New religious movements and quasi-religion: Cognitive science of religion at the margins

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Abstract
The article offers a critical analysis of the cognitive science of religion (CSR) as applied to new and quasi-religious movements, and uncovers implicit conceptual and theoretical commitments of the approach. A discussion of CSR’s application to new religious movement (NRM) case studies (charismatic leadership, paradise representations, Aḥmadiyya, and the International Society for Krishna Consciousness) identifies concerns about the theorized relationship between CSR and wider socio-cultural factors, and proposals for CSR’s implication in wider processes are discussed. The main discussion analyses three themes in recent work relating CSR to religious and religion-like activities that extend and reframe the model. These include (1) identification of distinctive and accessible cognitive pathways associated with new forms of religious belief and practice (in particular in ‘New Age’ movements), (2) application of CSR to movements and practices outside traditional definitions of religion (near death experiences, conspiracy theories, virtual reality), and (3) engaging CSR in wider cultural processes and negotiations (religion in healthcare settings, and the definition of the study of esoteric religious traditions within academic domains). The conclusion identifies two particular findings: (1) that application of CSR in these areas renders underlying cognitive processes more available to scrutiny and (2) that CSR is employed to identify and enlarge the category of religion. The conclusion suggests that the study of CSR in its application to NRMs and quasi-religion identifies a wide field of common and overlapping themes and interests in which CSR is a more active operand than is commonly assumed.

Keywords
Cognitive science of religion, New Age, new religious movements, quasi-religion, social brain hypothesis, spirituality

Introduction
The purpose of this article is to assess the conceptual and discursive themes in the application of cognitive science to the study of new and innovating forms of religious expression, and by doing so to understand the ways in which scholars have adapted and extended the cognitive science of...
religion (CSR) model. Thus, the approach offered here does not seek to carry out a novel application of CSR to any particular form of religious expression, but rather to examine the implications of the ways it has been applied in a broad area of (in this case new and quasi-religious) activity and belief. The framing is deliberately broad, to extend beyond studies presenting cognitive science accounts of new religious movements (NRMs), and to encompass a wider panoply of contexts in which religion appears as marginal or novel. The reference to ‘the margins’ in the title is also intended to refer to studies in which CSR is itself being applied in marginal or novel ways. As such, alongside the more conventional CSR studies of NRMs discussed in the first part of the article, the account presented here includes examinations of New Age, spirituality in healthcare settings, the academic study of western esotericism, near death experiences – and it even extends to recent work on congruencies between religion and conspiracy theories (CTs) and virtual reality (VR) from a cognitive perspective. The analysis identifies three principal tendencies in recent work at the interface of CSR and the study of these cultural forms, and these are the basis for the themes of the three main sections of the article:

1. Identifying distinctive cognitive pathways associated with new forms of religious practice and belief. In particular, in the studies examined here, distinctive cognitive aspects of ‘New Age’ affiliation compared to other religious forms.
2. The application of CSR to case studies beyond movements and practices traditionally defined as ‘religions’ (e.g., near-death experiences, CTs, and virtual reality).
3. Engagement of CSR in wider cultural processes; validation of and mediation between ostensibly conflicting cultural paradigms (in academia and healthcare in the examples discussed here).

While an interest of the role of CSR in the study of NRMs forms the starting-point for the discussion presented in this article, a caution against using purely cognitive explanations of religious phenomena suggested by some recent work in the field (discussed below) provides a broader rationale. It is suggested here that not only is there good justification for an extension and enriching of the scientific study of religion by the mutual engagement of social-cultural approaches and CSR – a viewpoint that has developed some momentum in the wider field – but that CSR is in fact being applied in a number of ways in the study of new and quasi-religion that illuminate its potential to be a dialogue partner within a wider range of methods and discourses in the study of religion and beyond.

The purpose of this article emerges from a larger project, one strand of which seeks to evaluate the utility of taking an evolutionary approach to the study of NRMs for the better understanding of their emergence, nature and functions. That aspect of the project applies the Social Brain Hypothesis (SBH) (Dunbar, 1998, 2014) as a powerful and novel evolutionary approach to the study of NRMs, and work in progress uses the model as a framework to understand the processes at play in an NRM, and to understand how an NRM case study can refine the ways in which an evolutionary model of that kind can be applied. While it is not the purpose of this paper to investigate the Social Brain Hypothesis itself (and it is not discussed in detail), that background interest in the application of evolutionary models to the study of NRMs is a useful framing for the task that is presented here. SBH offers a unified evolutionary perspective that emphasises the role of the group in the emergence of religion; religiosity is an evolved solution to the problem of bonding groups together. Thus, SBH proposes a meaningful evolved adaptation account of religion which places as much emphasis upon evolved physiological as cognitive processes (Dunbar, 1998, 2010, 2013, 2014; Machin & Dunbar, 2011). To that extent, SBH offers a coherent (and testable) theory of religion. For a CSR approach, however, the relationship between individual cognitive processes and cultural dynamics...
is a problematic one because the standard model postulates that religiosity is in important ways a by-product or mis-fire of otherwise usefully functional evolved cognitive systems, so the formation of many associated practices is presupposedly little more than redundant overgrowth. In CSR, then, the elaboration of an account of religion in its wider sense is in danger of emerging half-formed and unmoored, and lack of consensus about underlying mechanisms and structures creates additional problems for wider applications. While evolutionary perspectives using CSR have been applied in the study of NRMs (and this paper discusses a few recent examples), it is evident not only that many of those approaches are reliant on a relatively limited model of religious cognition insofar as it is implicated in cultural processes, but that for some NRM scholars CSR’s putative limited range is a stumbling block – and accounts of those concerns are discussed below. Nonetheless, in seeking to examine the ways in which CSR has been used in NRM studies, and extending the range of case-studies to bring in informative if more speculative subject matter, it becomes evident that there is a wider dynamic at play than the mere application of theory to case studies. In fact, a number of recent CSR studies of NRM and quasi-religious activities carry out implicit functions in extending and developing the role of CSR itself in the scholarly study of religion.

