To what extent do ‘processes of the mind’, consistent with evolutionary psychology, account for religious experiences involving the Trinity?

Mark B Robins, BSc MA

Supervised by: Dr Timothy Baylor

Submitted in partial fulfilment for the award of the degree of

MRes in Religious Experience

University of Wales Trinity Saint David

2022

PRIFYSGOL CYMRU
Y Drindod Dewi Sant
UNIVERSITY OF WALES
Trinity Saint David

Master's Degrees by Examination and Dissertation
Declaration Form

1. This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Name: Mark Robins
Date: 26.08.22

2. This dissertation is being submitted in partial fulfilment of the requirements for the degree of MRes in Religious Experience.

Name: Mark Robins
Date: 26.08.22

3. This dissertation is the result of my own independent work/investigation, except where otherwise stated.
Other sources are acknowledged by footnotes giving explicit references.
A bibliography is appended.

Name: Mark Robins
Date: 26.08.22. I hereby give consent for my dissertation, if accepted, to be available for photocopying, inter- library loan, and for deposit in the University's digital repository

Name: Mark Robins
Date: 26.08.22

Supervisor's Declaration.
I am satisfied that this work is the result of the student's own efforts.

Signed: Timothy R Baylor
Date: 26/8/22

Contents

Abstract

From a theistic perspective, this dissertation considers the hypothesis that 'processes of the mind', consistent with evolutionary psychology, facilitate subjective experiences of God as Trinity. Christians have for nearly two millennia reported experiences believed to involve the Father, the Son and the Holy Spirit. Such experiences contributed to the hermeneutics that eventually discerned the Nicene Trinity, the concept by which Christians believe they may recognise God.

The evolutionary psychology of religion at its current stage of development is often associated with non-theistic conclusions. However, in principle, the theory of evolution and Christianity may be compatible. This dissertation uses the so-called by-product approach, considering whether cognitive or attachment theories can explain the ways in which the human mind facilitates Trinitarian experiences. However these theories may distort the Trinity's meaning for Christians, for example by attachment processes focusing on perceived images of God and minimising the Nicene concept. Mentalization is considered. It provides a transtheoretical approach but has been little applied to religion. This dissertation proposes that integrating the model of the mentalizing mind into an evolutionary psychology of religion could offer fresh insights. The model might speculatively be used to offer a theistic account for experiences believed to involve God as Trinity, as well as accounting for some negative or ambivalent human responses to God.

Abbreviations

BC	Before Christ.
CE	Common Era.
CSR	Cognitive Science of Religion.
fMRI	Functional Magnetic Resonance Imaging.
PE	Prosopological exegesis.
RERC	Religious Education Research Centre.
The Archive	Alister Hardy RERC Archive Database.
ToM	Theory of mind.

Chapter One: Introduction.

The term 'Holy Trinity' ('the Trinity') refers to the belief of Christians that the one God exists as 'three persons', namely God as Father, as Son and as Holy Spirit[1]. Christians place the Trinity at the centre of their faith, for example at the heart of Anglican liturgy[2] and in the opening lines of the Catholic Mass[3]. This dissertation from a theistic perspective considers the hypothesis that 'processes of the mind', consistent with evolutionary psychology, facilitate personal experiences of God as Trinity.

Evolutionary psychology is an approach in which the 'psychological mechanisms'[4] or 'systems'[5] of the human mind are understood to be shaped by natural selection. Evolutionary psychology at its current stage of development offers an incomplete account and is often associated with non-theistic conclusions. Work continues to understand more thoroughly the links between evolutionary psychology and religion, for example in recent publications by Barrett[6] (1971 CE-present) and by Granqvist[7] (1973-present). Experiences involving the Trinity have had a significant role in Christianity but many theories in evolutionary psychology may struggle to describe theistically the ways in which those experiences occur. It is proposed that 'mentalization'[8] may offer a step forward. Mentalization is a 'transtheoretical'[9] approach that recognises how evolutionary theories could describe the human mind more fully by acknowledging their interdependence. Mentalization describes ways in which the human mind may facilitate an individual's relationships with self or others. It

---

[1] J. Smith, 'The Fourth Century Fathers', in *The Oxford Handbook of the Trinity,* ed. by G. Emery and M. Levering (Oxford: Oxford University Press, 2011), pp.109-122 (pp.116-117).
[2] Church of England, *Common Worship Main Volume* (London: Church House Publishing, 2000).
[3] Catholic Bridge, *Text of the New English Roman Catholic Mass* (2010). www.catholicbridge.com/catholic/catholic-mass-full-text.php [last accessed 04.02.22].
[4] L. Kirkpatrick, *Attachment, Evolution, and the Psychology of Religion* (New York: The Guilford Press, 2005), p.232.
[5] P. Boyer, *Religion Explained The Evolutionary Origins of Religious Thought* (New York: Basic Books, 2001), p.118.
[6] J. Barrett, and P. King, *Thriving with Stone Age Minds Evolutionary Psychology, Christian Faith and the Quest for Human Flourishing* (Downer's Grove, Illinois: Inter-Varsity Press, 2021).
[7] P. Granqvist, *Attachment in Religion and Spirituality A Wider View* (New York: The Guildford Press, 2020).
P. Granqvist, 'Attachment, culture, and gene-culture co-evolution: expanding the evolutionary toolbox of attachment theory', *Attachment and Human Development,* 23.1 (2021), pp.90-113.
[8]P. Luyten, and others, *The mentalizing approach to psychopathology: State of the art and future directions* (2020), pp.1-63. www.discovery.ucl.ac.uk/id/eprint/10083780/ [last accessed 4.2.22].
[9] Luyten and others, *The mentalizing approach,* pp.26-27.

is proposed that as a by-product of the human capacity for social mentalization, the mentalizing mind may facilitate relationships with God, making possible experiences believed to involve the Trinity, as well as accounting for some negative or ambivalent human responses to Him.

This introductory chapter considers some examples of experiences that Christians describe as Trinitarian. The chapter then briefly outlines, and responds to, some of the challenges that arise when considering religious experiences and evolutionary psychology together. The terms 'religion', 'experience', and 'evolutionary psychology' are considered from Christian and non-theistic perspectives. Whilst the latter perspective cannot be disproved, in principle 'processes of the mind' consistent with evolutionary psychology may be compatible with Christian faith and theistic experiences.

Examples of Experiences involving the Trinity

Experiences believed to involve the Trinity have been reported by Christians over two millennia. Christians believe that they experience a relationship with God that may perhaps be communicated in a distinct vision or auditory revelation, or as a transcendent presence sensed for instance during prayer, worship or at other times of day. Religious experiences may deepen Christians' faith. 'Meaning in life' may be found when 'current experiences and evaluations of our life are in line with our meaning systems, a complex network of global beliefs and goals'[10]. Religious beliefs are 'an important part'[11] of so-called 'meaning systems'. Experiencing God's presence may affirm Christians' beliefs, and so give greater meaning to their lives.

Some examples illustrate the significance for Christians of experiences involving the Trinity. They are described in the New Testament, for example visions of the exalted Christ (the Son) in Heaven (2 Corinthians12.1-4)[12] and experiences prompted by the Holy Spirit (Acts 10.44). In the early years of Christianity, before the doctrine of the Trinity had been conceptualised, the elements of the newly disclosed identity of God, as the Father and the Son,

[10] L. Dewitte, P. Granqvist and J. Dezutter, 'Meaning Through Attachment: An Integrative Framework', *Psychological Reports*, 122.6 (2019), pp.2242-2265 (p.2243).
[11] Dewitte, Granqvist and Dezutter, 'Meaning Through Attachment', p2250.
[12] New International Version (London: Hodder and Stoughton, 1979).

were revealed through personal experiences[13]. Such was the 'generative role of revelatory religious experiences[14]' that they may help to explain the spread of early Christianity. Centuries later, Saints have reported experiences involving the Trinity. Saint Julian of Norwich (1342-1416), for example, writes about her visions. 'Though the Three Persons of the Trinity are all essentially equal, my soul most readily understood love [Holy Spirit]'[15]. Saint Teresa of Avila (1515-1582) described the way in which the Holy Spirit appeared to her in the form of a brilliant dove with wings 'made of little shells which emitted a great brilliance'[16]. Prominent Christians in our own times have described God's Trinitarian presence. The Archbishop of Canterbury, Welby (1956-present), describes God as Father being 'one that is perfect, that loves me unconditionally, that reaches out to me and knows me'[17]. Mother Teresa (1910-1997) describes the divine presence that may be enjoyed with Jesus through prayer[18]. In short, early Christians, Saints and religious leaders have found meaning and a deepening of faith from experiences believed to involve the Trinity.

The Alister Hardy Religious Experience Research Centre Archive Database[19] ('the Archive') includes personal, anonymised accounts of experiences involving the Trinity reported by lay people. When describing an experience believed to be with God, one contributor writes that 'the limited scope of human language and understanding can come no nearer than the concept of the Trinity'[20]. Someone else describes 'an experience of being bathed in a waterfall

[13] L. Hurtado, *Lord Jesus Christ. Devotion to Jesus in Earliest Christianity* (Michigan: Wm. B. Eerdmans Publishing Co, 2005), pp.64-70.
[14] Hurtado, *Lord Jesus Christ*, p74.
[15] Julian of Norwich, *Revelations of Divine Love* (London: Penguin Books Ltd: 1966), p.192.
[16] Saint Teresa of Avila, *Autobiography of St. Teresa of Avila* (New York: Dover Publications, c.1567/2010), p271.

[17] The Archbishop of Canterbury, *Archbishop of Canterbury reflects on God as a father "who loves me unconditionally* (2018). www.archbishopofcanterbury.org/news/latest-news/archbishop-canterbury-reflects-god-father-who-loves-me-unconditionally#:~:text=The%20Most%20Revd%20Justin%20Welby%20said%20that%20calling,know%20myself%20and%20yet%20still%20loves%20me%20profoundly [last accessed 27.2.21].
[18] Mother Teresa, *Heart of Joy* (Collins, Fount Paperbacks, 1987), p.120.
[19] The Alister Hardy Religious Experience Research Centre, *Alister Hardy RERC Archive Database* (2022), www.studyspiritualexperiences.org [last accessed 4.2.22].
[20] The Alister Hardy RERC Archive Database, *001009* (2022). www.studyspiritualexperiences.org [last accessed 4.2.22].

of pure light, … as I lay there I thought 'this is the Holy Trinity''[21]. Yet, most Christians' experiences are not recorded in an archive but may occur privately, perhaps in prayer or while for instance walking on a beach or a city street, when a divine presence might be detected which is believed to be the Trinity. In summary, experiences involving the Trinity can have great significance for Christians.

Religious Experience

However, the nature and meaning of the term 'religious experience' is contested. It can appear self-evident at first, 'yet becomes increasingly elusive as one tries to get a fix on it'[22]. The terms 'religious' and 'experience' are considered in turn.

'Religious'

The meaning of the word 'religious' is disputed[23]. In general terms, religion, as opposed to other beliefs such as political views, 'must relate to the transcendent and point to some goal that lies above and beyond the materialistic goals of the present World'[24]. The Trinity may therefore readily count as 'religious'. It has been described as the 'central mystery of Christian faith'[25], believed by Christians to offer a sense of God's transcendence, and pointing to God's existence beyond our physical world as well as agentively within it.

'Religion' may, however, be understood reductively. Dawkins (1941-present), a geneticist and prominent atheist, describes religion as a delusion and the Trinity as 'sophistry'[26]. For atheists, religion may have a particular social function. Atran (1952-present) asserts that 'supernatural agents arise by cultural manipulation'[27], not divine agency. Mental processes that originally

[21] The Alister Hardy RERC Archive Database, *004230* (2022). www.studyspiritualexperiences.org [last accessed 4.2.22].
[22] R. Sharf 'The Rhetoric of Experience and the Study of Religion', *Journal of Consciousness Studies,* 7.11–12 (2000), pp.267–287 (p.267).
[23] G. Chryssides, 'The tools of the trade', in *The Study of Religion An introduction to key ideas and methods, 2nd Edition,* ed. by G. Chryssides and R. Geaves (London: Bloomsbury, 2014), pp.7-38 (pp.17-36).
[24] Chryssides, *The tools of,* p.36.
[25] G. Emery and M. Levering, 'Introduction', in *The Oxford Handbook of the Trinity,* ed. by G. Emery and M. Levering (Oxford: Oxford University Press, 2011), p.1.
[26] S. Dawkins, *The God Delusion* (London: Random House, 2006), pp.54.
[27] S. Atran, *In Gods We Trust. The Evolutionary Landscape of Religion* (Oxford: Oxford University Press, 2002), p.266.

evolved to detect animate, perhaps hostile, agents also detect events that involve imaginary 'gods' that are invented to help individuals cope with existential anxieties[28] such as a fear of death. Wilson[29] (1949-present) proposes that religion's social function is to help organise groups of people to function as a more coherent whole, thereby accruing advantages including improved sexual reproduction, for instance in the early Christian Church in which living faithfully included 'marriage, abundant children and fidelity'[30]. In summary, 'religion' from an atheist perspective is not a product of divine agency but of the human mind, albeit a product that might perform some social functions that are advantageous.

With the 'atheistic' and 'theistic' understandings of the term 'religion', one is unable to disprove the other. From the theistic perspective:

> we cannot simply infer God's non-existence from the mere fact that there exists a causal explanation [such as those of Wilson or Atran] for why we believe in God that does not involve God[31].

For example, Plantinga (1932-present) asserts that Atran's, and others', description of 'the mechanisms involved in religious belief does nothing, so far, to impugn its truth'[32]. The social and reproductive advantages of religious belief may accrue but this does not preclude God's existence. Belief in the sanctity of marriage may improve human reproduction but that improvement does not necessarily mean that God, whom Christians believe blesses marriage, is a product of the human mind. Theistic belief in God is at least as valid as the atheistic alternatives with which evolutionary theories are often associated. In understanding the term 'religion' theistically, this dissertation is therefore using it in a credible and widely accepted manner.

