Sensing the Divine

Influences of Near-Death, Out-of-Body & Cognate Neurology in Shaping Early Religious Behaviours
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Sensing the Divine

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Michael N. Marsh
Preface

Ideas for this book originated from discussions arising from the recent conference in New Mexico, USA, devoted to the origins of religion and religiosity, and their relationships to theology. The conference and its resulting book were formalised, edited and published by Professor Jay Feierman (University of New Mexico) and Professor Fr. Luis Oviedo OFM (The Pontifical University Antonianum, Rome). Some years before that Conference, I had written a doctoral thesis in the University of Oxford on Near-Death (NDE) and Out-of-Body (OBE) experiences, viewed critically from neuro(patho)physiological and theological perspectives. The major aetiological precipitants of these events would certainly have confronted early evolutionary species of humankind: that is an important understanding. Thus, the suggestion arose as to whether, as one specific aspect of natural religion pertaining to the earliest revelatory experiences – or a “sensing of the divine”, ND/OBE phenomenology undergone throughout those evolutionary histories concerning early "human" species could, collectively, have come to offer a glimpse of divine presence here on earth.

This book is divided into three parts: anthropology; OB/NDE and cognate neurophysiological aberrations; and thirdly, a resume in which a synthesis of these ideas is offered. Throughout, there are also four Addenda containing material which have relevance to the ideas being developed, but which are not essential reading for those disinclined to enter into concerns about the origins of language; the workings of the brain's frontal lobe; the neuropathology of abnormal dream states; or shaminism. Notwithstanding, the ideas expressed and elaborated therein provide effective traction for the idea that ND/OBE experiences could have played their contributory role in early perceptions of the divine by our ancient hominin forebears.

This has not been a particularly easy book to write. There is a wideness in the breadth of the material covered. Although I was familiar with most of those fields, having written about them in previous publications, they needed to be sharpened up for present purposes. Nevertheless the ideas are not necessarily expressed as
scientific essays, but in a more conversational style befitting the informed, articulate readership presumed to be examining this topic. Again, the Addenda do not have to be read: they merely provide additional information relevant to the thematic content of each part.

It is hoped that the contents of the book arising from ND/OBE and cognate neuropathological phenomenologies will be seen as an important addition to the existing literature on the origins of religion and, for those very early human precursors, as one additional but specific means by which a naturally based spirituality was able to develop and subsequently grow. I am especially grateful to Professor Oviedo for his encouragements and support, and also for the comments made by two other anonymous reviewers of the original manuscript who, despite their extraordinarily widely opposed comments, nonetheless were of considerable help in strengthening and shaping the content of this book.

Oxford, UK
Epiphany, 2020

Michael N. Marsh
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Chapter 1
Introduction

Much has been written on the so-called “origin(s) of religion”. But what does that oft-repeated phrase actually mean? It seems more than likely that the emergence of this way of conducting one’s life arose, not as a unitary phenomenon, but rather from multiple origins and therefore from a varied palette of culturally-based traditions. Indeed, those traditions need more careful definition too, since the relevant backgrounds, over time, would have obviously differed greatly. Moreover, such backgrounds need to include, ab initio, non-literate, so-called hunter-gatherer tribes and other “primitive” groupings from around the world since the human race began. Our difficulty is that those multiple backgrounds cannot be precisely known because there are no preserved written documents available for retrospective perusal. But two other observations arise. First, that our use of language or vocabularies relevant to “religion” and “religious behaviour” cannot strictly be employed for these ancient peoples or to any “beliefs” which they may have held. Since there were no credal definitions, it needs recognising that the words “religion”, “faith” and “belief” are inappropriate for the kind of discussions presented in this book. Indeed, the idea of “monotheism” is an extremely late theological conception: on the other hand, the initiating origins concerning “gods”, a plurality often widely but somewhat uncritically employed, cannot be determined with any certainty. Second, since we are considering pre-literate peoples, it is not possible to fully appreciate the kinds of cognitive structures in place during these early evolutionary epochs of ancient mankind: a few manuscripts left scattered in the archeological dust would have helped considerably. Following those remarks, I prefer the use of the word “spirituality” in referring to the otherworldly behaviours of pre-literate hominins (after Cottingham 2005) since it refers more to practice and personal attitude, rather than to adoption of high cognitively-engineered beliefs and their associated ritualistic outcomes.