Cognitive science and the study of NRMs

The cognitive science approach in the study of religion was largely developed in the 1990s and 2000s in the work of Dan Sperber (1974/1975, 1994), Stewart Guthrie et al. (1980), Stewart Guthrie (1993/1995), E. Thomas Lawson and Robert McCauley (1990), Robert McCauley and E. Thomas Lawson (2002), Harvey Whitehouse (1992, 1995), Pascal Boyer (1994, 2001), Justin Barrett (2004), Todd Tremlin (2006), and others. The framework places an emphasis on theorized universal cognitive processes that affect and manage the ways individuals can form and engage with religious ideas. At the heart of the approach is the notion that human cognition, evolved to support survival of individuals and species in ecosystems, can be activated in ways that generate religious ideas. For example, in 1980, Stewart Guthrie et al. outlined the ‘elements of a cognitive theory of religious thought and action’ building on discussion about the ways in which religious and nonreligious belief and behaviour ‘can best be understood as closely related variants of a single human cognitive process’ (p. 181, citing Agassi & Jarvie, 1973; Barbour, 1971, 1974; Barnes, 1973, 1974; Gellner, 1970; Horton, 1960, 1967, 1973; Jarvie & Agassi, 1967; Skorupski, 1976) and about the significance of anthropomorphization in the formation of religious beliefs (p. 181, citing Agassi & Jarvie, 1973; Durkheim, 1912/1976; Freud, 1927/1964; Goody, 1961; Horton, 1960; Jarvie & Agassi, 1967; Spiro, 1966; Tylor, 1873). The article argued that because ‘human-like models’ are frequently chosen to interpret ambiguous phenomena (i.e. anthropomorphism), and because they have the capacity to achieve (in the words of C. Geertz, 1966, p. 4) an ‘aura of factuality’ and a ‘uniquely realistic’ mood, they are applied to interpret ‘not merely immediate experience, but things and events distant in time and space, that may set “ultimate conditions” of human life’ (Guthrie et al., 1980, pp. 187, 192). Because of the success of the human interpretive model and a cognitive tendency to ‘economize thought and action by system building’, religious explanations are the extension of the human analogy to far horizons of interpretation (Guthrie et al., 1980, p. 192). Guthrie’s (1993/1995) Faces in the Clouds, developed the argument of the earlier article, suggesting that ‘we anthropomorphize because guessing that the world is humanlike is a good bet’ (p. 3). Pascal Boyer (2001) developed Guthrie’s account to note that ‘what happens in religion is not so much that people see “faces in the clouds” [. . .] as “traces in the grass”’; that is to say that they ‘detect traces of [supernatural agents’] presence in many circumstances of their existence’ (p. 164; citing J. L. Barrett, 1996, 2000). In Boyer’s (2001) account, the postulation of supernatural agents is the over-extension of an agent-detection system evolved to provide protection against
predators, and it is stabilized into religious belief by the human social instinct (pp. 167, 169–177). Over time, various accounts of the relationship between cognition and religion have theorized cognitive processes implicated in the formation of religious belief. Thus, building on his (Whitehouse, 1992) work on the implications of different cognitive orientations in religious communities in Papua New Guinea, Harvey Whitehouse (1995) developed an account of religion based on a bipartite model of memory to suggest two ‘modes’ of religiosity: the ‘doctrinal’ (verbal and exegetical, frequent, centralized, and hierarchical) and the ‘imagistic’ (non-verbal iconic, infrequent, tending to social splintering, and localized) (Whitehouse, 1992, p. 781, 1995, p. 193). In Rethinking Religion (1990) E. Thomas Lawson and Robert N. McCauley (1990) develop a theorized parity between symbolic-cultural systems and linguistic systems to propose a cognitive approach to understanding the syntax of religious ritual (as stable and paradigmatic examples of symbolic-cultural systems) which can therefore be understood as ‘the universal principles of religious ritual’ (p. 121). In many respects, Lawson and McCauley’s approach builds on and responds to Dan Sperber’s (1974/1975) hypothesis that symbolism is a distinct and innate cognitive mechanism (alongside perceptual and conceptual mechanisms). More recently, Sperber (1994) has argued for the deep modularity of mind; extending Jerry Fodor’s (1983) suggestion in The Modularity of Mind that distinct mental modules manage cognitive inputs, to argue for functional modules at every level of cognition. Tremlin has described the brain as ‘an astoundingly complex machine comprised of numerous specialized parts, or “modules”’ that work unconsciously to ‘interpret information from the outside world’ which have evolved over millions of years: ‘how we presently think is a direct result of adaptive solutions to past problems’ (Tremlin, 2006, pp. 7–8, 8). Because the cognitive modules are evolved they are shared by the species as a whole and ‘all humans possess the same cognitive hardware’, thus ideas and behaviours are ‘tractable’ between individuals and cultures (Tremlin, 2006, p. 8). The shared nature of religious beliefs is also emphasized by Ara Norenzayan and others (2016) – though they adopt a different grammar of theorized cognitive structure5 – to propose that ‘religious beliefs are rooted in a suite of core cognitive faculties that reliably develop in individuals across populations’ (p. 4, citing Atran & Norenzayan, 2004; J. L. Barrett, 2004; Bloom, 2012; Boyer, 2001; Guthrie, 1993/1995; Kirkpatrick, 1999; Lawson & McCauley, 1990). Boyer’s (2001) Religion Explained says that the core religious ideas ‘are not the concepts themselves but [. . .] the templates that produce them’ which are constrained by cognitive parameters so that while there is ‘an extraordinary variety of different concepts’ it is the case that ‘the number of templates is very limited’ (pp. 90–91). While the nature of cognitive operands invoked in accounts of the formation of religious ideas has proliferated over time, the basic understanding of religious ideas as the products of the extended activation of shared cognitive mechanisms has remained a consistent leitmotif in the field.

In recent years, the CSR approach has been increasingly applied to the study of NRMs. For example, Justin Lane (2009) has applied Todd Tremlin’s account of an ‘Agency Detection Device’ (ADD) mental mechanism (Tremlin, 2006) to the study of small innovating religious groups.6 He suggests that charismatic leaders of these groups may draw ‘on the same cognitive mechanisms and proclivities that go into making gods in order to sustain their power, whether the leader is aware of it or not’ (Lane, 2009, p. 84). Lane (2009) suggests that ‘through a mixture of self-propagation, as well as additions and embellishments on the part of their followers, these alphas gain certain attributes that cause them to violate their own ontological category and thus become superhuman agents’ (p. 90). In a similar way, Jani Närhi (2008) has unpacked the cognitive mechanisms associated with utopic paradise representations. Referring to Melanesian ‘Cargo Cults’ and western UFO religions among other movements, Närhi proposes that paradise representations may be generated in a process analogous to the ADD (Närhi, 2008; Citing Atran, 2002; Boyer, 2001, 2003; Tremlin, 20067). Paradise representations might, Närhi suggests, be generated by a natural
‘tendency of the human mind to continuously improve the chances for survival’ which ‘exaggerates and starts to produce mental representations with no counterparts in the empirically observable world’ (Närhi, 2008, p. 361). In effect, following Boyer (2003), paradise representations are understood as by-products of other evolved mental functions. In a recent book, M. Afzal Upal (2017) offers a multifaceted approach for the cognitive science of NRMs, and applies it in a case study of Ghulām Ahmad (1835–1908), the founder of the Ahmadiyya Movement (see also, Upal, 2005a, 2005b). The core CSR mechanism referred to by Upal is a revised form of the classic CSR account of the role of minimal-counterintuitiveness in making religious ideas interesting and memorable. Another book-length assessment of the ways in which CSR can inform understanding new and innovating religions in recent times, is Kimmo Ketola’s (2008) examination of Bhaktivedanta Swami Prabhupāda (1896–1977), the founder of the International Society for Krishna Consciousness (ISKCON, the Hare Krishna movement). Ketola’s (2008) intention is to uncover ‘the cognitive processes that reveal the way in which Prabhupāda and his actions were perceived and interpreted’ (p. 14). Citing Erving Goffman’s (1974/1986) idea of frame analysis and Dan Sperber’s (1974/1975) theory of symbolism, Ketola (2008) identifies the ways in which Prabhupāda was understood in counterintuitive ways and the significance of this for the attraction of followers (pp. 198–204).

Each of the NRM studies cited above has value in explicating a particular element or elements of religious behaviour or activity within the terms of a cognitive science approach. While the CSR framework is thus productive and resonant with work in the study of NRMs, it has nonetheless been susceptible to the claim that it is characterized by certain narrowness of focus; as Benson Saler (2010) has expressed it: the risk of ‘offering monochromatic explanations of polychromatic phenomena’ (p. 337). The essence of this critique is that cognitive accounts of religion have a tendency to make limited or reductive assumptions about the nature of religion and its functions that do not do justice to the depth and complexity of the social-cultural experience of religion or the critical study of religious belief. Fraser Watts (2014) has suggested that CSR has adopted speculative assumptions about the evolution of cognition in an uncritical way, and Léon Turner (2020) suggests that it has tended to treat the individual as isolated from social context. In the studies referred to above, for example, Justin Lane’s (2009) and Jani Närhi’s (2008) articles require considerable elaboration of the proposed (mis-)firing of a theorized ADD or an equivalent, and they place considerable weight on those processes to explicate the aspects of NRMs they are focused on. At the same time, both those studies treat the religious processes they are examining as reliant on relatively isolated cognitive phenomena – despite the enormous diversity and complexity of the social and cultural ecologies within which their subjects are active (Heaven’s Gate, Peoples Temple, Melanesian cargoism, UFO religions, and others).