---

[28] Atran, *In Gods,* pp.269-270.
[29] D. Wilson, *Darwin's Cathedral. Evolution, Religion and the Nature of Society* (Chicago: University of Chicago Press, 2002).
[30] Wilson, *Darwin's Cathedral,* p.152.
[31] A. Visala, 'The Evolution of Divine and Human Minds: Evolutionary Psychology, the Cognitive Study of Religion and Theism' in *Evolution, Religion, and Cognitive Science: Critical and Constructive Essays* ed. by F. Watts and L. Turner (Oxford: Oxford Scholarship, 2014), p.61.
[32] A. Platinga, *Where the Conflict Really Lies. Science, Religion and Naturalism* (Oxford, Oxford University Press, 2011), p.140.

Experience and religion

In its everyday usage the noun 'experience' is variously defined, for example as 'the way that something happens and how it makes you feel'[33], or 'a particular instance of personally encountering or undergoing something'[34]. The nature of 'experience' as part of religion is disputed. Personal religious experiences have from one theistic perspective been described as a myth since God is beyond human perception, meaning that humans may not at their current stage of evolution be able to experience Him[35]. Another objection is that religious experiences are 'well-meaning squirms that get us nowhere'[36], since the term 'religious experience' refers to that which is immediately present and thereafter cannot be validated by others. Individuals may be motivated to misrepresent personal experiences. By describing experiences involving the divine, people may present themselves as more religious than is the case, perhaps because of prejudice in some societies against non-believers[37]. In short, the validity of claims to 'religious experience' may be readily disputed.

Nonetheless, religious experiences have been described as integral to 'religion'. James (1842-1910) defined 'religion' as 'the feelings, acts, and experiences of individual men in their solitude, so far as they apprehend themselves to stand in relation to whatever they may consider the divine'[38]. By 'divine' James refers to 'any object that is godlike, whether it be concrete deity or not[39]. For James experience of the divine is intrinsic to religion itself, but religious experiences depend not only on the divine but on individuals' minds. The meaning of the term 'self' has been debated by philosophers from Ancient Greece onwards[40]. James distinguishes within the 'self' between: 'I', the subjective knower of self which is 'at each moment different from that of the last

[33] Cambridge Dictionary, *experiences* (2021). www.dictionary.cambridge.org/dictionary/english/experience?q=experiences [last accessed 10.9.21].
[34] Dictionary.com, *experiences* (2021). www.dictionary.com/browse/experiences [last accessed 10.9.21].
[35] N. Zangwill, 'The myth of religious experience' *Religious Studies,* 40.1 (2004), pp.1-22 (p.20).
[36] Sharf, The Rhetoric of, p.286.
[37] B. Mercier, S. Kramer and A. Shariff, 'Belief in God: Why People Believe, and Why They Don't', *Current Directions in Psychological Science*, 27.4 (2018), pp.263-268 (p.267).
[38] W. James, *The Varieties of Religious Experience. A Study in Human Nature* (London: Penguin Books Ltd, 1902/1985), p.31.
[39] James, *The Varieties*, p.34.
[40] R. Martin and J. Barresi, 'History as Prologue: Western Theories of the Self', in *The Oxford Handbook of the Self,* ed. by S. Gallagher (Oxford: Oxford University Press, 2011), pp.34-56.

moment'[41]; and 'Me', 'an empirical aggregate of things objectively known'[42]. Differentiating spontaneous thoughts from a more reflective 'aggregate of things known' is a theme discussed by James and developed by later psychological theories, some of which are discussed in this dissertation. James' notion of the self may highlight the significance of the human mind in enabling religious experience. In part of his work James used the notion of self to categorise people into so-called 'sick souls'[43] whose self is divided and tormented, and the 'healthy-minded' who 'refuse to acknowledge evil'[44]. For the so-called 'healthy-minded', James describes religious experience, faith and healthy-mindedness as mutually reinforcing. James' division of humanity into two distinct categories was overly simplistic, as people, including perhaps James himself[45], may experience varying degrees of psychological health and religiosity throughout their lives. Nonetheless, James highlights human psychology as an influence on religious experiences.

Theologians have described the significance of religious experiences. Otto (1869-1937) proposed that religion arises from the 'numinous' which is:

> What we feel when we encounter what is holy or sacred – an experience that for Otto was an experience of something that was 'wholly other'[46].

Otto describes feeling the presence of 'a '*mysterium tremendum et fascinans'* – a tremendously powerful yet magnetizing, fascinating mystery'[47]. Other theologians have also affirmed religious experiences as fundamental to faith[48], for instance describing religious experience as a broad 'framework for experiences of an ultimate kind'; or 'a personal encounter with God'[49]. Religious experience may be a dramatic event, or 'a conviction which gradually

[41] W. James, *The Principles of Psychology Volume One* (Cosimo: New York, 1890/2007), p.401.
[42] James, *The Principles of*, p.400.
[43] James, *The Varieties,* pp.127-188.
[44] D. Duclow, 'William James, Mind Cure and the Religion of Healthy-Mindedness', *Journal of Religion and Health*, 41.1 (2002), pp.45-56 (p.49).
[45] Duclow, William James. Mind Cure, pp.51-52.
[46] I. Strenski, *Thinking About Religion An Historical Introduction to Theories of Religion* (Oxford: Blackwell Publishing, 2006), p.182.
[47] Strenski, *Thinking about Religion*, p.182.
[48] T. Fitzgerald, 'Experience' in *Guide to the Study of Religion,* ed. by W. Braun and R. McCutcheon (London: Continuum, 2000), pp.125-139.
[49] Fitzgerald, Experience*,* pp.125-126.

develops in the course of one's ordinary life that life does, after all, make sense if interpreted as being governed by God'[50].

The experiential aspect of religion is not, however, its only aspect. Smart (1927-2001) illustrates this. He proposes six so-called 'dimensions'[51] of any religion which interact with, and so shape, the dimension of 'experience'. The six dimensions are: mythic (religious narratives that offer guidance); doctrinal (structured and coherent religious teachings); ethical (rules that guide behaviour); ritual (religious rites and ceremonies); social, or institutional (community with shared practices and beliefs)[52]; and material[53] (the ways in which religions reflect themselves materially). The dimensions of religion inter-relate, one influencing another, and vice versa. For example, early Christians' revelatory experiences were a vital step towards discerning the Nicene Trinity (a process discussed in Chapter Two). Conversely, the doctrine of the Trinity offers a conceptual framework which the human mind may use to recognise and so experience God's presence. Experience, according to Smart, is not the only 'dimension of religion' but is a significant one.

There is, however, disagreement as to what makes a personal experience religious as opposed to any other type of experience. Understanding how an individual distinguishes between religious and other experiences may depend on whether experiences are understood to be 'objective' or 'subjective' in content. Religious experiences have been described as objectively identifiable. Taves (1952-present), borrowing Otto's terminology, refers to this approach as the 'Sui Generis model'[54] in which some experiences are viewed as inherently religious, and so set apart from all others. James, for example, proposed four features of an experience that may objectively make it religious: 'noetic quality, ineffability, transiency and passivity'[55]. Rudolf Otto speaks 'more loosely of creature feeling, awefulness, overpoweringness, energy and fascination'[56]

---

[50] Fitzgerald, Experience, p.126.
[51] N. Smart, *The Religious Experience of Mankind* (Glasgow: Fount Paperbacks, 1977), pp.15-25.
[52] N. Smart, *Dimensions of the Sacred. An Anatomy of the World's Beliefs* (Berkeley: University of California, 1996), pp.10-11.
[53] Smart, *Dimensions of the Sacred*, p.275.
[54] A. Taves, 'Ascription, attribution, and cognition in the study of experiences deemed religious', *Religion*, 38.2 (2008), pp.125-140 (p.127).
[55] Sharf, The Rhetoric of, p.270.
[56] Sharf, The Rhetoric of, p.270.

being 'felt as objective'[57] evidence of an experience's religious nature. Hardy (1896-1985) invited contributions to the Archive by asking the question 'Have you ever been aware of or influenced by a presence or a power whether you call it God or not, that is different from your everyday self?'[58] (known as the 'Hardy question'). Religious experiences, according to Hardy, may be objectively classified like botanical specimens. The Alister Hardy Religious Experience Research Centre ('RERC') describes there being:

> many kinds of experience: a sense of presence of a higher power; answer to prayer; healing; meaningful co-incidences or synchronicity; déjà vu; Near-Death Experiences; Out-of-Body Experiences and After-Death Communications[59].

If an experience fits one of these descriptors, it may be classified as religious.

Whilst Christians' experiences of God have similarities, expressed for instance in the language of Trinitarian theology, each Christian's experience of God, and its meaning, is personal. The extent to which a reported experience has James' 'four features' or evokes feelings of a numinous presence can only ever be subjectively known, since experiences are not objectively verifiable and are mediated by the human mind. Some philosophical and theological accounts speak to the subjective nature of human experience.

Buber (1878-1965), who was Jewish, wrote extensively about 'I-It' and 'I-Thou' relationships[60], including human relationships with God whom Buber described as 'the eternal Thou'[61]. A personal relationship with God is experienced as 'I-It' (individual to object) if God is only known conceptually, for example as a doctrine on the page of a book. An individual's relationship with God might be termed 'I-Thou' if it offers a deeper presence unmediated by emotions, thoughts or other possible impediments. From a Christian perspective, God is known through a 'personal relationship'[62] with Him. Subjective relationships with God may include a range of thoughts, and emotions such as joy, doubt or

---

[57] R. Otto, *The Idea of the Holy An Inquiry into the non-rational factor in the idea of the divine and its relation to the rational* (Oxford: Oxford University Press, 1923/1958), p.11.
[58] The Alister Hardy Trust, (2022), www.studyspiritualexperiences.org [last accessed 4.2.22].
[59] The Alister Hardy Trust, 2022.
[60] M. Buber, *I and Thou* (London: Bloomsbury Academic, 1923/ 2013).
M. Buber, *A believing humanism: My testament, 1902-1965* (New York: Simon & Schuster, 1967).
[61] Buber, *I and Thou*, pp.77-83.
[62] A. McGrath, *Christian Theology, An Introduction Third Edition* (Oxford: Blackwell Publishers Ltd, 2001), p.273.

anxiety, which may distance an individual from the eternal Thou. For Buber revelation, a deepening personal relationship with God, is part of a move from relating with God as 'It' to God as 'Thou'.

> In revelation something happens to man from a side that is not man, not soul, not World. Revelation does not take place in man[63].

Buber's approach:

> allows valuable insights into the idea of revelation. For Christian theology, God's revelation is not simply a making known of facts about God, but a self-revelation of God[64].

Buber describes revelation as summoning 'reason to take part in its reception but also to allow itself to be stirred and renewed by it'[65]. From a Christian perspective 'reason' may perhaps include Trinitarian hermeneutics described in Chapter Two or the human mind recognising God's presence in the language of the Trinity, prompting receptivity or renewal in a personal experience of God's presence.

Another perspective is offered by Giussani (1922-2005) who was a Catholic priest. He describes Christians as sensing, and so experiencing, God's presence[66]. The human condition can however hinder experience of the divine which may be obscured by human knowledge, materialism, dwelling on the past, emotions and other so-called 'barriers'. Giussani condemns any form of 'subjectivisation'[67] that denies the theistic truth of God as Trinity but recognises the 'barriers' that shape or hinder an individual's personal experience of divine truth.

Various psychological theories and neurological research have also found religious experiences to be personal in content and meaning, although none of the studies offer a definitive account. For example, McNamara (1956-present) offers a neurological perspective. He proposes that the brain functions by responding to religion 'through the lens of the Self'[68]. 'The Self' consists of the memories, facts, and goals by which an individual cognitively knows his or her 'Self'. Religion challenges this personal Self, 'decentering' it so that the Self

---

[63] Buber, *A believing humanism*, p.135.
[64] McGrath, *Christian Theology, An Introduction,* p.272.
[65] Buber, *A believing humanism*, p.113.
[66] L. Giussani, *The Religious Sense* (Montreal & Kingston: McGill-Queen's University Press, 1997).
[67] Giussani, *The Religious Sense*, pp.9-10.
[68] P. McNamara, *The Neuroscience of Religious Experience* (Cambridge: Cambridge University Press, 2009), p.1.

gains a greater 'range of neurological systems'[69] that reduce the discrepancy between the current Self, and an idealised 'executive Self'[70] towards which religious concepts such as the Trinity may direct an individual's mind. This process results in subjective experiences influenced by the interplay between the Self, and the religious ideal.

Another theory that might account for religious experience is 'attribution'. The term refers to the 'collection of theories developed by psychologists to explain the common-sense causal explanations that people offer for why things happen as they do'[71]. Attributions may include 'perceptions of oneself in relation to a religious framework or to religious agents'[72], such as the Trinity. Someone may for example attribute the cause of his depression lifting to experiencing the Holy Spirit. Another individual may attribute her depression lifting to a cause that does not involve God. Whether an experience is attributed a religious cause, or not, is subjective. In the field of social psychology Taves develops attribution theories by proposing an approach based not just on the attribution of cause, but also on the 'ascription'[73] by an individual of 'a quality or characteristic'[74] that gives an event personal meaning. She metaphorically refers to each quality or characteristic as a 'building block'[75]. The personal meaning of an experience depends on how the so-called 'building blocks' are assembled by an individuals' mind. Possible 'building blocks' may include self-image, feelings, memories, and knowledge such as Trinitarian theology. For example, a woman may experience others in church behaving in a friendly manner. She may attribute the cause of her experience to the work of the Holy Spirit, and ascribe personal meaning, perhaps strengthening her faith in God. Kirkpatrick, whose work on attribution is cited by Taves[76], agrees that religious experiences are subjective. He suggests that many psychological processes, not just attribution,

[69] McNamara, *The Neuroscience of,* p.45.
[70] McNamara, *The Neuroscience of,* p.45.
[71] A. Taves, *Religious Experience Reconsidered A Building Block Approach to the Study of Religion and Other Special Things* (Princeton New Jersey: Princeton University Press, 2009), p.181.
[72] B. Spilka and D. McIntosh, 'Attribution Theory and Religious Experience' in *Handbook of Religious Experience,* ed. by R. Hood (Birmingham Alabama: Religious Education Press, 1995), pp.421-445 (p.422).
[73] Taves, *Religious Experience Reconsidered*, pp.17-21.
[74] Taves, *Religious Experience Reconsidered*, p.181.
[75] Taves, *Religious Experience Reconsidered*, pp.162-164.
[76] Taves, *Religious Experience Reconsidered*, pp.179-171.

may be 'the starting point for a building-blocks approach'[77]. Kirkpatrick proposes that ascription may be facilitated by 'social exchange' (discussed in Chapter Four) and attachment (discussed in Chapter Five).