Yet early pre-literate communities were, as human beings today, highly superstitious. Before picking up this book and beginning to read, how many times did you wish someone “good luck”, or cross your fingers as insurance against a bad result or even, in extremis, consult your horoscope in your daily newspaper? Ancient peoples
were imbued with superstitious ideas. Specific or prominent objects within their environments were endowed with “powers” of various sorts and which, in some cases, might be best avoided. Such powers would not only be ascribed to special features like a particular mountain, tree, the moon or an animal, but also to less definable “forces” occasioned by the seasons, weather patterns, and more recurrent phenomena such as thunder, lightning, earthquakes and so on. These largely non-visible yet highly powerful and destructive entities were a dangerous part of life’s reality and were thus to be afforded much respect. Today, while scientific explanation has robbed many of these phenomena of their overwhelming fearfulness, many of us still cower during an intense hurricane with very loud claps of thunder, brilliant flashes of lightning, and destructive gale-force winds. Indeed, although since the seventeenth century, progressive rationally-based explanations have been studied and come to be understood, the avoidance of these destructive forces of nature is not always immediately feasible and people are still killed, injured or find their homes and livelihoods taken from them. We inhabit a living planet in which these outcomes are not only necessary for that geophysical reason, but necessary, perennial events – tectonic plate shifts, volcanic eruptions, tsunamis, hurricanes and so on. Little wonder that ancient peoples regarded such forces as “all-powerful” and “god-like”, thus demanding respect.

Illness, likewise, has always been regarded as something abnormal and to some degree frightening. Even today, lay folk find dealing with or being in the presence of “deranged” people or those with hideous deformities, neither easy nor a particularly pleasing sight. The lingering biblical attribution of parental sins due to the occurrence and causation of such departures from the natural, still tend to be believed. Epileptics have always been considered to be possessed by evil powers, spirits or “devils”. From the Classical era, through first century Christianity and beyond until the Mediaeval period (Smoller 2000), similar irrational ideas and perceptions of apocalyptic proportions persisted, including occult traditions involving ritual, magic, alchemy and witchcraft. In his (recent) letter to the Romans, Paul expresses his unreserved and immovable conviction that only the love of God through Jesus Christ offers protection for him and ourselves from the “powers”, such as height, depth, principalities, and so on (Rom 8: 38–9). So there is a deep continuity through human evolution (even though possibly re-discovered from time to time) of fear of the unknown, and ascription of forces to concrete or abstract aspects of the habitats occupied by humans throughout history, as well as to people demonstrating varied physical or psychological abnormalities. And finally, the fear of death was perhaps the most powerful force which guided all these approaches towards the unknown, the varied attempts at overcoming them, and a desire for their mastery. It is on this background that the origins of more formalised “religion” and “religious practice” are likely to have arisen as the fundamental basis for a fuller understanding of a confusing universe. It is most strange that within our 6 million years of evolutionary human history, the concept of a revealed monotheistic Godhead has only surfaced, become known to us, and been progressively formalised within the last (and very recent) 3000 years. That, in essence, seems to be the relevant background upon which not only established “religions” would later take
origin, but also the environment as referred to within this book that, from its earliest times, a “sense of the divine” was able to germinate, take root, and be progressively nurtured. From that underlying perspective, this book specifically aims to explore the possible role of near-death and out-of-body experiences (ND/OBE) in that process. Of course, these types of experience are not the only possible originating sources, since animism and shamanism from their multi-cultural roots across the world are without doubt certain to have offered vital contributions. But likewise, it is a reasonable proposal that ND/OBE phenomenology also played an analogous role, and especially within pre-literate tribal societies.