On the other hand, thanks perhaps to the greater space for discursive decomposition provided by book-length accounts, Upal’s (2017) and Ketola’s (2008) monographs suggest ways in which CSR and social-cultural accounts of religion can enrich each other when they are dynamically engaged. There are three stages to Ketola’s (2008) account: (1) ‘cultural and social explanations are unable to satisfactorily account for the success of exotic movements such as ISKCON’ on their own, (2) ‘in order to develop better explanations we have to look more closely into the concept of culture and the psychological mechanisms’, and (3) ‘cognitive theories of the origins of religious symbolism, and the developmental trajectories of the modes of religiosity’ can help explain these (p. 208). Thus, the essence of Ketola’s (2008) argument is that a CSR framework can refine and enrich accounts of religion otherwise relying on social and cultural explanatory elements (p. 212). The rationales for Ketola’s (2008) study reflect the general critique of CSR referred to above: ‘[t]he relative importance of the socio-cultural and the psychological factors needs to be determined empirically rather than a priori’ and ‘human agency and collective social action should never be underestimated in analysing religious phenomena from the cognitive perspective’
Upal’s discussion comes, as it were, from the opposite direction but to the same conclusion. He cautions ‘against the tendency among some cognitive scientists of religion who argue that the universality of cognitive explanations blunts the need for understanding the sociocultural and historical context that leads to the creation and spread of radical religious ideas’, urging instead that ‘[u]niversal cognitive processes simply do not provide a complete explanation unless they are instantiated in a particular sociocultural context that is investigated by historians of religion’ (Upal, 2017, p. 20). Upal’s account goes on to integrate his core CSR approach with a social psychological model of NRM founders as ‘social-identity-change entrepreneurs’ and a contextual model of the psychology of memory, alongside the history-of-religion approach just referred to. A core example in Upal’s analysis is his revision of the theorized role of counterintuitiveness in the take-up of religious ideas. Upal argues that traditional CSR is ‘overly restrictive’ in proposing that only ‘maturationally natural knowledge’ (concepts acquired naturally during human maturation in ordinary environments without explicit tuition) and not ‘practiced natural knowledge’ (ideas learned through socially and culturally embedded explicit training) ‘provides the intuitive expectations whose violation leads to a preferential processing for the counterintuitive concepts’ (Upal, 2017, pp. 46, 45. Citing J. L. Barrett, 2008, pp. 310–311). Upal, instead, sees ‘historical and sociocultural contexts as crucial to understanding how concepts were seen as counterintuitive by people who were attracted to them’ and proposes taking ‘historical and sociocultural approaches to the study of religion as necessary complements to a cognitive account of religion’ (Upal, 2017, p. 55. See also, p. 67). This culminates in the extension of the function of minimal counterintuitiveness to socially and culturally generated knowledge, claiming that ‘ideas need to be socially counterintuitive to spread in a population and become culturally embedded’ (Upal, 2017, p. 68). In a conclusion that parallels Ketola’s, Upal (2017) proposes that

A traditional sociological approach that solely focuses on sociological variables is grossly incomplete. Similarly a traditional psychological approach that studies a brain in a vat and ignores various contextual factors will not suffice. Instead a fully multidisciplinary approach that relates sociological variables to the individual cognitive variables is required. (p. 156)

The advantages of a multidimensional approach have been noted in the cognitive study of religion in recent years (see Donald, 2001; Franks, 2013a, 2013b; Jensen, 2016). A striking call based on an NRM case is a study of the growth of Icelandic Ásatrú membership during a period of negative public discourse about the Lutheran National Church in Iceland. Noting a shared ‘national narrative’ for the two denominations, Guðmundur Markússon (2011) makes the somewhat tentatively framed suggestion that ‘contrary to the views of some major players in the cognitive field’ ‘something as “abstract” as narrative [. . .] can enter significantly into causal relations, and thus cannot be ignored as epiphaneomenon’ (pp. 286–287). It is striking that studies focussing on contemporary case studies, like Ketola (2008), Upal (2017), and Markússon (2011), seem to express the need with greater urgency.

In this respect, the application of CSR to the study of new and innovating religions reflects a lively recent debate within CSR about the relationship between cognition and wider culture. A relatively restrained presentation of a revised understanding of the relationship between cognition and culture is presented by Merlin Donald, who suggests that ‘[n]on-biological memory media’ (e.g. encyclopaedias) have ‘transformed the way human beings carry out their cognitive business’ (Donald, 2010, p. 71). Donald’s (2010) summary metaphor compares human culture to ‘a gigantic search engine that seeks out and selects the kinds of brains and minds it needs at a given historical moment’ (p. 78). L. Barrett et al. (2015) present the approach with greater expansiveness, to argue, in opposition to strong computational models of human cognition (where human intentionality is
‘built into it at source’), that ‘the bounds of the cognitive system’ should be drawn more widely – to include ‘bodily resources, material artefacts, and other aspects of the environment’ (L. Barrett et al., 2015, p. 3. Referring to Bryant, 2015). The implication of these for the study of religion is that it needs to look beyond accounts referring only to relatively limited cognitive operations. Armin Geertz (2010) refers to a model of cognition as ‘embrained, embodied, enculturated, extended and distributed’ and presents a complex ‘biocultural theory of religion’ drawing on ‘neurobiology, archaeology, anthropology, comparative religion and philosophy of science’ (p. 304). He argues that religion is more than an evolutionary by-product, and he goes further than suggesting that cognition and culture are intertwined in complex ways in processes that implicate religion, to suggest that religion might have a special function in helping humans ‘escape the solipsism of our individual minds’ and to ‘shape the matrices within which our minds are located’ (A. W. Geertz, 2010, p. 317). While the question of the biocultural theory of religion’s utility and testability is left pending in the article, A. W. Geertz (2010) nonetheless asserts the need to ‘show our colleagues in the cognitive sciences that any theory of human cognition must deal with the power, formative impact and constitutive role that culture plays’ (p. 317). Presenting his ‘systemic approach’ to religion as an ‘adaptive complex of traits incorporating cognitive, neurological, affective, behavioral, and developmental elements’ (Sosis, 2019, p. 47), Richard Sosis (2019), aligning his approach with Armin Geertz’s, has recently argued that ‘[r]eligions are organic systems’, brought ‘to life’ by ‘individuals, interacting through signalling mechanisms’, and ‘if those of us who study religion continue to ignore this fact, we do so at our own peril’ (pp. 46, 57).