In summary, Christians believe God to be immutable, but various theological and psychological approaches offer explanations for the subjectivity of religious experiences. The ways in which evolutionary psychology might account for subjective experiences of God's presence are considered in the remainder of this dissertation.

Evolutionary Psychology, and Religion

The theory of evolution is driven by the process of 'natural selection'.

> The differential reproductive success of heritable characteristics varies in a population, so that individuals that happen to have genetically influenced advantageous characteristics in a given environment will be 'favoured' in terms of the number of surviving offspring they produce[78].

These 'advantageous characteristics' are termed an 'adaptation', meaning a 'trait (physical or behavioural) that has been selected by virtue of its positive effects on survival or reproduction'[79].

> The principal assumption of evolutionary psychology is that the human mind should be considered to be an organ that was designed by natural selection to guide the individual in making decisions that aid survival and reproduction[80].

One view is that by focusing on psychology instead of say anthropology, linguistics or sociology, this dissertation may be focusing on the part of religious studies that in its 'tacit division of labour'[81] is most often associated with attempts to explain religious experiences since they are received as part of human thoughts and emotions. However, other fields of study also have significant contributions to make. Sociologists and anthropologists have considered the role of religious experiences within religions[82]. Kirkpatrick

---

[77] L. Kirkpatrick, 'From ".of religion" to "Psychology of.": Commentary on Ann Taves' Religious Experience Reconsidered', *Religion*, 40.4 (2010), pp.300-304 (p.302).
[78] L. Workman and W. Reader, *Evolutionary Psychology (Third Edition)* (Cambridge: Cambridge University Press, 2014), p.38.
[79] Workman and Reader, *Evolutionary Psychology,* p.473.
[80] Workman and Reader, *Evolutionary Psychology,* p.1.
[81] F. Whaling, 'A brief history of the study of religion', *DISKUS,* 7 (2006). www.jbasr.com/basr/diskus/diskus7/whaling.htm [last accessed: 06.05.18].
[82] A. Wallace, 'Revitalization Moments', *American Anthropologist,* 58 (1956), pp.264-281. R. Stark, 'A Taxonomy of Religious Experience'*, Journal for the Scientific Study of Religion*, 5.1 (1965), pp.97-116.

describes psychology and anthropology as metaphorically travelling in similar directions on the same road[83]. The Cognitive Science of Religion (Chapter Four) has sought to integrate aspects of psychology, anthropology and other fields of study. Whilst this dissertation focuses on evolutionary psychology, anthropology, sociology and other fields of study also offer significant insights, some of which have been borrowed by evolutionary psychology.

Combining theistically psychology, evolutionary theories and Christianity may be resisted. There is a materialist tradition within the field of psychology. For instance, Freud (1856-1939) proposed that religious experience is an illusion arising from unresolved issues in the unconscious causing a 'cultural expression of neuroses'[84]. Indeed, many research findings within the psychology of religion 'speak strongly to the idea that religion is a powerful factor in meeting human needs for meaning making, control and sociality'[85], not necessarily to the existence of God. However, as already discussed, theism is at least as valid as non-theistic alternatives. The validity of one or the other should not be decided on psychological grounds. Psychology is the study of the human mind and behaviour, and so as a field on its own may not be equipped to comment on the divine. Rather, realising evolutionary psychology's potential in the study of religion may depend 'upon its openness to a truly interdisciplinary effort'[86] including giving theology, such as the doctrine of the Trinity, its due.

Some Christians reject evolution as being incompatible with biblical accounts of creation[87], believing instead that they should be understood literally. In recent decades so-called 'scientific creationism'[88] has asserted that scripture and some scientific ideas are compatible but that the biblical creation stories (Genesis I and 2) should be understood literally and so cannot be reconciled with the theory of evolution. Another possible criticism by Christians of evolutionary theories is that natural selection generally favours well adapted

[83] L. Kirkpatrick, 'The role of evolutionary psychology within an interdisciplinary science of religion', *Religion,* 41.3 (2011), pp.329-339 (p.338).
[84] E. Shafranske, 'Freudian Theory and Religious Experience', in *Handbook of Religious Experience,* ed. by R. Hood (Alabama: Religious Education Press, 1995), pp.200-230 (p.222).
[85] R. Hood, P. Hill and B. Spilka, *The Psychology of Religion, Fourth Edition: An Empirical Approach* (New York: Guildford Press, 2009), p.20.
[86] Hood and others, *The Psychology of Religion,* p.483.
[87] Creationism.org *Articles* (2022), www.creationism.org/ [last accessed: 5.2.22].
[88] R. Numbers, 'The Creationists', in *God and Evolution A Reader,* ed. by M. Cunningham (Abingdon: Routledge, 2007) pp.90-121 (pp.109-111).

individuals, whereas in the Christian tradition God may be said to favour the weak[89]. Christian teaching guides individuals to 'empower, respect and love one another'[90] including those who experience disability, not to favour the relatively powerful who may lack a disability and so, in evolutionary terms, be better adapted to their environments. Research in evolutionary psychology may risk marginalising vulnerable people by focusing on genetic characteristics that are perceived as weaknesses, for example by focusing on people with autism whose capacity for religiosity may be less than the general population[91]. Responses to these criticisms point out that any evolutionary 'disadvantage' experienced by vulnerable people is part of God's creation and may be a 'disadvantage' from a human perspective, not God's. If evolution is rejected as being inconsistent with God as Creator, it does not necessarily follow 'that God could have reached his aims equally well by way of some other, non-evolutionary process'[92] since alternatives, if they exist, may perhaps cause more suffering. Further, God's defence of the vulnerable does not mean that He loves the rich and powerful less. In short, evolutionary psychology, and its focus on evolutionary advantages, need not conflict with Christian belief in God's love.

Indeed, evolutionary theories may be theologically compatible with Christian faith. For example, Roman Catholic[93] and Anglican[94] church leaders have accepted the theory of evolution. Pope John Paul II (1920-2005) provides one commentary:

> There are no difficulties in explaining the origin of man in regard to the body by means of the theory of evolution. But it must be added that this hypothesis proposes only a probability, not a scientific certainty… According to the hypothesis mentioned it is possible that the human body, following the order impressed by the Creator on the energies of

[89] R. Peels, 'Does Evolution Conflict with God's character?', *Modern Theology,* 34.4 (2018), pp544-564 (p.543).
[90] R. McCloughry and W. Morris, *Making A World of Difference Christian Reflections on Disability* (London: SPCK, 2002), p.120.
[91] S. Baron-Cohen, 'The evolution of theory of mind', in *The Descent of Mind: Psychological Perspectives on Hominid Evolution,* ed. by M. Corballis and S. Lea (Oxford: Oxford University Press, 2000), p.273.
[92] Peels, Does Evolution Conflict, pp.559-560.
[93] C. Schultz, *The Pope Would Like You to Accept Evolution and the Big* Bang (2014), www.smithsonianmag.com/smart-news/pope-would-you-accept-evolution-and-big-bang-180953166/ [last accessed: 5.2.22].
[94] C. Williams, *Archbishop of Canterbury backs evolution. Well, he is a Primate* (2006), www.theregister.co.uk/2006/03/21/archbishop_backs_evolution/ [last accessed 4.2.22].

> life, could have gradually been prepared in the form of antecedent living beings[95].

Theories about evolution may be accommodated within Christian theology[96]. One possibility points to Augustine's (354-430) proposal that God brought creation into being at a single moment and endowed it with the capacity to develop. According to McGrath[97] (1953-present), although Augustine does not use the term 'evolution', that 'capacity to develop' might be re-interpreted to align with evolutionary theory. Another approach points to the concept of 'secondary causality', proposed by Aquinas[98] (1225-1274). He asserts that God 'delegates causal efficacy to the created order'[99]. Although evolutionary theory would have been unknown to Aquinas, evolution might now be understood as being 'delegated' by God as part of creation. Christians who are scientists also offer ideas as to how Christian faith, theology and evolution may be compatible. Examples include the work of Haught[100] (1942-present), Dowd[101] (1958-present), and Miller[102] (1948-present). They offer differing explanations as to how evolution and biblical accounts of creation (Genesis 1 and 2) inter-connect, but their work shares the conviction that Christianity and evolutionary theories can be reconciled. Barrett, a cognitive psychologist who writes from a Christian perspective, describes a 'God-given telos: to love God and each other, and to represent God's wishes and aims for the natural world through our care for it'[103]. Barrett asserts that people may know human nature 'better by bringing together theological insights and those from relevant sciences including evolutionary psychology [that] will give us new tools for effectively pursuing the telos to which God has called us'[104].

---

[95] John Paul II, *Humans are Spiritual and Corporeal Beings (*1986), www.inters.org/John-Paul-II-Catechesis-Spiritual-Corporeal [last accessed 04.03.20].
[96] A. McGrath, *Inventing the Universe: Why we cannot stop talking about science, faith and God (*London: Hodder and Stoughton, 2015), pp.110-116.
[97] McGrath, *Inventing the Universe*, p.116.
[98] McGrath, *Inventing the Universe*, p.113.
[99] McGrath, *Christian Theology, An Introduction,* p.113.
[100] J. Haught, *Responses to 101 Questions on God and Evolution* (New York: Paulist Press, 2001).
[101] M. Dowd, *Thank God for Evolution. How the marriage of science and religion will transform your life and our World* (New York, Plume, 2009).
[102] K. Miller *Finding Darwin's God. A Scientists Search for Common Ground Between God and Evolution* (New York, Harper Perennial, 2002).
[103] Barrett and King, *Thriving with Stone Age,* p.135.
[104] Barrett and King, *Thriving with Stone Age,* p.160.

In conclusion, evolutionary theories and Christianity can in principle be compatible, not contradictory. Evolution might be understood as part of God's creation. 'Processes of the mind' consistent with evolutionary psychology may therefore be part of God's creation and so have the potential to account theistically for religious experiences including those involving the Trinity. The granular detail as to how evolutionary psychology might account for them is considered in the remainder of the dissertation.

Dissertation Structure.

Chapter Two considers in greater depth examples of experiences believed to involve the Trinity and their subjective meanings. Chapter Three discusses the methodology used in this dissertation. A methodology based on the so-called 'by-product'[105] approach is identified. In short, this approach conceptualises a human capacity for religiosity not as a specific adaptation, but as a by-product of adaptations that originally conferred evolutionary advantages for non-religious reasons.

Cognitive theories, including those from the Cognitive Science of Religion[106] ('CSR'), are considered in Chapter Four. Attachment theory[107] (Chapter Five) offers other explanations as to how Christians' experiences of God as Trinity may be facilitated by the human mind. Cognitive and attachment theories offer insights into religious experiences, but the theories struggle to account for experiences in a manner that is compatible with Christians' belief in God's agency and transcendence manifest in the Trinity.

An approach that integrates cognitive and attachment theories, namely mentalization, is discussed in Chapter Six. 'Mentalization' has been defined as 'the capacity to understand others and oneself in terms of internal mental states'[108]. In a mentalization-based approach, relationships between individuals are understood to be 'intersubjective', a term referring to the subjective relationships between individuals when each is mentalizing, and so interpreting

---

[105] Kirkpatrick, *Attachment, Evolution,* pp.232-238.
R. Sosis, 'The Adaptationist-Byproduct Debate on the Evolution of Religion: Five Misunderstandings of the Adaptationist Program', *Journal of Cognition and Culture,* 9 (2009), pp.315–332.
[106] K. Eames, *Cognitive Psychology of Religion* (Long Grove IL: Waveland Press Inc, 2016).
[107] J. Bowlby, *Attachment and Loss Volume 1* (London: Pimlico, 1969).
Granqvist *Attachment in Religion and Spirituality.*
[108]Luyten, and others, *The mentalizing approach*, p.4.

the mental state, of self and the other[109]. The intersubjective process forms an individual's beliefs about self and others. Mentalization is an emerging and speculative approach primarily developed to treat people with personality disorders and other psychopathologies and has so far had little to say about religion. It is proposed in this dissertation that an individual may respond intersubjectively to God's agency which is revealed through the Trinity. For example, the 'intersubjective existence animated and characterised by the agency and sanctifying action of the Holy Spirit'[110] might intersubjectively engage with human minds in a personal experience believed to be with God.

Some parameters are applied throughout the dissertation. Its focus is upon Christians' experiences involving the Trinity, a doctrine unique to Christianity. Muslims, for example, reject the Trinity as polytheism, and so a heresy[111], professing faith in the one god, Allah. Judaism also rejects the Trinity, instead believing in God the Father, who 'does for Israel everything that God as Jesus does for the Christian'[112]. Whilst the human mind has a role in non-Christian religious experiences, these are not considered further.

An exploration of religious experiences involving theology and psychology could be biased by an individual's beliefs. Pike (1912-2000) applied the terms 'emic' and 'etic'[113] to notions of the 'insider' and 'outsider'. The 'emic' viewpoint results from studying behaviour from 'inside the system'[114]. The author of this dissertation has an 'emic' perspective on the Church and its teachings such as the Trinity. To some extent he has an emic perspective on evolutionary psychology too, having practiced as a social worker using some of its theories to try to explain individuals' behaviours, emotions and lived experiences[115]. So-called 'outsiders' (the 'etic' viewpoint) might on occasion be more dispassionate, but the insider perspective can be more authoritative. Cantwell-

---

[109] J. Allen 'Mentalizing in Practice', in *Handbook of Mentalization-Based Treatment,* ed. by J. Allen and P. Fonagy (Chichester: John Wiley and Sons Ltd, 2006), pp.3-30 (pp.7-8).
[110]A. Thiselton, *The Hermeneutics of Doctrine* (Grand Rapids, MI/Cambridge: William B. Eerdmans Publishing Company, 2007), p.564.
[111] S. Nasr, 'The Islamic View of Christianity', in *Christianity through Non-Christian Eyes,* ed. by P. Griffiths (New York: Orbis Books, 1990), pp.128-129.
[112] M. Wyschogrod, 'Judaism and Evangelical Christianity', in *Christianity through Non-Christian Eyes,* ed. by P. Griffiths (New York: Orbis Books, 1990), pp.128-129.
[113] K. Pike, *Language in Relation to a Unified Theory of the Structure of Human Behavior* (The Hague: Mouton, 1967).
[114] Pike, *Language in Relation,* p.37.
[115] D. Howe, *The Emotionally Intelligent Social Worker* (Basingstoke: Palgrave Macmillan, 2008), pp.162-172.