In developing this theme which I have named “sensing the divine”, I have divided the book into three sections: Part I: a brief evolutionary history of mankind; Part II: the nature of ND/OBE experiences, their meaning together with normal and abnormal dream neurophysiology; and finally, in Part III: a synthesis offering grounds for my proposal that ND/OBE may well have provided one avenue by which the divine could have been sensed. At the outset, it seemed vital to provide a brief evolutionary account of mankind’s descent from the world of primates, as provided in Chap. 12. This is by no means an expanded or even in-depth account, but one offering the necessary orientation on which to portray the gradual realisation of a “sense of the divine” through ND/OBE experiences. Apart from specialists in this field, few general readers might be expected to have first hand knowledge of this evolutionary parade other than perhaps with certain names – especially “Neanderthal”, “Lucy”, or “Peking Man”. Nevertheless, the precise historical pathway through which H. sapiens arose is not known for certain. And indeed, with more ancient sources of DNA analysis or protein chemistry coming into focus the missing links in the chain may ultimately be filled in, so to complete the picture. However, from the many fossils studied it is clear that evolution has pursued a branched tree pattern. That means that the notion of any linear descent resulting in H. sapiens is still far from clear. However, in terms of a sensing of the divine, we are probably dealing with hominins who were living throughout the broad period 50–150 thousand years ago (kya). These would have included anatomically modern humans (AMH), Neanderthals and Denisovans, and more than likely H. heidelbergensis. The latter do seem to represent an evolutionary “hinge” from which an effective sense of modernity is observable. One further ingredient required would have been the possession of speech and some realistically linguistic forms of grammar, being the subject of Addendum I.1.

It cannot be determined when humankind began talking and to use speech for communication. There are reasons for supposing that this pre-dated the “Upper Paleolithic revolution”, being more realistically derived from the mechanics of communication already evolved in some of our closest animal relatives, such as monkeys, chimpanzees but also, surprisingly, the dolphins. Monkeys and chimpanzees have very effective mass communication networks capable of warning conspecifics of available food and especially imminent danger. In another realm, male birds must develop and expand their song repertoire by listening to the territorial calls of other birds. Without that combined experience, male birds would lack a most important attribute for attracting female mates. It would not be sensible to
ignore all the evolutionary mechanisms represented by these capabilities. These must surely underpin the capacity of humans to have utilised sound production into language with which we are familiar today.

In considering ancient human remains from that perspective, attention has been paid to critical anatomical developments, such as control of thoracic musculature for appropriate breath control during speech; the size of the canal through which the hypoglossal (XIIth cranial nerve) passes in innervating the (muscular) tongue; the reduced size of the oral cavity; and the descent of the larynx, all of which are pointers to evolving language capability in humans. And we must not forget the contribution of the FOXP2 gene and its mutational role in facilitating the motor articulatory components of human speech.

But apart from speech and language, perhaps the most striking evolutionary aspect of humans is the enormous size of the brain, and in particular, the massive increase in the frontal lobes. That expansion gives the human head its characteristic frontal bossing, compared with the upward terracing of the skulls of primates and even that of Neanderthal man. This next Addendum (I.2) explores the role of the brain and especially the pre-frontal cortex (PFC) in mankind’s evolutionary stance. The PFC lies in front of important co-ordinating motor areas within the frontal lobe, including the premotor, supplementary motor areas, and frontal eye fields. Classically, based on Brodman’s anatomical classification, the PFC comprises dorso-lateral, and ventromedial (orbito-frontal) portions. The PFC is the seat of decision making, motivation, mood, morality and conscience. Pre-frontal leucotomy, an operation performed during the last century for psychotic patients, has little effect upon intellectual ability but either severely depresses or re-aligns the expression of “personality” and, importantly, of controlled behavioural traits: (see the life-history of Phineas Gage: Harlow 1848, 1868). Damage to the PFC (usually traumatic, vascular or malignant) therefore results in poor decision making, apathy, reduced motivational activity, a failure to enjoy pleasurable events, ethical impropriety, and an inability to forward plan and hence instantiate novel outcomes in a world of rapidly changing circumstances and the options thereby posed.