**Cognitive pathways of new religious forms**

In the context of concerns about CSR’s potential lack of multidimensionality, the discussion of the application of CSR to Ahmadiyya and ISKCON in the work of Upal (2017) and Ketola (2008) has indicated the ways in which the application of CSR to NRMs can suggest a revision of scientific understandings of the relationship between cognitive processes and religious beliefs. While those studies seek to integrate CSR and social-cultural accounts in a deliberate way, an emerging strand in the study of NRMs from a CSR perspective has begun to formulate an implicitly integrated account. Perhaps the most striking development in the study of the CSR of NRMs in recent years has been evidence, drawn from empirical research in the study of the New Age movement, that not only supports the broad idea that cognitive processes and religious beliefs are more strongly conjoined through culture and sociality than CSR has generally suggested, but also suggests that there may be a similarly close relationship between cognitive processes and doctrine formation. Two articles discussed in this section suggest, to varying degrees, that the separation between the underlying cognitive processes and the contents of beliefs might be regarded as less distinct than is traditionally assumed. This is not to say that there is a distinct and dedicated cognitive process at play in New Age religious forms, but it is to suggest that cognitive architecture and belief may be more closely interpenetrated than is normally assumed in classic CSR.

In a chapter applying a cognitive framework to New Age practices and beliefs, Olav Hammer (2014) develops Harvey Whitehouse’s (2000, 2004a) account of ‘divergent modes of religiosity’. Whitehouse’s proposal (referred to above) is that there are two core modes of religiosity, the imagistic and the doctrinal; the imagistic is low on theory and doctrine, and depends on the emotional power of ritual events, while the doctrinal is rich in detail and doctrine and requires theory and memorization. Hammer notes, however, Whitehouse’s own observation that categorization of religious activities into one or other mode is not always obvious: ‘one easily finds examples of rituals that have too little explicit “theological” content to fit the category of doctrinal religiosity, but are also too emotionally low-key to serve as examples of the imagistic mode’ (Hammer, 2014, p. 267).
As such, he says, the modes are probably best regarded as ‘ideal’ types (Hammer, 2014, pp. 365–367. Citing, Whitehouse & Laidlaw, 2004 and Whitehouse, 2004b) and Hammer (2014) elaborates a third mode, the ‘cognitively optimal’:

Though some concepts are easier to memorize than others, some trains of thought seem more comfortable or natural than others [. . .] Although people may learn less-than-obvious doctrines or ritual behaviors through memorization, there is a tendency to drift back from ‘theologically correct’ concepts towards cognitively more optimal ideas. (pp. 267–268)

Examples of cognitively optimal tracks in religion include anthropomorphism (a tendency to conceive of superhuman agents in human terms), ritualization (linking ritual to basic concepts), chains of causal reasoning, and narrativity (framing principles of belief in myth structures rendering them more memorable) (Hammer, 2014, p. 268. Citing Whitehouse, 2004b, pp. 190–193). The essence of Hammer’s (2014) investigation is centred on the finding that ‘a number of related forms of popular religiosity in the modern West’, that might be grouped together under the ‘New Age’ rubric, ‘have neither imagistic nor doctrinal characteristics, yet are efficiently transmitted and thrive despite little institutional backing’: They are passed on and flourish because they are ‘cognitively optimal’ (p. 268. See also, pp. 269–270). Thus, while in social or cultural terms they might be regarded as novel and non-standard – sitting in fact on a cultural fringe compared to established mainstream forms of religion – in individual cognitive terms they sit at or around a path of least resistance.

Alongside these explicitly cognitive concerns, Hammer’s chapter refers to social factors affecting an individual’s absorption of New Age ideas. Among these is the ‘central presupposition of New Age religiosity [. . .] that one need not follow authorities: the most important test of any idea or practice is that it should be experienced as “true” by us’ (Hammer, 2014, p. 277). A standpoint at odds, he says, with the fact that people ‘are not free-floating individuals’ but ‘socialized into a society where there is already a mass of practices and opinions’ (Hammer, 2014, p. 277. Citing Hammer 2010, p. 49). Citing widespread New Age acceptance of (a particular version of) the doctrine of reincarnation as an example, Hammer unpacks a ‘cluster of mutually reinforcing concepts and actions’ including the exclusion of alternative accounts, that effects a presentation of a learned interpretation of particular visualization (understanding the visualization as evidence of reincarnation) as if it is immediate personal experience: ‘In this way, a firsthand experience becomes a privileged way of transmitting socially constructed doctrines’ (p. 279). Thus, A practice enabling people to perceive ‘vivid internal imagery’ in a New Age context enforces, Hammer (2014) says, interpretive frameworks due, among other things, to (1) a name (‘past life regression’) which ‘privileges one particular account’ and (2) ‘leading questions posed by the therapist (‘what did you look like?’)’ (p. 278). In summary, the implication of Hammer’s account is (1) that a religious form (New Age religiosity) has emerged that makes maximal use of some hospitable cognitive pathways, and (2) that secondary social processes have a feedback effect in reducing the cognitive demand of concept formation and transmission. In effect, an available and low demand cognitive pathway has been generative of a form of religion whose doctrinal points are more dependent on the architecture of those pathways than might otherwise be expected under the standard terms of a cognitive science approach to religion. One implication of this assessment would be to suggest that ‘New Age’ forms of religion are more ‘natural’ to evolved human cognition, and concomitantly that less cognitively optimal forms of religion (including established traditional religions) are elaborations requiring addition to those natural forms.

A similar implication can be discerned in a chapter by Miguel Farias and Pehr Granqvist (2007) on ‘The Psychology of the New Age’ in the Handbook of New Age. Farias and Granqvist seek there to ‘add the contribution of empirical psychological research to the study of the New Age’,
following the historical and sociological contributions of, especially, Wouter Hanegraaff (1996) and Paul Heelas (1996). Reviewing recent empirical research in the field, in which the authors were themselves involved, Farias and Granqvist suggest that their data ‘challenge an underlying assumption in the scientific research of religion, which claims that different forms of religious/spiritual practices and beliefs fulfil the same motivational functions and draw upon the same cognitive and emotive resources’ (Farias & Granqvist, 2007, p. 123. Citing Boyer, 2001). Their account centres on two principal psychological frameworks applied to religious thinking: social-psychological personality and attachment theory. Like Hammer, while they are not proposing a discrete ‘New Age’ cognitive pathway, their study may suggest that a firmer line can be drawn associating a particular style of religious expression (in this case, New Age) with particular cognitive transactions.

In their review of social-psychological personality studies, a core finding presented by Farias and Granqvist is a notable tendency among New Age subjects compared to Catholics and atheists to use ‘far more global abstract self-descriptions [. . .] in which the individual tended to see him/herself as a process, a metaphor or part of a universal force’ (Farias & Granqvist, 2007, p. 126. Citing Farias & Lalljee, 2008). The authors referred to this tendency as ‘holistic individualism’: ‘a somewhat paradoxical social-psychological frame’ where individuals ‘see themselves as connected to a larger universe of being and, yet, the nature of this connection is highly personal and abstract rather than socially embedded’ (Farias & Granqvist, 2007, p. 126). This finding was compounded in another study (Farias & Lalljee, 2006), investigating autobiographical descriptions of significant life events, which found that ‘[w]hile Catholics and atheists emphasized agency and communion themes equally, individuals in the New Age group reported twice as many agency as communion themes’ and ‘the type of agency more frequently used by New Age participants centred on ideas and feelings of being magically or paranormally empowered by a non-material force or entity’ (Farias & Granqvist, 2007, p. 126). In sum, Farias and Granqvist (2007) suggest that ‘the New Age idea of abstract connectedness is not just a static belief but rather a cognitive process, which underlies the way in which New Age participants perceive and interact with the world’ (p. 127). Based on a second phase of that study, Farias and Granqvist confirmed an expectation of ‘higher frequency of magical explanations’ among New Age participants compared to other groups, noting their surprise at finding that ‘New Age participants made twice as many magical as naturalistic causal attributions’ and suggesting that ‘New Age individuals had a highly associational cognitive style, which made them perceive events in their life in a tightly connected way (via supernatural forces or entities)’ (Farias & Granqvist, 2007, p. 127; Farias & Lalljee, 2006). Combined with further studies, Farias and Granqvist (2007) suggest that there are ‘strong indicators of the presence of underlying structures which may dispose the individual to experience unusual perceptions and magical/paranormal beliefs and experiences’ (p. 132), which are distinct from those found in other religious or atheist groups. There is, in effect, a blurring of the line between points of doctrine and belief and cognitive processes evolved for other purposes, summed up in the idea that ‘the New Age idea of abstract connectedness is not just a static belief but rather a cognitive process’ (Farias & Granqvist, 2007, p. 127. Also cited above).8