Smith (1916-2000) highlighted that so-called 'insiders' may better understand the experiences of those practising a religion[116]. 'Insiders' to aspects of evolutionary psychology, familiar with using analytically theories such as attachment or mentalization, may also have valuable insights. By recognising perspectives that challenge an 'insider's' viewpoint, a balance in perspectives may be maintained in the remaining chapters.

The fields of psychology and theology have been studied together over the centuries. One of the earliest examples is Augustine's so-called 'psychological model of the Trinity' which likened the human mind to the Godhead. He argued that 'the Genesis creation accounts allow us to conclude that humanity is the height of God's creation'[117]. He believed that the mind is 'the apex of humanity'[118], 'common to God and the human, the infinite medium in which they meet'[119]. If we know self perfectly, we know God in whose image (*imago Dei*) humans are made. However, our knowledge of God is imperfect, being obscured by the limitations of human thought and language, and the intrusion of our senses[120]. Augustine proposed 'an analogical ladder by which reason may climb to glimpse something of the being of God'[121]. He conceptualised an ascending succession of triads which he believed are analogous to the three persons[122], including being, knowing, willing; or 'the totally interrelated and self-reflexive activities of remembering, understanding and loving'[123]. If God's true word (*verbum cordis*) is fleetingly called into consciousness, it becomes an imperfect representation (*verbum mentis*) that is obfuscated by human thoughts and emotions yet becomes a memory. The mind may then use the memory in prayer or contemplation to understand or love God more fully[124].

---

[116] R. McCutcheon, 'Introduction', in *The Insider/Outsider Problem in the Study of Religion,* ed. by R. McCutcheon (London: Continuum, 1999), pp.15-22 (p.18).
[117] McGrath, *Christian Theology, An Introduction*, p.333.
[118] McGrath, *Christian Theology, An Introduction*, p.333.
[119] W. Hankey, 'Mind', in *Augustine through the Ages. An Encyclopedia,* ed. by A. Fitzgerald (Grand Rapids, Michigan, Wm. B. Eerdmans, 2009), pp.563-567 (p.563).
[120] Hankey, Mind*,* p.564.
[121] H. Chadwick, *Augustine of Hippo. A Life* (Oxford, Oxford University Press, 2009), p.121.
[122] Chadwick, *Augustine of Hippo*, p.121.
[123] Hankey, Mind, p.564.
[124] R. Saarinen, 'The Trinity, Creation and Christian Anthropology', in *The Oxford Handbook of the Trinity,* ed. by G. Emery and M. Levering (Oxford, Oxford University Press, 2011), pp.414-427 (p.416).

Some theologians after Augustine, such as Bonaventure (1221-1274) and Aquinas[125], continued the tradition of unifying psychological and theological enquiry. They had identified the relevance of human psychology to the ways in which individuals experience a relationship with God. However, new theological insights have since developed[126]. Theologians describe God as being transcendent in immanence, present throughout creation and the universe, and being outside the human mind[127]. In the field of psychology Augustine's psychological model is no longer used. Psychologists do not believe that the human mind is either literally or analogically Trinitarian. By the twentieth century psychology and theology were separate fields with the former based on scientific, not theological, methods. Whereas Augustine's 'psychological model' understood self to exist in relationship with God, in twenty-first century psychology 'when the notion of self shows up, it tends to be in one of its many hyphenated roles, such as self-image, self-conception, and so on'[128]. 'The ontological status of these various hyphenated notions of self and identity is often unspecified'[129]. The 'Dis-integration'[130] of psychology and theology may have been a necessary and healthy process, so that each field could develop on its own terms. However, in recent years both fields have increasingly been studied together. For example, an approach called 'maximal integration' may 'result in a psychology significantly different from late modern psychology only where Christianity has something distinctive to contribute'[131]. The approach used in this dissertation is consistent with 'maximal integration'.

As far as possible this dissertation does not seek greater theological 'truth, reality or value'[132] between, or within, Christian beliefs. It does not comment on the validity of different Trinitarian theologies, nor seek to add to them. Instead,

---

[125] R. Nieuwenhove, 'In The Image of God: the Trinitarian Anthropology of St Bonaventure, St Thomas Aquinas and the Blessed Jan van Ruusbroec'. *Irish Theological Quarterly,* 66 (2001), pp 109- 121 (p.111).
[126] McGrath, *Christian Theology, An Introduction*, p.334.
[127] Thiselton, *The Hermeneutics of*, p.467.
[128] Martin and Barresi, History as Prologue, p.51.
[129] Martin and Barresi, History as Prologue, p.51.
[130] F. Shults, 'Dis-integrating Psychology and Theology', *Journal of Psychology & Theology,* 40.1 (2012), pp.21–25 (p.24).
[131] E. Johnson, 'The Three Faces of Integration', *Journal of Psychology and Christianity,* 30.4 (2011), pp.339-355 (p.351).
[132] J. Cox, *Religion without god: methodological agnosticism and the future of religious studies. The Hibbert Lecture 13 April 2003* (2003). www.s3-eu-west-1.amazonaws.com/img.thehibberttrust.org.uk/Hibbert-Lecture-2003-Dr-James-L-Cox.pdf?mtime=20161116150000 [Last accessed: 11.04.18], p.2.

the dissertation seeks to 'analyse and compare the position taken'[133] by individuals in their religious behaviour, an approach sometimes termed 'methodological agnosticism'. The dissertation explores how the Trinity may engage with our evolved mental processes, rather than using psychological theories to comment on the validity (or not) of individual theologians' work. Trinitarian theology may thereby have something distinctive to contribute to evolutionary psychology and its understanding of religious experience.

[133] R. McCutcheon, 'Introduction' in *The Insider/Outsider Problem in the Study of Religion,* ed. by R. McCutcheon (London and New York: Cassell, 1999), pp.215-220 (p.217).

Chapter Two: The Holy Trinity and Religious Experience.

Experiences believed to involve God as Father, Son or Holy Spirit have been reported by Christians since the first century CE. In this chapter, after briefly introducing hermeneutics, examples of Trinitarian experiences from early Christianity, the Archive and other sources are considered. Early Christians' experiences of God as Father or Son were a significant influence on the hermeneutics that eventually discerned the Nicene Trinity, a concept by which human minds may recognise God's loving presence today. Subsequent chapters will consider whether individuals' evolved mental architecture may use the Trinitarian concept to distinguish God's presence from other human experiences.

Hermeneutics and the Trinity

Scriptural verses referring to the three persons together are limited in number (Matthew 28.19 and 2 Corinthians 13.14) so that faith in God as Trinity has developed through theological interpretation, and re-interpretation, a methodology known as 'hermeneutics'[1]. It was originally recognised in ancient Greece when a distinction was made between 'literal and allegorical meanings'[2]. Dannhauer (1603-1666) used the term 'hermeneutics' to describe the interpretation of scripture[3]. For Christians 'a new focus was brought to bear on [hermeneutics] in the modern period, in the wake of the Reformation with its displacement of responsibility for interpreting the Bible from the Church to individual Christians generally'[4]. The hermeneutical process has been termed a 'circle' as it may repeat after each new interpretation. The hermeneutics that discerned the doctrine of the Trinity are found in the work of Tertullian[5] (177-220), Origen[6] (185-251) and others, interpreting scripture, revising their views, and then repeating the process.

---

[1] Thiselton, *The Hermeneutics of*, pp.451-469.
[2] I. Gilhus, 'Hermeneutics', in *The Routledge Handbook of Research Methods in the Study of Religion,* ed. by M. Stausberg and S. Engler (London: Routledge, 2014), pp.275-285 (p.275).
[3] Gilhus, Hermeneutics, p.276.
[4] M. Forster, 'Hermeneutics', in *The Oxford Handbook of Continental Philosophy,* ed. by B. Leiter and M. Rosen (Oxford: Oxford University Press, 2007), pp.30-75 (p.30).
[5] S. Holmes, *The Quest for the Trinity. The Doctrine of God in Scripture, History and Modernity* (Downers Grove, Illinois: Intervarsity Press, 2012), pp.67-73.
[6]S. Hildebrand, 'The Trinity in the Ante-Nicene Fathers', in *The Oxford Handbook of the Trinity,* ed. by G. Emery and M. Levering (Oxford: Oxford University Press, 2011), pp.95-108 (pp.103-105).

This chapter considers experiences believed to involve the Trinity. Some themes are developed.

i) In the centuries after Jesus' death, Christians gradually drew upon scripture, personal experiences, and other sources to discern hermeneutically Christianity's new, Trinitarian concept of God.

ii) Experiences believed to involve God are subjective, but may involve theological concepts, such as monotheism. The personal needs to be anchored by scripture and theology which are 'boundary markers'[7] to safeguard Christians' faith from distortions, even though theology can scarcely begin to articulate adequately God's transcendence.

iii) Experiencing God as Father, Son or Holy Spirit may change the ways in which an individual relates with 'self', and so influence the ways in which he or she relates with others. For example, during his conversion to Christianity, Paul (c.5-64/67) heard a voice say, "Saul, Saul, why do you persecute me?" (Acts 9.4). Paul later argued that the sufferings of the emerging Church were in real ways the sufferings of Christ (Colossians 1). Through his conversion to Christ Paul appears to have experienced a new self-concept that included his conversion to the Church.

The Trinity and Religious Experiences in Earliest Christianity.

'Earliest Christianity' (approximately 30- 170 CE) discerned the 'major convictions, and parameters of belief'[8] that underpinned subsequent efforts to understand the relationship between God as Father, Son and Holy Spirit. The earliest Christians did not have a systematised Trinitarian theology but were reacting to the profound meaning that they found in Jesus' life and death. 'Whatever may have been Jesus' intentions…, the effect of his public activity was very much to polarize a good many of his contemporaries over the question of how to regard him'[9], inspiring for example loyal disciples, as well as antagonising the governing authorities[10].

[7] Thiselton, *The Hermeneutics of*, pp.463-464.
[8] Hurtado, *Lord Jesus Christ*, p.649.
[9] Hurtado, *Lord Jesus Christ*, p.55.
[10] Hurtado, *Lord Jesus Christ*, p.56.

Although our knowledge today of earliest Christianity is incomplete, it appears to have developed under a composite of influences including traditional Jewish monotheism. God was believed by the Jewish people to be the Creator of everything, including 'matter, space and time'[11], *ex nihilo* ('out of nothing'). He was also believed to be 'the sovereign Ruler of all things'[12]. Early Christian believers 'characteristically insisted on the exclusive validity of the Scriptures of Israel, rejecting all the other deities of the Roman world; and they sought to express and understand Jesus' divine significance in relation to this one God'[13]. Jesus was therefore worshipped 'in a fashion entirely without precedent'[14]. One New Testament scholar, Hurtado (1943-2019), describes early Christians' devotion to God as Father and to Jesus as 'binitarian', 'posited in a relation to each other that seems intended to avoid a ditheism of two gods'[15], thereby maintaining monotheistic traditions yet being a 'new view of God'[16].

Early Christians' beliefs were partly informed by textual hermeneutics. Bauckham (1946-present) describes early Christians hermeneutically re-reading Old Testament texts[17] to bring 'the Old Testament into relationship with the history of Jesus'[18]. Early Christians for example believed Jesus' divinity was revealed through His crucifixion, from which the 'Christological pattern of humiliation and exaltation is recognised as revelatory of God'[19], a pattern interpreted from Old Testament texts.

Early Christians' identification with Jesus may also be strongly linked to personal experiences that struck the recipients 'as having revelatory validity'[20]. The role of personal religious experiences in the formation of religions has been recognised by social scientists. For example, Wallace (1923-2015), an anthropologist, refers to the restructuring of prior religious beliefs following a moment of insight gained from a 'religious vision experience'[21]. Stark (1934-

[11] S. Oliver, *Creation A Guide for the Perplexed* (London: Bloomsbury T&T Clark, 2017), p.35.
[12] R. Bauckham, *God Crucified Monotheism & Christology in the New Testament* (Carlisle, Cumbria: Paternoster Press, 1998), p.45.
[13] Hurtado, *Lord Jesus Christ*, p.3.
[14] M. Bates, *The Birth of the Trinity: Jesus, God, and Spirit in New Testament and Early Christian Interpretations of the Old Testament* (Oxford: Oxford University Press, 2016), p.21.
[15] Hurtado, *Lord Jesus Christ*, p.53.
[16] Hurtado, *Lord Jesus Christ*, p.650.
[17] Bauckham, *God Crucified,* p.56-69.
[18] Bauckham, *God Crucified,* p.47.
[19] Bauckham, *God Crucified,* p.46.
[20] Hurtado, *Lord Jesus Christ*, p.65.
[21] Wallace, Revitalization Moments, p.270.

present), a sociologist, describes revelatory experiences as ‘inter-personal encounters’[22] (human with the supernatural) which can ‘contradict and challenge prevailing theological truths’[23].

Early Christianity included so-called ‘charismatic exegesis’[24]. It involved appropriating Old Testament texts about experiences involving God and hermeneutically aligning them with emerging Christian beliefs.

> For example the utterly remarkable allusion to Isaiah 45.23 in Philippians 2.10-11 involves finding a reference to Christ as Kyrios as well as God in what is perhaps the most stridently monotheistic passage in the Old Testament[25].

‘Prosopological exegesis’ (‘PE’) may have gone further. PE involves the assigning of ‘dramatic characters to otherwise ambivalent speeches in inspired texts as an explanatory method’[26]. Bates emphasises the role of PE by using the term ‘theodrama’, meaning ‘the dramatic world invoked by an ancient reader of scripture’[27]. Old Testament scripture could be re-interpreted[28], as if in a dramatic performance with the one God in the text ‘speaking’ as both Father and Son.

Early Christians were also influenced by visual experiences which ‘the recipients describe as specially given to them by God and, as such, distinguishable from every day and public visual experiences understood as resulting from encounters with objects’[29]. ‘Appearances‘ may have helped to form early Christian beliefs including:

> 1) that God had raised Jesus from death, so that it really is Jesus, not merely his memory or influence, who lives again; 2) that God has bestowed on Jesus uniquely a glorious new form of existence, immortal and eschatological bodily life; 3) that Jesus has also been exalted to a unique heavenly status, thus presiding by God’s appointment over the redemptive program; and 4) that those who were given these special encounters with the risen Jesus were divinely commissioned to proclaim Jesus’ exalted status[30].