Although our customary approach to proper behaviour and the ethical framework underpinning those values in society is based, historically, on theological or philosophical ideals, the increasing use of brain scanning techniques has allowed moral behaviour to be parsed in terms of brain damage, especially involving the PFC. The lower, inner (ventro-medial) aspect of PFC through its rich connections with the cingulate and amygdaloid centres, plays a supervisory (and deeply-based evolutionary) role in affective and emotional competence over a wide range of behavioural dispositions. That includes being able to read the emotive character of another’s facial expression, thus guiding the appropriate behavioural response whether that be of sadness, empathy or arousal to irritation or anger. This is part of a wider mechanism for reading other people’s minds and inferring what they are thinking: known as “Theory of Mind” or mentalizing, although other parts of the brain play supportive roles as well. vmPFC also plays a role in memory formation (with the hippocampus) and higher-order sensory processing (through its connections with the temporal visual association areas). Conversely, the dorso-lateral (dl)
PFC has reciprocal connections with the frontal motor control areas and thus in master-minding physically-determined behavioural responses, performance monitoring (cingulate gyrus) and higher-order sensory processing (through association areas within the parietal cortex). While vmPFC integrates emotional, mnemonic and environmental stimuli, the dLPFC has a supervisory influence in modulating behaviour and having overall control of appropriate responses to environmental demands, challenges, and hence in forward planning and organisational strategies (Wood and Grafman 2003). In considering humankind’s evolutionary profiles, it is obvious that the PFC has evolved to co-ordinate complex forms of subtle behavioural outcomes to many environmental challenges. Its controlling influence on posterior cerebral centres illustrates its contribution to the moral stance, which is important both in viewing our behavioural characteristics, but also our sense of moral duty which has great relevance within the sphere of “religious” sensitivities and sensibilities.

From Part I that is devoted to human anthropology and related issues, we move into the book’s second part (Part II) which deals with ND/OBE phenomenology, together with cognate neurophysiological perturbations Chaps. 3, 4 and 5: these all have a central relevance to the theme of sensing the divine. Common perceptions about ND/OBE have been greatly warped by the media which persist in cloaking these events in mystery, with out-of-focus light, tunnels, and any other form of weirdness that can be dragged in for support. In fact, the phenomenon of tunnels is not a common feature of ND/OBE accounts, and any unappraised reporter might be in great difficulty if asked to define their geo-cosmic co-ordinates. My own approach is based on giving due regard to what subjects report, an approach recalling the adage full of ancient wisdom which exhorts medical students to listen carefully to what patients are telling them. Indeed patients’ accounts of their illnesses reveal much about the natural history of the condition, sometimes possibly giving more than the generalised information available in textbooks. From that important perspective, it becomes clear that ND/OBE phenomena are late events occurring over a short time-frame as subjects are in the process of regaining full conscious-awareness. Since that is what subjects are telling us, we have a duty of care to listen, to report their remarks accurately, and then to draw the appropriate conclusions. That makes far more sense than the approach of others who are desperately trying to convince the public that “mind”, “soul”, or “consciousness” can exist (and move freely about) without the necessary neural support during the earlier period during which these subjects are unconscious. But a moment’s sober recall would tell those intrepid experimenters that a blow to the head and hence to the underlying brain, results in pre- and post-traumatic amnesia. Furthermore, if the brain is injured, infected or partially removed, then some changes in subsequent conscious experience or behavioural competence may result. Even the commonly observed process of dementia should inform the medically qualified that the mind is tightly adherent to the brain, even though conscious experience, per se, is a non-physical concept. The possibility that an insubstantial conceptual entity like conscious-awareness could be imagined to travel long journeys into space, or wherever, seems distinctly odd. Yet for over 30 years, attempts have been made to “capture” evanescent consciousness while illicitly on the run, with the use of television monitors or other
attractive displays within intensive care or other acute hospital-based facilities: little wonder no success in these endeavours has ever been reported. In upholding my thesis, I posit seven criteria, directly based on the testimony of post-NDE subjects, indicating that this phenomenology can only be an awakening phenomenon (Chap. 4), and is not occurring while brains are either “dead” (so it is alleged) or whose conscious output is floating around in some other extra-terrestrial realm. This conclusion is fully supported by the experiences recalled by other subjects regaining consciousness following a faint, attempted suicide from high bridges, or with military aviators rotated at high speed as part of investigatory studies into the reasons for their loss of consciousness during aerial combat and other high-speed manoeuvres. Moreover, that such vivid memories can be put down during a short (re-awakening) interval again re-inforces the view that these memories are made and remembered just as the subject is waking up, but not if the brain were “dead”, as insisted in certain quarters. Finally, but more recently, I have ventured to propose that NDE are epiphenomena associated with the loss and subsequent restoration of consciousness (Marsh 2016), and that the real effect of such experiences critically involves the dramatic post-experiential changes in subjects’ personalities and altered ways of living. That is the vital issue here, although too little attention has been paid to this aspect of NDE phenomenology. Such would be a contributory component of a sensing the divine, since it is obvious that the marked change in temperament would have been noticed within the NDE subject’s group, and therefore seen as a real outcome, based on what was beheld during the event itself. Moreover, that change in personality not only would have been noticed, but its “spiritualising” implications, as well as their ensuing public influences, would gradually have been incorporated into the social mores of these ancient peoples.