This distinctive framing of the New Age cognitive process is paralleled in Farias and Granqvist’s findings about attachment research as applied to New Age subjects. Referring to Granqvist and Hagekull (2001), testing the compensation hypothesis, Farias and Granqvist (2007) confirm the expectation that New Age affiliation is linked to a more insecure attachment history (p. 139). They make similar findings on the basis of studies of ‘self-reported romantic attachment and indices of New Age embrace’ (Farias & Granqvist, 2007, p. 140): ‘[H]igh New Age scale scorers also scored higher in romantic attachment disorganization [. . .] than did low New Age scorers’ (Granqvist & Hagekull, 2001) and there was ‘greater interest in reading spiritual/esoteric books,
which are common in New Age circles, among adults who scored high in ambivalent/preoccupied attachment as compared with others’ (Saroglou et al., 2003). In summary, in relation to the attachment research, Farias and Granqvist (2007) suggest that the available studies ‘uniformly and strongly supported the compensation hypothesis’ (p. 141). While this compensation effect is evident in traditional religious forms as well, the authors suggest that by providing ‘a surrogate attachment-like figure (i.e. God)’ which may offer ‘a certain degree of earned security’ because the attachment figure helps ‘the individual establish perceptions of a personal, nurturing relationship’, the absence of an equivalent in the New Age implies a similar beneficial effect may not be available in that milieu (Farias & Granqvist, 2007, p. 143). Furthermore, they speculate that New Age involvement may ‘not serve a functional compensation, especially not in promoting increased security of attachment’ because negative preoccupation and disorganized tendencies in such individuals are ‘not counteracted, but even encouraged and allowed a more or less full expression within the New Age and in the company of other individuals with similar inclinations’ (Farias & Granqvist, 2007, p. 142). Thus, though they take a rather different approach, Farias and Granqvist echo Hammer’s broad model of a religious form making maximal use of an available cognitive pathway, tempered by social processes that feedback into the active religious ideas. Both the studies discussed in this section, suggest ways in which the broadening of the religious object investigated has the effect – as we might expect – of diversifying the detectable interactions between the cultural (religious) artefact and the cognitive architecture. Despite their differences, both of these studies outline a religious form potentially dependent on more than cognitive mis-fire or over-extension, and in fact appearing to be well-adapted to the cognitive ecosystem it inhabits. This also has the effect of meaning that the study of the ‘New Age’ makes underlying cognitive processes more available to study, because of the closer relationship between doctrine and cognition. We might expect, as the CSR model is extended to wider case studies, to find that relationship between the formation of cultural concepts and the theorized cognitive architecture is more inherent and less abstracted than the way it has sometimes been presented.

CSR beyond NRMNs

In the last decade, there has been a spate of studies applying CSR in case studies that have stretched the conception of religion, and which have, concomitantly, stretched the range of phenomena to which the CSR approach has been applied. If the application of CSR to non-mainstream and innovating religious forms like the subjects of the studies by Närhi (2008), Lane (2009), Ketola (2008) and Upal (2017) discussed in the first section represents a hinterland of the mainstream for the conventional study of religion, its application to near death experiences, CTs, religious experience within virtual reality, and similar contexts represents a marginal transition. In a recent article, Claire White et al. (2018) have applied a cognitive approach to the study of accounts of near death experiences (NDE) and the afterlife to propose that:

It is likely that belief in an inhabited afterlife realm has as much [to] do with our species’ cognitive predispositions as it does fears of one’s own eventual demise, as people tend to view the death of a loved one as resulting in a change to their physical location rather than as an existential annihilation. (p. 281)

Three core themes, taken from accounts of near-death experiences or reports of the afterlife, form the thrust of White, Kinsella and Bering’s analysis. The first is access to privileged knowledge/memories, in which ‘people allegedly acquire information during their death/near-death state or previous life they could not possibly have known before’ (White et al., 2018, p. 283). The second is the idea that ‘the ethereal mind continues apart from the physical body’ and the
physical body might be discarded or radically changed at the moment of death (White et al., 2018, p. 284). The third is the notion that ‘the same mind can inhabit different bodies [. . .] at different periods of time, or even multiple bodies over a long continuous period of time’ (White et al., 2018, p. 289). Each of these aspects is, the authors suggest, commensurate with findings in the cognitive sciences. For example, the primacy of mind or memory, it is argued, reflects ‘the widespread assumption that [. . .] “we do not feel as if we are our bodies; we feel we occupy them”’ (White et al., 2018, p. 285. Citing Bloom, 2004). And, the presumed portability of mind between bodies reflects, the authors suggest, folk dualism and ‘general scholarly consensus that people everywhere represent themselves and others as being constituted by non-physical properties’ (White et al., 2018, p. 285. Citing Bloom, 2004; Corriveau et al., 2005; Gopnik et al., 1990; Richert & Harris, 2006; Roazzi et al., 2013). In conjunction with a range of other studies, White et al. (2018) propose that ‘these qualities lend themselves to a sort of intuitive model, or default stance, of psychological continuity after death’ (p. 288. Citing Conway, 2005). In summary, White et al. (2018) suggest that

one reason popular reports of NDEs and reincarnation are compelling is because they meet cognitively intuitive expectations about what counts as evidence for life after death [. . .] they are not simply by-products of enculturation or indoctrination into a particular theology. (p. 291)

Echoing the theme encountered in the previous section, White, Kinsella and Bering indicate that there is a close connection between the content of belief and underlying cognitive processes.9

Aside from the value of their concatenation of research findings from the study of near-death experiences and accounts of afterlife with some important theorized common cognitive tendencies, what is striking about White, Kinsella and Bering’s study is the way in which they link their assessment to cognitive science accounts of religion. Thus, they suggest, ‘[p]arapsychology, while ostensibly empirically motivated, may serve similar purposes as religion and ‘[t]his is especially true for cognitive scientists of religion, since CSR offers a clear conceptual perspective from which to understand the seemingly impenetrable appeal of parapsychology’ (White et al., 2018, p. 292). In effect, starting from the assumption that accounts of experiences at or after death, or the more formal pursuit of parapsychology, are some distance from the category of conventional ‘religion’, White, Kinsella and Bering are employing CSR as a way to identify their candidate religious object as a valid object of interest to scholars of religion – because it is engaging in the kinds of processes that CSR postulates. In effect, this is to claim that CSR can be used as a measure of what may or may not be classified as religion.