---

[22] Stark, A Taxonomy of, p.99.
[23] Stark, A Taxonomy of, p.108.
[24] Hurtado, *Lord Jesus Christ*, p.73.
[25] Hurtado, *Lord Jesus Christ*, p.73.
[26] Bates, *The Birth of,* p.3.
[27] Bates, *The Birth of*, p.5.
[28] Bates, *The Birth of*, pp.140-146.
[29] Hurtado, *Lord Jesus Christ*, p.71.
[30] Hurtado, *Lord Jesus Christ*, p.73.

Examples in early Christianity of so-called 'appearances' are described in scripture, for instance in Acts 7.54-56 and Revelations 5.1-14.

Early Christianity was influenced by individuals' spontaneous religious utterances. They resulted 'out of the religious exaltation of Christians'[31]. Religious utterances were 'heavily concerned with celebrating and lauding Christ'[32] as part of worship. The utterances were believed to be unscripted, personal responses to God's presence.

Early Christians also believed that they experienced the agency of the Holy Spirit. For example, the apostles are described as imparting to others 'God's secret wisdom' (1 Corinthians 2.7), which God revealed 'by the Spirit' (1 Corinthians 2.10). Paul lists the so-called 'fruits' of experiencing the Spirit (Galatians 5.22-23): 'love, joy, peace, patience, kindness, goodness, faithfulness, gentleness and self-control'. The fruits of the spirit may prompt a new, perhaps kinder, relationship with self and others.

In summary, the combination of PE, 'appearances', 'spontaneous utterances' and the gift of the Holy Spirit inspired Christians who had not yet developed a systematised Trinitarian theology. They began to discern hermeneutically new ways of understanding God which revealed something of Jesus' unique relationship with the Father.

Towards The Nicene Trinity.

Reports of personal experiences involving the 'new view' of God and scriptural reinterpretations gradually accumulated within Christian communities. Third century doctrinal development occurred in a piecemeal fashion as Christians attempted to understand more deeply the 'earnest convictions'[33] of the emerging Church. One influential scholar was Tertullian[34] who was 'the first to say that Father, Son and Holy Spirit are 'persons''[35] (in ancient Greek, 'hypostasis') who share one divine being (in ancient Greek, 'ousia')[36] and are of one substance'[37] (i.e. are 'consubstantial' or in ancient Greek 'homoousian').

[31] Hurtado, *Lord Jesus Christ*, p.73.
[32] Hurtado, *Lord Jesus Christ*, p.73.
[33] Hurtado, *Lord Jesus Christ*, p.651.
[34] McGrath, *Christian Theology*, p.321.
[35] Hildebrand, The Trinity, p.106.
[36] Smith, The Fourth Century, p.117.
[37] Hildebrand, The Trinity, p.106.

Other doctrinal ideas were being proposed, for example by Origen[38] who is credited with being the first systemic theologian. He considered the relationship between Father and Son since 'the Word [Christ] was God. He was with God in the beginning' (John 1.1-2). Origen hermeneutically uses scripture to reach his conclusions[39], for example citing John 1.9 in which the Son is described as 'light' coming into the world from the Father[40]. Origen conceptualised the Father as eternally begetting the Son in a divine, incorporeal, unique act[41]. Origen proposed that 'the name Father implies the existence of a child and if God is truly called Father, the Son's generation must be eternal'[42]. Origen also proposes that as begetter 'the Father is superior to the Son'[43] and both are superior to the Spirit.

By the late third and early fourth centuries, 'piecemeal' hermeneutics within the Church had led to schisms. Prominent were the teachings of Bishop Alexander of Alexandria (250-326) and Athanasius (296-373) who understood the Father and Son to be distinct persons within the one Godhead. 'Employing Origen's language of 'eternal generation' Alexander argued that the Son as the Word and Wisdom of the Father is intrinsic to the being of God and so is the perfect image of God'[44]. The Father and Son, whilst distinct persons, were therefore 'homoousion' (of one substance).

Others disagreed, most notably Arius (256–336 CE). The ensuing disputes have been termed the 'Arian Controversy', but Arius might more accurately be understood as 'the spark that ignited a fire waiting to happen'[45]. Arius asserted that 'the Son had a beginning whereas God is without beginning'[46]. Jesus' incarnation therefore meant that He was a creature, implying that Father and Son are discrete beings. Arius' theology was subordinationist[47], understanding

[38] Hildebrand, The Trinity, pp.103-105.
[39] L. Ayres, 'At the Origins of Eternal Generation: Scriptural Foundations and Theological Purpose in Origen of Alexandria', in *Retrieving Eternal Generation,* ed. by F. Sanders and S. Swain (Grand Rapids: Zondervan, 2017), pp.149-162 (p.158-162).
[40] Ayres, At the Origins, p.159.
[41] Ayres, At the Origins, p.155.
[42] L. Ayres, *Nicaea and its Legacy An Approach to Fourth-Century Trinitarian Theology* (Oxford: Oxford University Press, 2004), p.22.
[43] Hildebrand, The Trinity, p.104.
[44] Smith, The Fourth Century, p.110.
[45] Ayres, *Nicaea and its Legacy,* p.20.
[46] F. Young, *From Nicaea to Chalcedon. A Guide to the Literature and Its Background. Second Edition* (London: SCM Press, 2010), p.43.
[47] Hildebrand, The Trinity, p.104.

the Son as subordinate to the Father. Arius' beliefs initially found favour with Emperor Constantine (272-337) who claimed 'direct experience of God'[48]. Emperors' power had traditionally been based upon a special relationship with Rome's pagan gods[49]. Arius' theology with discrete divine beings in the Godhead might have accommodated a similar 'special relationship' within Christianity.

To try to resolve the schisms within the Church, its leaders were summoned to the Council of Nicaea (325). It concluded that:

> the Son was begotten 'from the substance of the Father' and therefore was 'of the same being with the Father'. Confessing that the Son was 'begotten' not 'made' distinguished the Son from creatures implying true divinity with the Father[50].

The Father and the Son's relationship was expressed in the Nicene Creed which to this day includes the affirmation of faith in 'One Lord, Jesus Christ, the only Son of God, eternally begotten of the Father[51]. Arius' views had been rejected, partly because Constantine switched to support Alexander's more widely held position. Arius was exiled.

Widespread schisms remained within the church. For example, in 357 the second Council of Sirmium issued an anti-Nicene injunction that re-asserted the Son's subordination to the Father. In response Athanasius called a synod that reaffirmed the Nicene Creed[52]. Some opponents of the Nicene Creed focused on its phrase: 'And in the Holy Spirit'. So-called Pneumatomachians ('Spirit-fighters') denied the divinity of the Spirit. In response pro-Nicaeans highlighted personal experiences believed to involve the work of the Spirit in Christians' lives and church communities[53]. Many other schisms occurred, so that after decades of dispute, in 380 Emperor Theodosius issued an edict making the Nicene Creed the faith of the Empire[54]. The Council of

---

[48] Young, *From Nicaea,* p.16.
[49] Young, *From Nicaea,* p.16.
[50] Smith, The Fourth Century, p.111.
[51] The Church of England, *Creeds and Authorised Affirmations of Faith* (2022). www.churchofengland.org/prayer-and-worship/worship-texts-and-resources/common-worship/common-material/new-patterns-28 [last accessed 26.5.21].
Catholic Online, *The Nicene Creed* (2022). www.catholic.org/prayers/prayer.php?p=495 [last accessed 10.2.22].
[52] Smith, The Fourth Century, pp.113-114.
[53] Smith, The Fourth Century, p.120.
[54] Smith, The Fourth Century, p.116.

Constantinople (381) affirmed the Nicene Creed and added that the Holy Spirit is divine and 'proceeds from the Father''[55].

The Trinity has been criticised as the product of human minds, not divine agency (Chapter One). 'Human nature' undoubtedly contributed to the hermeneutic circles that discerned the Trinity. Examples might include Bishop Athanasius' reportedly brutal and tyrannical leadership style[56]; Church leaders denouncing and exiling opponents; and Emperors adopting certain beliefs and not others to maintain their power. These behaviours may perhaps be explained by evolutionary psychology (discussed in later chapters). Nonetheless, the controversies within fourth century Christianity were also sincere disputes about theology, to which human minds responded hermeneutically, spurring each other to test out and reinterpret doctrines that could align with Christians' experiences of the 'new view of God'. Evolved psychological processes may have facilitated the hermeneutics. Cognitive processes would for instance have enabled interpretation of scripture and others' work.

By the eleventh century Western, but not Eastern, church theology had added to the Nicene Creed that the Holy Spirit proceeds from the Son as well as the Father to show that the Son and the Spirit are related as well as distinct[57]. However, since the Council of Constantinople the Nicene Trinity has remained for Christians the fundamental descriptor by which God is known, drawing people into the Church and 'guiding that body in the Spirit towards the vision of God'[58]. When Christians have experienced God's presence, experience and Trinitarian doctrine may:

> both serve as placeholders, points of access, or shorthand for the biblical revelation that alone brings us to the truth of the Trinity. If we say that we know the Trinity from experience, we are using a telescoped expression meaning that the Trinity made known in scripture is also the object of our experience[59].

[55] Smith, The Fourth Century, p.117.
[56] Young, *From Nicaea*, p.71.
[57] McGrath, *Christian Theology*, pp.342-343.
[58] Ayres, *Nicaea and its Legacy*, p.429.
[59] F. Sanders, *The Triune God* (Grand Rapids: Zondervan, 2016), p.88.

Two examples of the ways in which Christians have believed that they experience the Trinity's presence in their lives are: v*estigia Trinitas;* and through personal relationships.

1. *Vestigia Trinitatis*

Some Christians believed that 'vestiges', or footprints, of the Trinity are found in the ordering of creation. Augustine wrote:

> All these things which are made by divine skill, show in themselves a certain unity, and form, and order… When therefore we regard the Creator who is understood by the things that are made, we must understand the Trinity of whom there appear traces in the creature, as is fitting[60].

From medieval times, and culminating in the seventeenth century, a tradition developed that 'triads' found in creation, such as three leaves on a plant, demonstrated the presence of the Trinity[61]. For example, Gil (1565-1635) proposed that the physical composition of 'euerie thing [everything]'[62] is Trinitarian. By the 19th century the Trinity had, however, become marginalised within Western theology, partly due to doubts 'over its adequacy to its stated purpose, to represent adequately the biblical revelation of God'[63]. In the twentieth century Barth (1886-1968)[64] and others re-energised Trinitarian theology. Barth robustly challenged the doctrine of *vestigia Trinitatis*. He asserted that the Trinity has one source of revelation, Christ[65], so that the Trinity may only be known from scripture, and not from creation which may mistakenly displace transcendent reality[66]. The notion that the Trinity is found in the ordering of creation is not considered further in this dissertation.

However, the term *vestigia Trinitatis* continues to be used by some theologians. D'Costa (1958-present), for example, asserts that the wisdom of non-Christian religions may be 'from God, consonant with His Word (*semina Verbi*) even if

---

[60] Augustine, *On the Trinity, Book VI* (United States of America, Beloved Publishing/Amazon, c.400/2014), pp.151-163 (p.162).
[61] D. Klinck, 'Vestigia Trinitatis in Man and his Works in the English Renaissance', *Journal of the History of Ideas*, 42.1 (1981), pp.13-27 (p.13).
[62] Klinck, Vestigia Trinitatis in Man, p.16.
[63] S. Holmes, *The Quest for the Trinity,* p.198.
[64] G. Hunsinger, 'Karl Barth's Doctrine of the Trinity, and Some Protestant Doctrines After Barth', in *The Oxford Handbook of the Trinity,* ed, by G. Emery and M. Levering (Oxford: Oxford University Press, 2011), pp.294-313.
[65] Hunsinger, Karl Barth's Doctrine, pp.298-299.
[66] J. Kombo, *Theological Models of the Doctrine of the Trinity* (Carlisle, Langham Global Library, 2016), pp.70-71.

they are not themselves the Word'[67]. In the culture of non-Christian religions, wisdom is not yet expressed in terms of the Trinity but may be understood by the Church as *vestigia Trinitatis* (God's footprint). Whilst the theology of religious pluralism is beyond the scope of this dissertation, from the perspective of some cognitive theories discussed in Chapters Four and Six, D'Costa's theology may describe ways in which some Christians use the concept of the Trinity to make inferences about the beliefs of non-Christians.

2. The Trinity and Personal Relationships.

Several theologians have considered ways in which personal relationships may (or may not) constitute a form of what it means to experience the Trinity. A detailed consideration of the social or political Trinity lies outside the scope of this dissertation, but some examples of Trinitarian theology are briefly discussed.

Williams (1950-present) suggests that Christians may seek deeper meaning in human relationships by reflecting upon the mutual relations within the Godhead.

> The divine act is not an eternal sameness at all, but relational act; so that the challenge for creatures is not the abolition of difference and the cancelation of the subject, but the subject's growth into precisely that recognition and enactment of the self's reality in the other that is the heart of the theological vision[68].

Williams describes the way in which the sacrament of marriage is not about gratification through different erotic pleasures, but a deepening relation of mutual love and intimacy, which might be inspired for the faithful from experiencing something of the relations of mutual love believed to be within and outflowing from the Trinity[69].

Other theologians have focused on the role of desire in human relationships. Coakley (1951-present) proposes that 'desire' is 'an ontological category belonging primarily to God, and only secondarily to humans as a token of their createdness 'in the image''[70]. God's 'desire' is His love for creation and for its

[67] G. D'Costa, 'The Trinity in Interreligious Dialogues', in *The Oxford Handbook of the Trinity,* ed, by G. Emery and M. Levering (Oxford, Oxford University Press, 2011), pp.573-585 (p.582).
[68] R. Williams, 'The deflections of desire: negative theology in trinitarin desire', in *Silence and the Word. Negative Theology and Incarnation,* ed. by O. Davies and D. Turner (Cambridge: Cambridge University Press, 2002), pp.115-135 (p.131).
[69] Williams, 'The deflections of desire', pp.131-133.
[70] S. Coakley, *God, Sexuality and the Self An Essay 'On the Trinity'* (Cambridge, Cambridge University Press, 2013), p.10.