Although NDE are cerebrally-induced hallucinations, the actual impact on the subjects undergoing an NDE are considerable. I suggest that the possible envisioning of a brightly-clad “figure” or some other “sacral” object from within the local environment, together with a lively vision of those known to had died, but who yet now seem to be inhabiting another (inaccessible) realm and apparently in good spirits, are features that would especially have contributed towards a sensing of divine presence and the possibility of another “world” or existence. There is one further additional aspect to note which is the flying upwards into the sky which typifies the OBE component (Chaps. 6, 7). Recent neurophysiological investigations have clearly demonstrated that this feature is brain-based, originating from aberrant activity within the “vestibular” system. This is the system, for example, which orients us in an upright position, and guards against gravitational pull. Flight is an almost universal feature of all subsequent religious systems still existent, a thematic idea originally derivative, most possibly, from the upward motion distinctively exemplary of the OBE.

There is, in my view, a close relationship between ND/OBE phenomenology and the dream state, whether normal or abnormal. A cursory exploration of these fields is therefore vital to the theme of this book, and is pursued in two Addenda (II.1 and II.2) attached to this Section on ND/OBE phenomenology. We should realise that ancient hominins were just as ill, and disease ridden, as we are today, and based on
genetic, physiological and environmental (epigenetic) factors. *(Some of the grosser outcomes have been unearthed from Atapuerca, Spain (Man-5) with a massive dental abscess penetrating his skull and ear canals, and another (Man-3) with multiple trauma wounds to his skull: and at Shanidar, (Shanidar I) a man with absence of left arm, a mal-developed shoulder, and unevenly worn teeth obviously used as a duplicate hand: and the little 3-year old child at Qafzeh (Judea, Israel) who had died from uncontrolled hydrocephaly). We know that REM dream-mode sleep can override normal conscious awareness (“REM penetration”), and is associated with such states as the genetically-determined narcolepsy-cataplexy syndrome; sleep paralysis; and lucid dreaming, all of which may be associated with ND/OBE phenomenology. There is no reason to suppose that this constellation of disordered conscious states did not affect early mankind (much as we know that FOXP2 mutations relative to articulatory speech were borne far back by Neanderthals and Denisovans, over 300kya).

These altered states of consciousness (ASC) are associated with aberrant molecular switching between their relevant aminergic control mechanisms within the upper midbrain/pontine regions. Such disordered switching leads to moments of complete unawareness or an apparent detachment from reality. Most interestingly, these states have notably been captured throughout the religious “mystical” literature. There, such transient states are referred to as “Absolute Being”; union with God; or even the “dark night of the soul” by St. John of the Cross. Indeed, these neuropathological abnormalities go some way in explaining the sheer profundity of deep religious transcendence which is best defined by William James’ criterion of “ineffability”. It should not go unnoticed that these are substantive insights into specific genetic and neurophysiological underpinnings of the very fundamentals of humanly-based religious thought and experience which I evaluate in greater detail in Chap. 10. In proceeding further, I draw attention to the fact that all religions, subsequently elaborated by literate peoples (including Egyptian, Islamic, Jewish, Christian) involve some kind of flight into the “heavens”. We need to ask how that concept arose. My suggestion is that a concurrence with OBE hallucinations among ongoing spiritual activities among ancient peoples was an association progressively woven into the fabric of all later evolving religious systems and creeds in the ‘post-axial period’ and beyond, as notably recorded by Bellah (2011).