Two further papers suggest a similar employment of CSR, while provocatively extending the subjects they treat to the margins of what might conventionally be understood to fall into the domain of ‘religion’. Bradley Franks et al. (2013) employ CSR to ‘theoretically elucidate [the] dynamics and inner logic’ (p. 1) of CTs in a paper on ‘conspiracy theories as quasi-religious mentality’. And, Ryan Hornbeck and Justin Barrett (2008) use CSR to unpack the notion that ‘virtual reality is in some ways an essentially spiritual experience’ (Julian Dibbell, quoted in Hornbeck & Barrett, 2008, p. 75). While Franks, Bangerter and Bauer are explicit that their account of the relationship between CTs and CSR is analogical, their manoeuvre is similar to that of White, Kinsella and Bering, in that their ‘main hypothesis regarding what makes CTs “stick” to explain threats, is that they incorporate quasi-religious, minimally counter-intuitive representations of external agents who are omniscient and omnipotent regarding the domain of that threat’ (Franks et al., 2013, p. 9). That is, they propose that CTs are attractive because, in certain particular domains and contexts, they are activating or using mechanisms like those identified by the CSR as active in cultural forms understood as religious. They are able to refer to CTs as ‘quasi-religion’ because they can be
described in the vocabulary of CSR, and to that extent CSR is being employed as a test of ‘religiousness’ (albeit, in this case, the authors judge that it does not quite meet the full criteria).

While they are cautious in their presentation, Hornbeck and Barrett (2008) deploy the CSR test to a stronger (albeit highly tentative) conclusion compared to Franks, Bangerter and Bauer in that they go beyond implying mere analogy on the grounds of the successful identification of classic CSR mechanisms in the cultural form they are studying. The two core themes of CSR cited by Hornbeck and Barrett, like Franks, Bengerter and Bauer, are minimal counterintuitiveness (‘balance between understandable intuitiveness and attention-grabbing novelty’) and ‘properties that enhance (rather than detract from) inferential potential in matters of importance, particularly social ones’ (Hornbeck & Barrett, 2008, pp. 82–83). These features, they suggest, ‘also factor prominently in VR worlds and suggest a reason why participants in SL [Second Life] and other virtual spaces often compare their experiences to the spiritual and the religious’ (Hornbeck & Barrett, 2008, p. 83).10 Like White et al. (2018) and Franks et al. (2013), Hornbeck and Barrett explicitly seek only to claim that the congruencies they identify between their subject and CSR mechanisms ‘do not work at an optimum. They are weak analogues, not functional equivalents, of those supernatural concepts that feature in popular religions’ (Hornbeck & Barrett, 2008, p. 85). Nonetheless, ‘[a]s a tentative empirical footnote’ Hornbeck and Barrett (2008) explore a phenomenon they refer to as ‘virtual touch’ where users of VR ‘sometimes register tactile sensations’ on their physical body when they see their digital avatar being touched (p. 86). They suggest that in some circumstances, virtual touch is associated with ‘an emotionally salient experience – corporeal sensations and ‘warm’, oxytocin-like effects – that was itself counterintuitive!’ and ‘might by some accounts be considered a “spiritual-like” experience by virtue of this counterintuitiveness’ (Hornbeck & Barrett, 2008, p. 87). Given the unusual nature of these effects using the limited technology available today, and contemplating the potential progress of technology in the future, Hornbeck and Barrett (2008) close their article speculating that ‘future VR developments could inspire experiences that are, by all accounts, religious or spiritual’ (p. 87). Thus, while they are restrained the claims they make about the potential for VR as it is today to induce experiences that are religious, the question is implicitly only one of degree rather than quality: it simply requires better technology. As such, we can see in Horbeck and Barrett’s article the same use of CSR as a test of the ‘religiousness’ of a cultural form that might otherwise be assumed to be a highly marginal candidate.11

The range of phenomena considered in this section is very broad. The productivity of these studies suggests that CSR can be usefully applied to, and extend understanding of, a broader range of phenomena than what is conventionally included under the rubric of ‘religion’. The fact that these kinds of applications are productive indicates that religion should perhaps be thought of as one example of a broader range of phenomena in human cognition – and to that extent CSR is being applied to identify what the notion of religion might include. That is, in effect, an implicit presupposition of the research discussed in this section. If religion is not to be redefined to incorporate the subjects of study discussed in this section, then either there is limited justification for singling religion out into a distinct cognitive theory, or there is no reason to identify a particular cognitive theory as relating to religion in particular.

Much of the critical thrust encountered in the work of Upal (2017) and Ketola (2008), discussed in the first section, arose from a concern about the relationship between underlying ‘internal’ cognitive processes and socio-cultural shared activities. There is a strong and self-evident element of cultural transmission in mainstream religious phenomena – where the socio-cultural aspects appear to dominate – but that is less obviously the case in the subjects of Upal’s and Ketola’s studies – where the cognitive substrate appears to be more prominent under a lighter cultural overlay. This is perhaps exaggerated again in the studies discussed in this and the previous section – where the cognitive
substrate is perhaps the dominant element amid a relatively fluid and somewhat transient doctrinal formula. This suggests that the further the subject of study is from the centre of the conventional domain of mainstream religion, the cognitive phenomena that are being considered here arise in a more self-evident way from underlying architecture and capacities. Indeed, the kinds of marginal phenomena with which this article is concerned may be better subjects for the observation of the underlying religious processes than mainstream religion itself. It may also be part of the appeal of the kinds of quasi-religious phenomena considered here: that they provide a more unfettered means of access to those deep cognitive processes than religious forms with more elaborated and long-standing doctrinal overlays.

The cultural role of scientific discourse about religion

While the previous section suggests that CSR can be productively applied to subjects that fall some way outside the usual threshold of what might be conventionally regarded as religion per se, in assessing the wider socio-cultural function of CSR as a participant in systems of discourse, it is evident that it has been employed in ways outside its value as a technology for the mere analysis and better comprehension of religion. In particular, in the two studies discussed in this section, we can see CSR being employed in two radically different arenas to validate and mediate between ostensibly conflicting paradigms. In an article for the Journal for the Study of Spirituality, Peter Kevern (2013) presents a thought-provoking argument suggesting that a cognitive science framework can help bridge the communication gap caused by the religious reference points of many patients in healthcare (especially end-of-life care) settings and the more reductionist concepts subscribed to by many healthcare professionals. As he says, ‘[a] significant contributor to the unease with which spirituality is addressed within the [UK] health service is the echo of its origins in a religious and classical-philosophical world which healthcare providers do not necessarily know or share’ (Kevern, 2013, p. 9. Citing Paley, 2008b and Pesut et al., 2008). The conventional response to this conundrum has been ‘to empty “spirituality” of most of its determinate content’ in its management in institutional settings which results in ‘an alienated, if transferable, consumer product’ (Kevern, 2013, p. 9. Citing Carrette & King, 2004; Paley, 2008a). In response, Kevern (2013) suggests, the CSR model might be employed to ‘generate a framework for talking about spirituality that is comprehensible to both reductionists and holists, and so perhaps to establish “spirituality” more firmly and broadly within healthcare practice’ (p. 9).

The limitations Kevern identifies with the ‘standard model’ of CSR when applied in this way are, he suggests, mitigated when used in healthcare settings; indeed, the implication is that the social and cultural isolation of the medical ward presents a particularly suitable context for the implementation of spiritual care models drawing on CSR. The two major concerns Kevern (2013) identifies with the application of CSR in this way are (1) that it relies on an isolated model of cognitive processes, while in practice religious beliefs are inseparable from the communities in which they are formed and sustained and (2) that ‘the functions and effects of religion are rich, subtle and almost impossible to study in an experimental way’, so ‘the model is little more than a basket of hunches and prejudices’ (p. 10). However, because patients are ‘removed from their usual sources of religious practice and doctrinal reinforcement’, ‘likely to be looking for sources of support’ and ‘likely to be reappraising their beliefs’ so, in effect, ‘thrown back on their individual intuitions’: ‘We might therefore find’, Kevern (2013) suggests, ‘that their distinct religious backgrounds and practices become less salient than their internalized “spirituality”; and this, in turn, is likely to be more influenced by the cognitive mechanisms identified in the CSR model’ (p. 11).