'participation in the divine trinitarian life'[71], of which reproduction and evolution are part[72]. Coakley's argument includes the proposition that the Trinity's 'ontological three-ness always challenges and 'ambushes' the stuckness of established 'two-ness': of male-female; of 'us; and 'other''[73], transforming relationships with others and with self[74].

Radical Orthodoxy offers another approach. Millbank (1952-present) proposes a bold Christian 'counter-ontology' including the practice of charity and forgiveness; and 'the treatment of peace as a primary reality'[75]. The counter-ontology is modelled upon the peaceful 'harmony between Father, Son and Holy Spirit'[76], and may only be lived out through 'participation'[77] in Christian community, using the Trinity as a resource for thinking about politics and relationships of power between individuals. Millbank, drawing upon Augustine's work, proposes that all knowledge should be regarded as 'divine illumination'[78]. For example, Millbank commends De Lubac's (1896-1991) description of evolution as resulting in 'a surprising gift'[79]. Radical orthodoxy understands Christianity as reshaping 'desire, directing it towards its proper end especially through the liturgy. Eros is seen as properly part of Christian life, not something to be supressed'[80], so that same sex unions should 'be seen (beyond the received tradition) as equal in cosmic significance to those of marriage'[81].

Other theological insights include Tonstad's queer theology which seeks a 'passionate communion'[82] lived out in human lives by acknowledging 'God's

---

[71] Coakley, *God, Sexuality and the Self,* p.10.
[72] S. Coakley, 'Sacrifice Regained: Evolution, Cooperation and God' *The Gifford Lectures 2012.* Available at: www.giffordlectures.org/lectures/sacrifice-regained-evolution-cooperation-and-god (last accessed on 16.08.22).
[73] Coakley, *God, Sexuality and the Self,* p.330.
[74] Coakley, *God, Sexuality and the Self,* pp.340-342.
[75] J. Millbank, *Theology and Social Theory Beyond Secular Reason (Second Edition)* (Oxford, Blackwell Publishing, 2006), p.429.
[76] S. Shakespeare, *Radical Orthodoxy A Critical Introduction* (London, Society for Promoting Christian Knowledge, 2007), p.27.
[77] J. Millbank, C. Pickstock and G. Ward, 'Introduction. Suspending the material: the turn of radical orthodoxy', in *Radical Orthodoxy. A New Theology*, ed. by J. Millbank, C. Pickstock and Graham Ward (London, Routledge, 1999), p.3.
[78] Millbank, et al, Introduction. Suspending the material, p.2.
[79] J. Milbank, *The Suspended Middle* (Grand Rapids Michigan, William B. Eerdmans Publishing Company, 2005), p.56.
[80] Shakespeare, *Radical Orthodoxy*, p.146.
[81] J. Millbank, *Being Reconciled: Ontology and Pardon* (London, Routledge, 2003), p.208.
[82] L. Tonstad, *God and Difference. The Trinity, Sexuality, and the Transformation of Finitude,* (London: Routledge, 2016), p.291.

presence in, identification with, and love for the [human] body'[83]. She challenges traditional Trinitarian theology that 'pretends fatherhood and sonship have nothing to do with sex or gender'[84] and that interprets Christ's revelation in ways that marginalise gender and sexual minorities. Tonstad critiques 'various forms of theological baggage'[85], including Coakley's failure to specify the ways in which her notion of 'ontological three-ness' ambushing the 'stuckness of two-ness'[86] may happen. Tonstad also criticises queer theology, since destabilising the 'binary of sex does not necessarily result in the destabilisation of alternative forms of hierarchy such as those prefigured in the gendering of the Trinity'[87].

In contrast, Kilby's (1964-present) theology is apophatic. 'If the Trinitarian doctrine is fundamental to Christianity, this is not because it gives a picture of what God is like *in se* from which all else emanates, but rather because it specifies how various aspects of the Christian faith hang together'[88]. Kilby focuses on the mystery and incomprehensibility of the Trinity, which may prompt more honest human engagement with 'our true situation'[89], if the unknowability of the Trinity is recognised by the faithful.

In summary, theologians have suggested several ways in which personal relationships might constitute a form of what it means to experience God's presence. The hermeneutics that inform the different theological perspectives remain works in progress. In the methodologically agnostic approach of this dissertation, no theological approach is favoured over another. Instead, later chapters consider whether our evolved minds might facilitate recognition of God's presence. This approach may be challenged. Millbank proposes that whatever social theories claim, 'we only know, with 'scientific' certainty, certain effects, not ultimate reasons, causes or natures'[90]. Social theories that make

[83] L. Tonstad, *Queer Theology* (Eugene, Oregon, Cascade Books, 2018), p.103.
[84] Tonstad, *Queer Theology*, p.77.
[85] A. Slater, *Radical Orthodoxy in a pluralistic World. Desire, Beauty, and the Divine* (London, Routledge, 2018), p.68.
[86] Tonstad, *God and Difference,* pp.98-121.
[87] Slater, *Radical Orthodoxy in a pluralistic,* p.76.
[88] K. Kilby, *God, Evil and the Limits of Theology* (London, t&t clark, 2020), p.16.

[89] K. Kilby, 'Trinity and Politics: An Apothatic Approach', in *Advancing Trinitarian Theology Explorations in Constructive Dogmatics,* ed. by O. Crisp and F. Sanders (Grand Rapids Michigan, Zondervan, 2014), pp.75-93 (p.93).
[90] Millbank, *Theology and Social Theory,* p.270.

positivist claims 'turn out to be not the challenge of a knowledge that mirrors, but of a knowledge that is arbitrary power'[91]. Examples may include some theories in evolutionary psychology that were discussed in Chapter One. They assume atheistic conclusions without recognising the validity of theistic perspectives. For Trinitarian theology to integrate more fully with evolutionary psychology, the latter perhaps needs to learn from the wisdom of the Trinity and be more open to interdependence with others' beliefs and ideas, a theme discussed further at the end of Chapter Five. The tensions identified by some theologians between theology and social theory might then ease a little.

The Archive

The Archive, which was introduced in Chapter One, offers an empirically based approach to understanding better individuals' religious experiences. The early Christians were inspired by experiences believed to involve the new view of God. Contemporary accounts of Christian faith inspired through personal experiences involving the Trinity are found in the Archive. However, it has limitations. Experiences recorded in the Archive cannot be a representative sample. Participants in the Archive are self-selecting and their accounts unverifiable. In addition, the Archive was intended to document experiences that could objectively be classified as religious whereas this dissertation understands religious experiences to be subjective. Personal experiences that are recorded in the Archive may however be re-examined as subjective responses to God.

Some illustrative examples from the Archive that refer to the Nicene Trinity are described below. The Archive's entries are anonymised, so that pronouns are used for the individual documenting their personal experience.

i) Upon becoming a widow, she found some inner peace from faith in God, experienced as 'trying to comprehend in this Power we call God the limited scope of human language and understanding can come

[91] Millbank, *Theology and Social Theory*, p.277.

no nearer than the concept of the Trinity, expressed in Christianity, as aspects of our experience of God'[92].

ii) While resting during recovery from an illness, he had an experience of being 'bathed in a waterfall of pure light, a feeling that everything was at one - everything around me, plus me, plus something else, it was seconds only in time yet time-less, as I lay there I thought "this is the "Holy Trinity", I can only say it was as if this Holy Trinity was pure silk in content'[93]

iii) Meetings by an individual with a healer over a period of several months when the Father was believed to be present. The individual records that the experience has 'taught me the purpose of life and given me an understanding and awareness of the Father and the way he works'[94].

iv) An individual describes a conversion experience from atheism and developing trust in the Father who appeared during healing sessions over a period of several months[95].

v) Someone describes experiences over many years testing his Christian beliefs, and gradually through experience finding that 'I was believing in a Creator God, and after all these waves, & movement, & so on, had grasped that there was a thing known to Christians as the Holy Spirit'[96].

vi) Someone else writes that while meditating on the 'Logos [the Son] as our deity, responsible to the logos of the galaxy for bringing the inhabitants of that system to perfection without losing a soul… I

[92] The Alister Hardy RERC Archive Database *001009 (*2022) www.studyspiritualexperiences.org [last accessed 7.2.22].
[93] The Alister Hardy RERC Archive Database, *004230* (2022). www.studyspiritualexperiences.org [last accessed 7.2.22].
[94] The Alister Hardy RERC Archive Database, *004285* (2022). www.studyspiritualexperiences.org [last accessed 7.2.22].
[95] The Alister Hardy RERC Archive Database, *004733* (2022). www.studyspiritualexperiences.org [last accessed 7.2.22].
[96] The Alister Hardy RERC Archive Database, *003180* (2022). www.studyspiritualexperiences.org [last accessed 7.2.22].

received a quite definite command and commission … saying, "You are now accepted as an officer in the army of righteousness''[97].

vii) Another individual had a vision of a great light and then a voice saying 'In the beginning was the Word [the Son], and the Word was with God, and the Word was God. In Him was Life and the Life was the Light of men!". The vision inspired conversion and gradually the confidence to follow a career in teaching[98].

viii) Another contributor to the Archive describes recovery from a near death experience during which 'I was in the Word and the Word was in me, and spiritual truth - love, joy, peace, power, passion, tender response, reassurance, courage, faith, awe, gratitude and a sense of glory and majesty, seemed to be spiritually induced within me, bringing realisation and revelation'[99].

ix) Someone else recalls 'The overwhelming experience of being loved by God that came with the baptism of the Holy Spirit'[100].

x) An individual describes events in his life when he believes that he was experiencing the guidance and work of the Holy Spirit[101];

xi) The experience of someone while reading a pamphlet: 'there was blue sky all around & I felt & saw the white feathers of the dove [Holy Spirit] brush my cheek. It seemed to last a split second'[102].

xii) One item from the Archive describes someone's experience while walking in mountains. The walker reports seeing 'a triangle made up of three sheep, For the Father, Son and Holy Spirit', and then hearing a voice that he believed to be God[103].

---

[97] The Alister Hardy RERC Archive Database, *000007* (2022). www.studyspiritualexperiences.org [last accessed 7.2.22].
[98] The Alister Hardy RERC Archive Database, *005155* (2022). www.studyspiritualexperiences.org [last accessed 7.2.22].
[99] The Alister Hardy RERC Archive Database, *005160* (2022). www.studyspiritualexperiences.org [last accessed 7.2.22].
[100] The Alister Hardy RERC Archive Database, *100035* (2022). www.studyspiritualexperiences.org [last accessed 7.2.22].
[101] The Alister Hardy RERC Archive Database, *400177* (2022). www.studyspiritualexperiences.org [last accessed 7.2.22].
[102] The Alister Hardy RERC Archive Database, *004167* (2022). www.studyspiritualexperiences.org [last accessed 7.2.22].
[103] The Alister Hardy RERC Archive Database, *004931* (2022). www.studyspiritualexperiences.org [last accessed 7.2.22].

xiii) Another account describes a storm with bright lights, a tempest experienced while praying or sleeping[104], later attributed by the observer to the Holy Spirit.

xiv) One archive contributor describes a sensation of floating upstairs with thoughts of Joan of Arc which she later interpreted as baptism of the Holy Spirit[105].

xv) One individual describes witnessing the death of a child, and later having a vision of looking up into infinite dimensions of height, with 'the apex of a triangle without lines, with MASCULINE at the bottom left-hand corner and FEMININE at the right corner'[106] which the experiencer described as the Holy Trinity.

The table below identifies some Trinitarian concepts found in the examples from the Archive.

Theological concept	**Example above.**
Trinity	Archive i), and ii).
Father	Archive iii) and iv).
Son	Archive vi) and vii).
Logos (or Word)	Archive vi).
Holy Spirit	Archive v), ix), x), xi), and xiii).

In the examples, the experiencer believes that God's presence has been revealed. The individual recognises His presence using the Trinitarian concepts. The language and theology of the Trinity may enable the experiencer to find deeper meaning in the event, for example when 'trying to comprehend this Power we call God' (Archive i)).

[104] The Alister Hardy RERC Archive Database, *004973* (2022). www.studyspiritualexperiences.org [last accessed 7.2.22].
[105] The Alister Hardy RERC Archive Database*, 005533* (2022). www.studyspiritualexperiences.org [last accessed 7.2.22].
[106] The Alister Hardy RERC Archive Database, *004984* (2022). www.studyspiritualexperiences.org [last accessed 7.2.22].

Alongside theological concepts, personal images are also found in the examples, including:

- seeing ‘a triangle made up of three sheep, For the Father, Son and Holy Spirit’ (Archive xii);
- images of ‘bright lights, a storm’ attributed to the Holy Spirit (Archive xiii);
- Joan of Arc being present in an experience described as Trinitarian (Archive xiv); and
- ‘infinite dimensions of height’ signifying the Trinity (Archive xv).

The context and emotions of an experience, such as a bereavement (Archive i)) or conversion to Christianity (Archive iv)), may also influence for the experiencer the subjective meaning of the event.

Some of the examples from the Archive may illustrate the ways in which ‘self’ could be transformed by experiences believed to involve the Trinity. For instance, the personal meaning found in an experience may have enabled someone to gain self-confidence as they grew in faith (Archive vii).

In summary, the examples chosen from the Archive appear to document individuals’ transformative experiences believed by them to be part of a relationship with God in which His loving presence is recognised in the Trinity. Trinitarian concepts are present in the subjective experiences alongside personal interpretations, images and meanings.

‘In the light of experience’

Some social scientific theories marginalise the Trinity whilst accepting the sacred. Hervieu-Leger (1947-present) is critical of the Church and its doctrines such as the Trinity, whose purpose, she states, is to transmit between generations authoritative traditions of belief[107]. She contrasts these traditions with an immediate emotional experience of the sacred which is not dependent on religious institutions or doctrines[108]. The experiences described in this chapter may show, however, that individuals do recognise God from the Trinity in ways that can have an immediate effect and greater personal meaning than merely upholding a tradition.

[107] D. Hervieu-Leger, *Religion as a Chain of Memory* (Cambridge, Polity Press, 2000), p 81.
[108] Hervieu-Leger, *Religion as a,* pp.52-53.