It seems clear that the bizarreness reported by so many post-NDE subjects is directly analogous to the abnormal typology exemplary of the REM dream-state. During the latter, the dIPFC is always de-activated (Maquet et al. 1996: Braun et al. 1997) a functional relaxation permitting the extreme wayward material characterising this form of mentation. The moral laxity accompanying certain REM dreams, incidentally, even caused St. Augustine to question whether he himself was responsible for their immoral content (Mann 1983). But all is restored as subjects awaken, during which the functions of dIPFC return, so to re-establish normal-controlled waking sensibilities and responsibilities. It is more than likely that similar laxity occasioned by some NDE reports is related to a disconnected dIPFC during the crisis moment. This would certainly permit similar wayward aspects of behaviour to occur during its preliminary phases, as invariably reported. It is noteworthy that at a
later stage, once consciousness has almost completely returned, an overriding moralizing aspect to NDE reportage is now obvious, involving imposition of stricter limits on what subjects may continue pursuing or wish to pursue themselves (my Fourth Criterion). So there is an added pressing sense of deep concerns involving subjects’ lives as the NDE phenomenon ends but which are of immediate future importance. Hence my re-classification of ND/OBE into a more sensible format: early- and late-phase sequences.

Finally, in Part III, I look at the ways through which some kind of spiritual practices might have arisen among ancient hominin tribes and communities (Chaps. 8, 9). Before continuing, we should realise that I am not trying to precipitate ND/OBE onto a presumed uniform background of spiritual behaviour. Indeed, there was no such uniformity (Rowan 2012): each ancient community worldwide is likely to have pursued its own peculiar beliefs and practices. However, ND/OBE are universal events and even more likely then, rather than now. That is because the antecedent precipitants were certainly in place (as tabulated in Chap. 4) as against our current various legislations against accidental damage now operative within modern society. Therefore, during times past, their influence must have been felt, observed and, as I have argued, progressively adapted into existing (or pre-existing) cultures, especially those appertaining to the supernatural, however envisaged at their respective times, and by each specific community.

But how did this all begin? The study by Peoples et al. (2016) offers most interesting insights, because it has used current anthropological data in order to recede deeper into past eras, so to conclude that the foremost principal activities from the earliest times would have included animism, shaminism, and ancestor veneration. We have already covered those natural phenomena which would have been critical in generating a reverence for nature and its uncontrollable forces as noted in my introductory paragraphs above. From that, the progression would have been the selection of certain prominent items within the natural habitat to which some kind of honorific attitudinal approach could have developed. In modern terminology, these would be called “icons”, and icon being a thing or concept acting as a pointer through which another realm, often the supernatural, can be formalised and conceptualised, thus to be brought into the conscious realm of daytime behaviour. We have also seen that a fear of death would have been another potent force leading to ancestor veneration and the need to have these dead forebears on side in order to promote good relations, moral behaviour, amenable weather, good crops, and the well-being of society.

All this could have been taking place, with a reasonably effective use of language, with H. *heidelbergensis*, around 100kya (Fuentes 2015). This early human type appeared 600kya. That, we should carefully note, comes more than 5 million years after the original split from the chimpanzees. At this stage in human evolution, we should certainly expect something beyond the struggling little ape-men characterised by “Lucy” whose height was just over 1 m and brain capacity around 300 cc. There was a massive increase in brain size of the Heidelbergs up to 1200 cc thus doubling that of H. *erectus*. Now the manufacture of stone, wood and bone becomes far more complex, together with the appearance of “art”-type objects, suggesting a
marked increase in community size, co-ordination together, and with inter-group alliances. Fire seems now to be a common tool used for warmth and cooking, and there is evidence for an increase in ritualistic behaviour during this period (Coward and Gamble 2008; Bedarnik 2003; Rossano 2009; Malone et al. 2012; Dean et al. 2012; McBrearty 2012; Wadley 2013). And all the anatomical pointers towards the occurrence of language were also present (Dunbar 2014, 235). We would expect something impressive to have encouraged this enormous expansion in the brain and related evolutionary pressures demanding this special change in culture and behaviour.