Two long-standing themes of CSR study, hypersensitive agent detection and theory of mind, are helpful in illustrating the practical application of CSR in the ways Kevern suggests. The former, he
suggests, indicates that ‘human beings may generally find it easier to believe in divine agents than not, and that a balanced mental state is more likely to include some transaction with divine beings than not’ so that, especially amid traumatic events, the healthcare practitioner can be aware that ‘[t]here are good clinical reasons to take talk of gods and other “spiritual powers” seriously’ (Kevern, 2013, pp. 12–13). This is complemented by theory-of-mind, which Kevern applies as a general framework of purpose for the divine agents invoked by hypersensitive agent detection. ‘[W]hen we intuit the presence of an “agent” who is implicated in the way events are unfolding’, Kevern (2013) says, ‘we most naturally assume that this “agent” has a purpose and method that is comprehensible to us. Gods can be assumed to behave in a human sort of way’ (p. 13). In summary, the CSR framework might suggest to healthcare practitioners that

[T]he attempt by a patient facing a challenging event to tell a story of the origins, purpose and future meaning of their condition in terms of the purposeful action of divine beings or unnamed forces, viewed empirically, should not normally be seen as delusional or fanciful, but as a practical psychological strategy to assist them to address the situation and respond appropriately. From this perspective, any attempt to reason them out of their ideas is clearly pointless, counterproductive and potentially abusive. (Kevern, 2013, p. 13)

In effect, CSR enables medical practitioners who presupposedly do not share the metaphysical commitments of their more religiously inclined patients, to make a discursive shift in their understanding of some classical elements of religious belief: ‘It moves the discussion of spirituality away from questions of its literal truth or falsehood towards questions of its value and the ways it can be fruitfully supported’ (Kevern, 2013, p. 14). In effect, Kevern is proposing a meta-application of CSR (that is, an application beyond the simple scientific scrutiny of religion) which is to employ it to rehabilitate the religious and spiritual discourses of patients as valid objects of engagement for service providers presumably habituated to settings that are powerfully informed by reductive and materialist models of human nature.

A parallel process to Kevern’s attempt to rehabilitate religious and spiritual discourses in medical settings is evident in the academic sphere in recent work on the study of esotericism. Wouter Hanegraaff’s (2012) book, *Esotericism and the academy: Rejected knowledge in Western culture*, speaks to a consistent theme in his work, and in the study of esotericism more generally, over a long period of time: establishing the validity of western esotericism as an object of scholarly study. The book’s introduction indicates a sense of embarrassment among intellectuals and academics in the field – long associated with the occult, magic, Gnosticism, and other strands perceived to challenge the canonical core of Christian theology and mainstream religious studies – detected early in Hanegraaff’s career. Despite discovering that foundational thinkers in the esoteric tradition were ‘far from being marginal outsiders’ but ‘had been remarkably influential in their own time, and stood at the origin of large and complex intellectual traditions’ the attempt to study them made Hanegraaff’s teachers uncomfortable (Hanegraaff, 2012, p. 2). While the situation for western esotericism as an object of study has improved, it is still the case that it is regarded by many scholars as marginal and somewhat suspect, thus subject to assumptions, in Hanegraaff’s words, ‘reflective of ideological constructs and stereotypes’ that militate against its inclusion in the canon of respectable objects for the gaze of scholars of religion (Hanegraaff, 2012, p. 3). Indeed, Hanegraaff suggests, the modern academic enterprise was formed in opposition to the very currents of thought he sought to study, hence it has had, and to some extent retains, a taint of otherness. While Hanegraaff has not developed a cognitive science framework for his habilitation project, his broad approach provides a useful framework by which to understand the few scholars who have done so.

Three recent papers, published in a special issue of *Aries*, the periodical of the European Society for the Study of Western Esotericism, on Esotericism and the Cognitive Science of Religion, present
case studies in the application of a cognitive science approach to aspects of the esoteric domain (Asprem, 2017; DeConick, 2017; Markússon, 2017). Thus, Egil Asprem’s (2017) article approaches magical astral travel practices in the Golden Dawn with reference to the neuroscience of perception; Guðmundur Markússon (2017) assesses the impenetrability of the writings of Aleister Crowley with reference to the cognitive study of reading; and April DeConick (2017) presents a cognitive model designed to account for the formation and innovation of concepts when mapped onto spatial orientation in a study of ancient soul flight narratives. To the extent that they do not problematize cognitive science, these studies offer conventional applications of the approach to religious subjects susceptible to its interrogation — though, because of their subject matter, they sit nearer the margins of the conventional domain of religious studies itself. Nonetheless, we can see in these studies the implicit progression of Hanegraaff’s project to domesticate western esotericism as an object of scholarly attention. The editors’ introduction to the volume of the journal in which these articles appear alludes to this deployment of cognitive science in a comment about ‘the professionalization of research on esotericism over the past two decades’ (Asprem & Davidsen, 2017, p. 1). A similar note can be detected in another recent paper by Egil Asprem (2016) — one of the authors of the editors’ introduction to the special issues of *Aries* — on ‘Reverse-engineering “esotericism”: how to prepare a complex cultural concept for the cognitive science of religion’. Implicit in the article’s rationale is the attempt to make esotericism more easily susceptible to study by another discipline (in this case, cognitive science), and thus it might be understood to reflect a secondary front the Hanegraaffian project to bring that domain nearer the centre of the conventional academic gaze. That implicit purpose is made explicit in the paper’s closing words: ‘[T]he potential trade-offs are great: to rewire the field firmly at the center of the scientific study of religion and participate fully in the new era of discovery unleashed by the cognitive science of culture’ (Asprem, 2016, p. 180).

In both of the approaches discussed in this section, it is evident that CSR is being drawn on for more than its potency as a tool for the analysis of cultural forms, and is being engaged in scenes of cultural tension. Its value for this purpose appears to stem in large part from its academic credibility as a *bona fide* scientific thesis about religion, which allows it to function as an independent reference point. It is also employed in both the approaches discussed in this section as, in effect, a neutral arbiter. Of course, CSR has only limited inherent alignment with one side or other in the debate about the academic respectability of the study of esotericism, and to the extent that Kevern proposes CSR as a framework to enable healthcare workers to engage in religious talk with patients who have faith commitments, it is also non-aligned in that context. It should also be recognized that Kevern is not in practice proposing that CSR do anything more than create a common language for atheists or agnostics required to provide care to theists, and the intercession of CSR relies on each side of the conversation bracketing their respective meanings when they use the same language. John Paley (2015) dismisses Kevern’s project as part of a political discourse seeking to ‘create and maintain a space for religious sensibilities in the health services’ by ‘attaching the religious connotations of “spirituality” to as many health-related concepts and practices as possible’ (pp. 220–222). Nonetheless, Kevern’s model is an interesting one that could be understood to imply that the underlying cognitive architectures shared by all humans provide a common ground for diverse and divergent belief systems, and that shared space may be consensually accessible through language and the deliberate use of the psychological theory itself.

