and distributed kind of processing. The connectionist network that best emulates its function is the autoassociative network also called an attractor net. Such a network consists of a set of relatively unstructured units that interact with each other on a symmetrical basis; there is no clear-cut input or output and the network only "settles" temporarily (see Hartmann, 1998).[13]

As mentioned above dreams are heavily pictorial and these pictures are often instances of *conceptual metaphors*. Metaphors are one of the basic modes of human thought; they are analogical in character and express our embodied knowledge of the world. A metaphor is basically a transfer of knowledge and inferential capabilities from a well-known area of discourse – the source domain – to a different and usually less well-known

area – the target domain. These domains usually, but not necessarily, have some intrinsic similarity (see Lakoff & Johnson, 1999). The special kind of mental processing occasioned by dreaming has a tendency to "stumble upon" such similarities and this invites the use of conceptual metaphor. This is how dream expert Ernest Hartmann puts it:

> What I am saying – and this may be a bit difficult to grasp – is that a metaphoric similarity is a real similarity. In the nets of our minds (and that's all we have), metaphor is real: The similarity between a personal relationship and a journey by car is just as real as the similarity between a car and a truck. If there is enough overlap in our representations of two items, they are related items for us, and the looser "flow" of excitation in dreaming can and often will make connections between them. This happens more easily in dreaming since we have fewer or "thinner" boundaries and less of the logical rules (and category rules) that we maintain in waking. Thus dreaming, when we are processing more broadly and loosely with less emphasis on categories and separations, is absolutely full of metaphor.
> (Hartmann, 1998: 106-107)

But how exactly do dreams relate to our main question, the emergence of the God-concept and human religiosity? Most religions build their worldview on a number of colourful stories and base their authority on the claim that these stories were handed down to the clergy through some sort of divine intervention. These stories usually contain an overabundance of supernatural happenings and superhuman beings. It is important at this point to emphasize that these extraordinary elements are not epiphenomenal to religion; to the contrary they are part of its warp and weft, its *conditio sine qua non*. These supernatural happenings and superhuman beings are of the same character as those encountered, more or less spontaneously, in dreams.[14] In the words of Ernest Hartmann:

> We can also consider the actual images and icons that occur in all of our religions. In any number of religions, a god or a supernatural creature is portrayed as a bird or a lion with a man or woman's head, or a man with the head of an antelope or other animal. I would argue that these images probably derived at some point from dreams. They are the very stuff of dream connection or condensation – especially the powerful condensations that sometimes occur at the end of a long dream.[15]
>
> Some readers may feel that I am speaking only of distant or "primitive" religions that have little to do with modern man. Not so! What we have discussed relates to Western religions as well as to those we consider more exotic. For instance, I have suggested that the Christian hell is populated by creatures derived from nightmares. Demons and devils of