Many presumptive remains of H. heidelbergensis were discovered in a deep shaft at Atapuerca, Spain in what is known as the “Pit of Bones” containing skeletons of around 32 individuals. This might have been a cave, and thus reflective of shaministic practice (Dunbar 2014, 189). Shaminism is another fascinating aspect of spirituality practised by early hominins. Although its origins are uncertain: possibly, there are multiple origins from around the world in view of its universal presence across the globe. But it would be unlikely that it was not part of the social scene among the heidelbergers. Shaminism has obviously been a most important form of behaviour whose features I sketch in, for information (Addendum III.1): such activities would have engaged these ancient peoples. It was usually conducted in the dark, such as at night, in caves, or through the Winter months involving trance-promoting behaviour with dancing, singing, stamping of the feet and rhythmic dancing, and use of psychedelic drugs. Thus, it can be regarded as another manifest form of ASC, like ND/OBE. It persists today, and possibly was the predecessor of more exclusive priest-hoods and quasi-magical ceremonies only available to those who were not only literate, but had been initiated and trained into the mysteries of the cult. The outward flights of shamans have analogies with the flight occurring during OBE: whether there was a kind of cross-contamination of ideas here cannot be decided. Most importantly for the people would have been the alleged contacts with the spirit world while the shaman was out of his body, aided by the healing he brought back and accomplished. But together, these are aspects of the outward yearnings of pre-literate communities who would have been grappling with the contexts of death, of having to die, what that post-mortem future could have in store, and the close contact with one’s dead forebears. At this stage in the evolutionary history of hominin spirituality, we have yet to see the further development of ideas concerning the “Big Gods”, thought to have arisen as mankind began to alter his lifestyle from hunting and gathering to one of domestication, cultivation of the land and animal husbandry. For this, see the extended discussion in Atkinson et al. (2015).

In the world we inhabit today, religion is a fairly clear-cut phenomenon which, even if only practised at weekends, commits its adherents to the possibility of life eternal within the Godhead. Furthermore, that approach is in marked comparison with Humanist or Secularist approaches, for whom there is no afterlife. From what we can glean from the workings of early pre-literate human societies, this sense of a clearcut division between the religious and non-religious sphere was not observed. All of life, the habitat, ones’ dead forebears and any possibility of a supernatural “beyond” were all of a piece. In other words, the invisible co-existed with the
visible, while interactions with the visible would have comprised what we term animism. In more simplistic interpretation, animism would include everything alive, although such a worldview would not necessarily ascribe life to non-animate objects (Sumegi 2014). There was no “religion” defined in terms of cognitively-based beliefs, dogmas, and formal systems demanding a degree of conformity if not adherence. It is ritual, behaviour, or praxis which defines the sacred at the heart of these practices relevant to a supernatural order, or higher realm, with or without “gods”. Ritual is a cohesive force binding together those taking part. One of the most potent forms of ritual community in early hominin societies is likely to have been shaminism with its trances, psychedelic drug use, and out-of-body spiritual adventures. This form of activity would have also engaged with music, chanting and song, and dancing. These additional activities further cemented these bands of individuals together and offered the possibility of thinking about higher “Big Gods”, in time.

Following these introductory thoughts, I now invite readers to sample the following pages in thinking about the very origins of spiritual behaviour among the earliest of our hominin predecessors. This book is not a novel, so individual chapters can be read without any major loss of context or sequence. Altogether, it is hoped that the evolutionary background of mankind, the detailed investigation of ND/OBE phenomenology associated with its additional cognate aberrant dream states and their control, should lead to a fuller understanding of ND/OBE as likely events influencing a perception of the divine among pre-literate hominin species.

References

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Part I
Anthropological Perspectives