Another sceptical view of the Trinity is set out in McCauley's book, '*Why Religion is Natural and Science is Not'*[109]. McCauley proposes that religion is better attuned than science to our evolved cognitive processes. His theory emphasises spontaneous mental processes, which he terms 'maturationally natural cognition'[110], through which humans have similar 'immediate, intuitive views which pop into mind domains where they may have had little or no experience or instruction'[111]. McCauley thereby marginalises any role for doctrines. He singles out the Trinity as a product of scientific-like theological inferences, likening it in complexity to 'the modern psychological account of multiple personality disorder'[112]. One reason that religion will outlast science, according to McCauley, is that 'theological incorrectness is inevitable'[113] with intuitive religious views intruding one's thoughts even if one fervently focuses on ecclesiastically correct doctrines. The evidence in this chapter may agree with McCauley insofar as he proposes that human minds experience God's presence through spontaneous thoughts, one example of which may be the 'spontaneous utterances' in early Christianity. However, the evidence in this chapter is that the Trinity is not marginal to Christian faith as McCauley suggests but fundamental to ways in which Christians recognise God's presence.

'In the light of personal experiences' described in this chapter, the Trinity is not a rhetorical tradition or the marginally relevant product of scientific thinking. Trinitarian concepts are present in personal experiences. New experiences of God in early Christianity contributed to hermeneutics which eventually discerned the Nicene Trinity. Examples in this chapter describe Christians continuing to recognise God through the Trinity. Their experiences are subjective, involving Trinitarian concepts as well as personal images, feelings and thoughts. Experiences involving the Trinity may be formative in human lives, perhaps prompting greater communion in human relationships and influencing perceptions of self. Theologians such as Tonstad also highlight the negative impact of some Trinitarian theology upon minority groups whose lived

[109] R. McCauley, *Why Religion is Natural and Science is Not* (Oxford: Oxford University Press, 2011).
[110] McCauley, *Why Religion is,* pp.5-7.
[111] McCauley, *Why Religion is,* p.5.
[112] McCauley, *Why Religion is,* p.235.
[113] McCauley, *Why Religion is,* pp.243-244.

experiences are marginalised. The remaining chapters explore the possible role of individuals' evolved mental architecture in facilitating (or hindering) personal experiences that involve the Trinity.

Chapter Three: Evolutionary Psychology and Religious Belief.

> Evolutionary psychology refers to an approach to psychological science that begins by acknowledging that the brain – the organ primarily responsible for producing and organising all thoughts and behaviours - is, like all other organs and physiological systems, the product of eons of evolution by natural selection[1].

Evolutionary psychology is a relatively new approach which offers contrasting, and competing, accounts as to how the brain processes thoughts and emotions, including those about religion and its associated experiences. This chapter briefly considers some aspects of the field of evolutionary psychology. The chapter then discusses whether the human capacity for religiosity is a specific 'adaptation', or a 'by-product' of adaptations that are not religion specific. The 'by-product' approach is proposed as the more conservative and is used in subsequent chapters.

Evolutionary Psychology and Religion

Theistic approaches within evolutionary psychology, including this dissertation, aim to identify innate mental faculties that allow 'humans to perceive and comprehend, on some level, the supernatural, specifically God and the sacred'[2]. There are many human activities considered by evolutionary psychology, and its theories. Some activities, such as music or dance, may for an individual be experienced as part of his or her relationship with God. However, the full range of human activities, and any associated evolutionary theories, lie beyond the scope of this dissertation. It focuses on religious experiences as part of an individual's 'one to one' relationship with God, when his or her experience of God is unmediated, perhaps undistracted, by dance, music or other activities.

Evolution-based theories are criticised, for instance for a bias towards genetic determinism[3] (disregarding non-genetic factors), but 'nurture' can be as much a part of evolutionary psychology as 'nature'. For example, in attachment and mentalization theories (discussed in Chapters Five and Six respectively) research can suggest a complex interaction between genetic and environmental factors that influence human development from birth onwards.

---

[1] Kirkpatrick, *Attachment, Evolution*, p.20.
[2] Eames, *Cognitive Psychology,* p.13.
[3] Workman and Reader, *Evolutionary Psychology*, p.30.

Other critics question the integrity of an 'evolutionary psychology of religion'. The term is often invoked 'to support a postmodern moral scepticism or relativism'[4], with conclusions appearing positivist, but on closer analysis being hypotheses advanced in attempts to endorse pre-existing moral, perhaps atheist, views. Theories are therefore carefully evaluated in subsequent chapters, for example to consider whether the Trinity's meaning for Christians is respected or is reformulated by the evolutionary perspective.

In recent decades one strand of evolutionary psychology has considered how the evolution of human biology and cultural development may interact, the so-called 'co-evolutional approach'. Whilst culture might be thought of as the product of our evolved mental processes, those processes might in turn be impacted by human cultural development which typically occurs more rapidly than biological evolution[5]. One 'novel theory'[6] proposes that:

> Once the forces outlined in by-product theories have caused those you interact with to adopt religious beliefs, it becomes individually adaptive (i.e., functional) for you to believe as well, lest you incur social costs[7].

Natural selection might then favour those with mental architecture best adapted to adopting and maintaining religious beliefs, so that religiosity might influence biological evolution. However, 'co-evolutional' ideas are tentative. Theology including the Trinity has not resulted in Christians evolving biologically in ways that are different to other humans. When individuals seek relationship with God, they must use 'the toolkits we have available to us in the environmental niches that face us'[8]. Theology including the Trinity may provide something of the wisdom needed to bridge the gap between God, and human minds that have little evolved since the Stone Age[9]. When considering the ways in which our evolved mental processes may (or may not) facilitate experiences believed to

[4] McGrath, *Inventing the Universe*, p.174.
[5] A. Bender, 'The Role of Culture and Evolution for Human Cognition', *Topics in Cognitive Science,* 12.4 (2020), pp.1403-1420.
Granqvist, Attachment Culture, p.97-98.
[6] M. Stagnaro and D. Rand, 'The Coevolution of Religious Belief and Intuitive Cognitive Style via Individual-Level Selection', in *The Oxford Handbook of Evolutionary Psychology and Religion*, ed. by J. Liddle and T. Shackelford (Oxford: Oxford University Press, 2021), pp.153-173 (p.153).
[7] Stagnaro and Rand, The Coevolution of Religious Belief, p.168.
[8] Barrett and King, *Thriving with Stone Age,* p.135.
[9] Barrett and King, *Thriving with Stone Age*.

involve the Trinity, co-evolutional ideas are not explored further in this dissertation.

'Adaptation' or 'By-product'

Evolutionary psychology seeks scientific explanations premised on the theory of natural selection[10]. These explanations may be grouped into two paradigms, 'adaptation' or 'by-product'. This binary grouping has been challenged, for example by Granqvist who urges scholars of evolution to 'move beyond the adaptation verses by-product debate to immerse themselves in nature-nurture interactions that yield religious and spiritual development'[11]. The so-called 'adaptation versus by-product debate' may make less sense if evolution is part of God's creation. He is believed by Christians to be eternal and atemporal, and so may not distinguish product and by-product, first made and second. There is however a lack of decisive empirical evidence by which the debate may be settled[12]. The 'adaptation versus by-product' distinction remains prominent within evolutionary psychology and so is briefly considered in this chapter.

'Adaptation' approach

Theories have been proposed to try to explain how an adaptation for 'doing religion' may work, such as 'a specific genetic and biochemical mechanism'[13]. VMAT2 protein was, for example, controversially proposed[14]. VMAT2's role is disputed among geneticists. Rather than being a specific mechanism, it is likely to be linked to levels of serotonin and dopamine in the brain which can affect the 'shape'[15] of religious experiences, so that VMAT2 is involved in religiosity but is not a specific adaptation. In another approach, Hardy, who founded the Archive[16], proposed a so-called 'biology of God'[17]. Hardy asserted that there is a synthesis between human belief in the supernatural and human biology such that God is 'intimately linked with organic evolution'[18]. Another pro-theistic view

[10] Hood and others, *The Psychology of Religion,* pp.57-58.
[11] Granqvist, *Attachment in Religion and Spirituality,* p280.
[12] McGrath, *Inventing the Universe*, p.127.
[13] D. Hamer, *The God Gene: How Faith Is Hardwired Into Our Genes* (New York City, Anchor Books, 2005), p.211.
[14] Hamer, *The God Gene,* pp.70-78.
[15] McNamara, *The Neuroscience of,* p.232.
[16] Alister Hardy Society for the Study of Spiritual Experience, www.studyspiritualexperiences.org [last accessed 05.05.18]
[17] A. Hardy, *The Biology of God A scientist's study of man the religious animal* (London: Jonathan Cape, 1975).
[18] Hardy, *The Biology of*, p.207.

is provided by McNamara, whose neurological theory was discussed in Chapter One. He states that it is 'reasonable to suppose that religion is an adaptation. The practice of religious rituals and belief in supernatural agents occurs in virtually all human cultures'[19]. In summary, an innate human capacity for religiosity resulting from a specific adaptation is possible[20].

However, the 'adaptation approach' may be the minority view within evolutionary psychology[21]. 'No one has found God in the nervous system [including the brain]'[22]. Any notion that religious belief occurs in all human cultures, and so may be an adaptation common across humanity, could break down on closer inspection. Apart from the meaning of 'religion' being disputed between different groups and cultures, the extent to which activities occur that are termed 'religious' varies markedly, both geographically and across time, which may be inconsistent with an innate human capacity for religiosity[23]. If the purpose of religion may be to promote greater group cohesion, 'cooperation may be made possible by a suite of mental mechanisms that are not specific to religion'[24]. In addition, group cohesion may more reliably be understood as the result of morally guided behaviour rather than an innate capacity 'to do' religion[25].

'By-product' approach.

The so-called 'by-product' approach understands the human capacity for religiosity to be a 'by-product' of our mental architecture which had originally evolved for other purposes[26]. Our ancestors evolved specific mental mechanisms that over the millennia have spawned 'by-products' which are not in themselves adaptations but are secondary consequences of them. According to one summary, 'the appearance of religion is not an important evolutionary event, because it is only a fairly predictable by-product of mental capacities that

[19] McNamara, *The Neuroscience of,* p.249.
[20] Sosis, 'The Adaptationist-Byproduct', p.328.
Z. Szocik, 'Religion and Religious Beliefs as Evolutionary Adaptations', *Zygon*, 52.1 (2017) pp.24-52.
[21] Sosis, The Adaptationist-Byproduct, p.315.
[22] Hood, Hill et al, p.66.
[23] Kirkpatrick, *Attachment, Evolution*, p.216-218.
[24] I. Pyysiäinen and M. Hauser, 'The origins of religion: evolved adaptation or by-product?' *Trends in Cognitive Sciences,* 14.3 (2010), pp.104-109 (p.107).
[25] Pyysiäinen and Hauser, The origins of religion, p.108.
[26] L. Kirkpatrick, 'Attachment Theory and the Evolutionary Psychology of Religion', *The International Journal for the Psychology of Religion,* 22 (2012), pp.231–241 (p238).

would have appeared, religion or not'[27]. In the emerging, but incomplete, field of evolutionary psychology, the 'by-product approach' offers a less speculative, more conservative position than the 'adaptation approach'[28]. Religion is one of many aspects of human life, but most do not have a specially adapted gene, so why would religion? Rather, our evolved 'mental tools encourage people to think about and believe in gods, the Judeo-Christian God enjoying particularly favourable treatment'[29], even though those 'mental tools' may have originally evolved for non-religious purposes. The 'by-product approach' may offer a less speculative methodology and so is used in the remainder of the dissertation.

However, there can be 'more than a little vagueness when evolution is applied to religion'[30], for instance uncertainty as to the specific mental mechanisms that may facilitate relationships with God. Choosing specific theories about our mental processes might reduce the 'vagueness', since they are testable, and research may have occurred. There are many competing theories within evolutionary psychology. Just as theological hermeneutics enabled the Trinity to be gradually discerned, so there is perhaps a hermeneutics of evolutionary psychology. Competing theories, texts and hypotheses are tested and reviewed. In this dissertation particular theories are chosen because 'a great deal of religious belief and behavior involves perceived relationships with supernatural beings'[31]. The chosen theories describe how 'our evolved psychological architecture comprises mechanisms dedicated to tasks related to negotiating social relationships'[32] that as a by-product of evolution may also facilitate relationships believed to be with God. The chosen theories need to account for experiences of God being subjective, as discussed in Chapter One. The theories also need to account for the ways in which Christians may recognise God's loving presence as Trinitarian (Chapter Two). Chapters Four and Five consider cognitive and attachment theories respectively.

---

[27] P. Boyer, 'Out of Africa: Lessons from a By-Product of Evolution', in *Religion as a Human Capacity: A Festschrift in Honor of E. Thomas Lawson,* ed. by T. Light and B. Wilson (Leiden: Brill, 2004), pp.27-43 (p.39).
[28] Lee Kirkpatrick, 'Toward an Evolutionary Psychology of Religion and Personality', *Journal of Personality,* 67.6 (1999), pp.921-952 (p.926).
[29] J. Barrett, *Why Would Anyone Believe in God?* (Lanham MD: Altamira Press, 2004), p.viii.
[30] Hood and others, *The Psychology of Religion,* p.61.
[31] Kirkpatrick, *Attachment, Evolution,* p.240.
[32] Kirkpatrick, *Attachment, Evolution*, p.240.

Chapter Four: The Trinity and Human Cognition.

The Cognitive Science of Religion ('CSR') is:

> a multidisciplinary perspective [including psychology] on the origin of religion that suggests that religion emerged as an unintended by-product of the evolving cognitive architecture of the mind. This view is referred to as the 'standard model'[1].

CSR is often associated with non-theistic views of religion, but some of 'the emerging scientific narrative speaks of religion as a cognitively natural human activity'[2]. In this chapter, cognitive mechanisms for detecting agency, including supernatural agency, are briefly discussed. Some cognitive theories consistent with the by-product approach might explain ways in which the human mind then distinguishes events believed to involve God's agency from other experiences. Theories considered in this chapter include social exchange[3] which suggests that religious experiences are part of a mutually beneficial exchange with God; and anthropomorphism[4], attributing human traits to non-human entities, which may seem a likely account since Christian's attribute Fathership or Sonship to God. However, each theory offers an incomplete account. Theory of mind ('ToM'), the innate ability to attribute mental states to another[5], is also discussed. It may offer some insights into the ways in which the human mind facilitates experiences involving the Trinity.