**Conclusion**

This article has examined the application of CSR to a wide range of new religious and quasi-religious phenomena which are by definition outside the conventional mainstream of the study of religion, and to that extent ‘at the margins’. These words from the title of the article are intentionally
ambiguous; they refer not just to religious margins, but also to applications of CSR that are outside the usual discourse and thus the use of CSR in marginal ways. An important form of this discursive use of CSR is the role of the approach in validation and mediation. These themes, discussed in the previous section, are evident in both of the two other strands discussed in this analysis: every act of carrying out academic research is an assertion of the validity of the subject and method of study. While, the studies of New Age movements, near-death experiences, CTs, and virtual reality discussed above do not explicitly problematize the issue in the way that is in evidence in the studies in the field of esotericism or healthcare and religion discussed in the previous section, they do implicitly assert that validity. There is also a parallel between the assessment of the empirical study of ‘New Age’ affiliation and the application of CSR to marginal religious forms (NDEs, CTs, and virtual reality). In both cases the studies discussed suggest that their subjects are not only usefully susceptible to analysis from a cognitive perspective, but that they provide valuable refinements: the study of New Age affiliation identifying a religious form with a particular association with a cognitive pathway, and the study of cultural forms at the margins of religion suggesting case studies with a heightened exposure of their underlying cognitive processes. Thus, while it is not the fulsome integration of CSR with wider social-cultural processes envisaged by Upal’s (2017) and Ketola’s (2008) critiques of CSR’s insularity, the analysis in this article shows the ways that the application of CSR to new and quasi-religion has started to elaborate that integration in theoretically embedded if heretofore overlooked ways. The finding that the propositions of ‘New Age’ and near-death experience beliefs are more closely penetrated by underlying cognition than conventional religions, in the material assessed by Farias and Granqvist (2007), Hammer (2014) and White et al. (2018), indicates these forms of religious expression may be good candidates for the study of the underlying cognition itself – at the same time as querying the presumed separation of doctrine from cognitive processes in standard forms of CSR. A similar point is made by Kevern (2013) in his suggestion that the social-cultural isolation and pressing existential valence of the medical ward is a context in which religious forms of expression closer to cognitively optimal pathways (as less affected by socially and culturally constructed doctrine) are more likely to come to the surface. What is particularly striking about this finding is that it suggests that new and quasi-religious forms may offer valuable, relatively accessible, and largely overlooked research subjects alongside the hunter-gatherer case studies that form the staple of CSR at present. Overall, these suggest that the new and quasi-religious forms provide sites of special scientific interest in the study of underlying cognitive architecture.

The suggestion that some forms of doctrine are suffused by traces of cognitive architecture is implicitly to propose that more elaborated (usually traditional) religious forms are characterized by addition and extension that usually obscures that substrate. In effect, this is to enlarge the category of religion across a spectrum from the relatively simple, non-traditional and non-mainstream to the elaborate, large and mainstream. This is explicitly at play in the application of CSR to the study of western esotericism where CSR is being employed to incorporate a domain of belief and practice into the definition, and implicitly evident in the analysis of near-death experiences from a CSR perspective. Discursively, the potential for the useful application of CSR to a cultural form not otherwise understood as religious – exemplified most strikingly in the studies of CT beliefs and virtual reality experiences (Franks et al., 2013; Hornbeck & Barrett, 2008) – is to apply CSR as an assessor of the religious category, to discern what objects can be treated as religious.

The focus of this article has been the application of CSR in the study of NRM, quasi-religion, and a range of forms of religious expression and engagement at the margins of mainstream traditions of study or practice. In assessing recent work in the area, it has uncovered a broad zone of research in which CSR is implicated in scholarly debates in and beyond the mere study of religion, and where social and cultural factors can be invoked theoretically in complex and multi-level...
ways. The approach to ‘the margins’ developed here – that is, one that pays attention not just to marginal subjects of study but marginal applications of theory – is a productive one that raises questions and implicitly queries presuppositions nearer the centre. In the same way that the discussion of religion and religiosity at the margins uncovers the ways that these cultural forms appear to reveal more clearly the deep cognitive architectures that underlie their lighter cultural coverings, the study of NRMs and religion at the margins may uncover something of the implicit conceptual and theoretical boundaries of the scientific study of religion itself.

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Notes

1. NB the use of the term ‘marginal’ is not intended to suggest that the subjects investigated are not significant in cultural or numerical terms, it refers instead to beliefs/practices and applications of theory at the edges of the conventional scholarly gaze.
2. A number of other studies referring to other marginal domains with potentially similar claims to inclusion under the rubric would be rewarding in extending the analysis that is carried out here. For example, discussions of astrology (see Glick et al., 1989; Kelly, 1997; Lillqvist & Lindeman, 1998; Munk, 2011) and mindfulness/meditation (see Cahn & Polich, 2006; Farias & Wickholm, 2015/2019; Holas & Jankowski, 2013; Levinson & Aldwin, 2013/2015; Lutz et al., 2007; Varela et al., 1991/2016) touch on themes relevant to the category.
3. A case study of the Panacea Society – a breakaway millenarian and proto-feminist religious group from the Church of England which was formed in the United Kingdom in the 1920s (Lockhart, 2019; Lockhart (in press) and Shaw, 2011).
4. See Saler (2010) and Powell and Clarke (2012) for critical discussions of the ‘standard model’.
5. There is not the space here to discuss the variety of grammars of cognitive architecture invoked in CSR. See, Barsalou (2003), Lloyd (1999), Schjødt (2007, 2009), Smith (2014, pp. 56–75), Turner (2014), Visala (2011/2016, pp. 32–54).
6. Lane refers to the ADD as the ‘Agent Detection Device’. Tremlin’s account of the ADD refers to J. L. Barrett (2000); Poulin-Dubois & Shultz (1988); Stern (1985); Guthrie (1993/1995).
7. Whitehouse’s work on ‘cargo cults’ is referred to above, and the significance of his wider theory of modes of religiosity for understanding new age forms of religiosity are discussed below.
8. Hammer takes a different view to Farias and Granqvist on the point of abstract connectedness: Hammer (2014) cites the ‘widely disseminated suggestion that the superhuman agent is an “energy” or “force” rather than a person’ as undermining anthropomorphism despite the fact that the anthropomorphizing of supernatural agents is ‘one of Whitehouse’s examples of a cognitively optimal religion’ (p. 279). This is, Hammer suggests, an example of socially constructed doctrines transmitted under the cloak of firsthand experience.
9. See Andersen et al. (2019a) for an empirical study of communication with the dead making more restricted claims.
10. Second Life is an online role-play environment in which individuals interact with each other and the digital environment as an in-game digital character (an ‘avatar’) created by the user.
11. A study with an overlapping subject matter is Marc Andersen et al., (2019b) study of agency detection, which used a virtual reality forest environment to evaluate participants’ propensity to detect virtual beings (though ‘no beings were actually present in the forest’ (p. 56)). Among other things, the study found that participants with high expectations of an encounter with a being were more likely to generate false positive detections than participants with low expectations of such an encounter, and that the HADD model is not supported because the findings ‘suggest that religious teachings may first produce expectations in believers which in turn elicit false detections of agents’ rather than that ‘humans by default produce false detections of agents which in turn give rise to’ belief (Andersen et al., 2019b, pp. 59, 60. Citing J. L. Barrett & Lanman, 2008; Guthrie, 1980, 1993). Because the virtual environment in Andersen’s study is at a remove from the religious experience (it is a model within which to conduct managed tests on responses to simulated stimuli that have a theorized relationship to the formation of religious belief, rather than the mechanism for religious activation itself) it is a less useful example of quasi-religion than the stronger model in Hornbeck and Barrett (2008) – which links the virtual environment to religious experience directly – at least for the purposes of this article.

12. Arguably, because esotericism has been historically regarded as a marginal and unorthodox form of religion by the academic mainstream, the title ‘Cognitive Science of Religion’ implicitly privileges conventional and traditional understandings of the term ‘religion’ that excludes esotericism.

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