Agency Detection

An 'agency detection device' ('ADD') may be innate in human minds. An ADD:

> looks for evidence of beings (such as people or animals) that not merely respond to the environment but also initiate action based on their own internal states[6].

McCauley[7] describes agency detection systems as disposing individuals to look for agents, thus improving chances of detecting predators. Boyer describes

---

[1] Eames, *Cognitive Psychology,* p.136.
[2] McGrath, *Inventing the Universe*, p.125.
[3] L. Cosmides, 'The logic of social exchange: has natural selection shaped how humans reason? Studies with the Watson selection task', *Cognition* 31.3 (1989), pp.187-276.
L. Cosmides and J. Tooby, 'Cognitive Adaptations for Social Exchange', in *The Adapted Mind: Evolutionary Psychology and the Generation of Culture,* ed. by J. Barkow, L. Cosmides and J. Tooby (Oxford: Oxford University Press, 1992), pp.163-228.
[4] S. Guthrie, *Faces in the Clouds A New Theory of Religion* (Oxford, Oxford University Press, 1993).
[5] Eames, *Cognitive Psychology,* p.143.
[6] Barrett, *Why Would Anyone,* p.4.
[7] McCauley, *Why Religion is*, p.82.

ADD as spotting the 'traces in the grass'[8] whatever their meaning may be. Barrett describes the ADD as a so-called 'categorizer' that:

> looks for evidence of beings (such as people and animals) that not merely respond to their environment but also initiate action on the basis of their own internal states such as beliefs and desires[9].

The more clearly threats are identified by so-called 'categorizers', the greater survival and so reproductive chances may be for an individual.

A Hypersensitive ADD ('HADD') is proposed by Barrett as a mechanism of the mind that identifies supernatural agency, detecting events when they violate 'intuitive assumptions for the movement of ordinary physical objects … and the object seems to be moving in a goal-directed manner'[10]. Examples of experiences involving the Trinity in Chapter Two possibly describe events that a HADD might detect. For example, in Archive xi) someone writes that 'I felt & saw the white feathers of the dove brush my cheek', an event that for the individual may have violated her intuitive assumptions about what happens when reading a pamphlet. Boyer describes the notion of a HADD as speculative[11], but in principle making sense, although from Boyer's non-theistic perspective the counterintuitive movement that is detected is due to causes other than God. The idea of a HADD has however been criticized as lacking a clear neural structure that responds to all triggers that are classified as supernatural[12]. Other research concludes that there are many sources of evidence that support the existence of the HADD[13], for example human babies may appear to detect agency in ways that can be hypersensitive[14]. In summary, the existence of HADD, or the ways in which it would operate, are speculative but many researchers propose that a HADD may detect agency including agency that might have supernatural causes.

---

[8] Boyer, *Religion Explained,* p.145.
[9] Barrett, *Why Would Anyone,* p.4.
[10] Barrett, *Why Would Anyone,* p.33.
[11] Boyer, *Religion Explained,* p.147.
[12] A. Lisdorf, 'What's HIDD'n in the HADD?', *Journal of Cognition and Culture*, 7.3-4 (2007), pp.341-353.
[13] J. Liddle and T. Shackelford, 'An Introduction to Evolutionary Perspectives on Religion', in *The Oxford Handbook of Evolutionary Psychology and Religion*, ed. by J. Liddle and T. Shackelford (Oxford: Oxford University Press, 2021), pp.1-17 (pp.3-4).
[14] Liddle and Shackelford, 'An Introduction to, p4.

Once agency has been detected, its meaning needs to be understood. Christians may recognise events as the Father's presence or the work of the Holy Spirit when other mental processes, such as ToM, are activated.

'Theory of Mind'

The term refers to 'a developmental process involving the ability to imagine what others are thinking, feeling, intending, etc'[15]. Whilst human behaviours might be directly observed by an individual, the inner workings of the human mind cannot. 'Theory of mind' proposes that humans have evolved an innate ability to 'theorise' about the mental states of others and self. Baron-Cohen (1958-present), postulates 'an innate learning mechanism with a specific location in the brain'[16] that acquires knowledge and uses it to make inferences. The so-called 'folk psychology', or 'theory-theory', approach assumes 'a child evolves a scientific-like network of interdependent propositions about the others' mind on the basis of experience'[17]. These propositions may continue to be acquired and modified throughout life. An evolved capacity for ToM could confer evolutionary advantages, for example offering an increased likelihood of discerning someone's friendly intentions from those of a foe.

ToM might appear to suggest the existence of one individual's 'limpid understanding of the other'[18]. However, the inferences made by ToM are not pellucid. They are beliefs about others' thoughts, feelings and intentions. An individual cannot for example know the intent behind another's smile but based upon the individual's social knowledge and past experiences may infer, and so believe, what the smile means. The scientific validity of so-called 'common sense beliefs', such as those facilitated by theory of mind is disputed. Churchland (1942-present) uses an approach referred to as 'eliminative materialism'[19]. He asserts that 'our common-sense psychological framework is a false and misleading conception of the causes of human behaviour and the nature of human activity'[20]. So-called 'beliefs' are really obsolete theories since

[15] Eames, *Cognitive Psychology,* p.143.
[16] P. Fonagy, G. Gergely, E. Jurist and M. Target, *Affect Regulation, Mentalization, and the Development of Self* (London: Karnac, 2004), p.29.
[17] Fonagy and others, *Affect Regulation, Mentalization*, p.29.
[18] M. Plastow, 'ToM' II: difficulties and critiques', *Australasian Psychiatry,* 20.4 (2012), pp.1–4 (p.1).
[19] P. Churchland, *Matter and Consciousness. A Contemporary Introduction to the Philosophy of Mind Revised Edition* (London, England: The MIT Press, 2001), pp45-46.
[20] Churchland, *Matter and Consciousness*, p43.

'the most central things about us [such as sleep and mental illness] remain almost entirely mysterious from within folk psychology'[21]. Baker (1944-2017) proposes that so-called 'physicalistic psychology', such as experimental research, cannot vindicate 'belief' as a concept since 'attitudes constitutive of the common-sense conception of the mental are identified by content, but the concept of content resists incorporation into physicalistic psychology'[22]. One example may be experiences believed to involve the Trinity which are identified by their content. Their possible causes, such as God or a man-made influence, may not be distinguishable in experimental research. On the other hand, Baker acknowledges that the 'metaphysical purity'[23] of psychology may not be significant for research programmes if they nonetheless yield fruits that advance the field of psychology. In contrast Fodor (1935-2017) proposes that 'beliefs' can be taken 'to be real [mental] states that causally interact with other states and with sensory input and behavioural output'[24]. Psychology can therefore study 'beliefs' successfully. Whilst debates about the validity of 'folk psychology' and its so-called 'common sense beliefs' may continue, much of CSR's account of the human mind relies upon ToM and its functional inference of 'common sense beliefs' about the mental states of self and others.

Research into theory of mind suggests that:

> social processes involve two types of mental inferences: 1) those concerned with goals and intentions (i.e. transitory states); and 2) those that concern inferences about personality and traits and social scripts (i.e. enduring characteristics)[25].

Child development studies suggest that the first type may appear in infancy and the second type in early school years.

> Imaging studies indicate that two cortical areas of the brain are consistently activated in mental inference tasks: the right temporoparietal junction and the medial prefrontal cortex. Findings from a recent meta-analytical review of more than 100 fMRI [functional magnetic resonance imaging] studies of human social cognition indicate

[21] Churchland, *Matter and Consciousness,* p46.
[22] L. Baker, *Saving Belief. A Critique of Physicalism* (Princeton: Princeton University Press, 1987), pp.109-110.
[23] Baker, *Saving Belief. A Critique,* p.172.
[24] Baker, *Saving Belief. A Critique,* p.24.
[25] J. Astington and C. Hughes, 'Theory of Mind: Self-Reflection and Social Understanding', in *The Oxford Handbook of Developmental Psychology Volume 2 Self and Other,* ed. by P. Zelazo (Oxford: Oxford University Press, 2013), pp.398-424 (p.415).

> that these two regions correspond well with these two types of inferences[26].

Some research suggests self-reflection involves ToM[27], although others disagree, suggesting that:

> self-related processes engage a distributed set of brain regions situated in both hemispheres. Current efforts aimed at identifying brain areas recruited during self-referential thinking in older persons, across cultures, and during mental time travel [time delayed self-recognition for example from a photograph] further confirm this observation[28].

Areas of the brain in addition to those typically associated with ToM might be involved in self-reflective mental processes.

A by-product of the human capacity for ToM may be religious belief. Augustine in the theological tradition of his time located God's being within human mental processes[29] so that God might be understood as part of the psychological self. However, from a human perspective God is 'other'. Christians believe that God transcends creation whilst being present, or immanent, too. God therefore is believed to exist in ways unlike any human. ToM is part of mental architecture that has evolved little since the Stone Age. Trinitarian theology may be used by ToM to try to bridge the gap between our Stone Age minds and the otherness of God.

Baron-Cohen asserts that:

> the common feature of all current religions is that a supernatural agency—a god, a spirit—is postulated who can communicate with you, possibly judge (i.e. think about) you, and who can be appeased by ritual acts. The idea of a supernatural agency of this kind would be impossible without a ToM[30].

Baron-Cohen may exaggerate the role of ToM in 'all religions'. Buddhism for instance has no concept of supernatural agency, although Christianity does.

ToM might distinguish the supernatural from other experiences by using narratives and concepts that are familiar enough for individuals to find them intuitive, whilst also being counterintuitive enough to engage inferential mental

---

[26] Astington and Hughes, Theory of Mind: Self-Reflection, p.415.
[27] Astington and Hughes, Theory of Mind: Self-Reflection, p.418.
[28] A. Morin, 'Self-recognition, theory-of-mind, and self-awareness: what side are you on?', *Laterality,* 16.3 (2011), pp367-83 (p.378).
[29]Augustine, *On the Trinity, Book XV* (United States of America, Beloved Publishing/Amazon, c.400/2014), pp.349-351.
[30] Baron-Cohen, p.270.

processes[31]. The Trinity is a concept with both familiar and counterintuitive elements that may convey something of God's immanence and transcendence. The term 'God as Father' may convey meaning to people who using ToM might infer some qualities of a human father as belonging to God, such as being an authority figure. Eternal generation is counterintuitive when compared to ordinary human experience and so may convey the divine mystery and God's difference from humanity. Having detected supernatural agency, using ToM a Christian may make inferences based upon familiar and counterintuitive elements of the Trinity to recognise God's presence and to infer something of His nature. In the examples from the Archive in Chapter Two individuals in different contexts appear to infer God's presence using the Trinity to try to understand better their experiences which they believe were the result of divine agency.

ToM may also use ideas about God that are spontaneous, natural and often theologically incorrect[32], perhaps using knowledge of human social interactions and spontaneous thoughts to inform inferences about Him. The spontaneous utterances reported by early Christians (Chapter Two) may have involved ToM when first inferring God's presence as both Father and Son. Such inferences would have been theologically incorrect for Jewish people which may suggest the inferences spontaneity in response to Jesus' life and teaching.

In summary, ToM might offer some cognitive insights into the ways in which experiences believed to involve the Trinity occur. Two aspects of these experiences, Trinitarian language and responding to divine providence, are next considered.

Language

Words or sentences may not offer a clear and transparent set of meanings to self or others[33]. The word 'Father' may be variously defined in a dictionary[34]. Such definitions are arbitrary in the sense that the letters that make up a word, and what the word refers to, are not inherently linked. A signifier, such as the

[31] Barrett, *Why Would Anyone,* pp.21-30.
[32] McCauley, *Why Religion is*, pp.207-221.
[33] J. Carrette 'Post-structuralism and the study of religion', in *The Routledge Companion to the Study of Religion (second edition),* ed. by J. Hinnells (Abingdon: Routledge, 2010), pp.274-290 (p.277-281).
[34] Cambridge Dictionary, *father* (2022), www.dictionary.cambridge.org/dictionary/english/father [last accessed 12.2.22].

word ‘father’, and the signified, say a biological parent, are linked only within the structure of language. Saussure[35] (1857-1913), in proposing so-called ‘structuralism’, asserted that language is a ‘system of signs’ (letters and words). Symbolic meaning is found from their structural relationship[36]. The word ‘Trinity’ for example may be recognised as symbolising God, without someone necessarily knowing its detailed theology. In the last fifty years, so-called post structuralism further questions the signifier, for which meaning may ‘never fully present in a text’[37]. No word, or structure of words, may convey the complete meaning of the signified. The words in the ‘Nicene Trinity’, or the words in every text about the Nicene Creed, may not completely convey the entirety of God.

The meaning found by an individual in a signifier is influenced by ToM. Baron-Cohen proposes that if the purpose of communication is to change the knowledge state of another, the communicator needs to understand that ‘others have minds’[38], and use ToM to consider how the recipient will receive the communication. For example, if I shout, ‘polar bear’, I may be issuing a warning to another person or referring to a child’s cuddly toy. The words ‘polar bear’ may lack for the recipient my intended meaning if I do not first use my ToM to consider how the person may infer meaning to the words. The recipient will in turn use ToM to infer the first speaker’s intended meaning and may then use his or her ToM when replying, so that each participant’s ToM guides a conversation. When discerning hermeneutically the Nicene Trinity the church leaders discussed in Chapter Two, such as Origen and Arius, are likely to have used ToM to infer meaning from others’ work and to convey back fresh meanings, using language in ways intended to change others’ knowledge.

Baron-Cohen’s research is focused on the needs of people on the autistic spectrum, whose innate capacity for using ToM is limited in comparison to the general population[39]. Baron-Cohen’s research identifies that the capacity of people with autism to structure language[40] is reduced, when compared to the general population. Research also suggests that the capacity of people on the

[35] F. Saussere, *Course in General Linguistics* (London: Peter Owen, 1916/1974).
[36] Carrette, Post-structuralism, p.279.
[37] Carrette, Post-structuralism, p.282.
[38] Baron-Cohen, The evolution of, p.262.
[39] S. Baron-Cohen, A. Leslie A and U. Frith U., ‘Does the autistic child have a ‘Theory of Mind?’, *Cognition*, 21.1 (1985), pp.37–46.
[40] Baron-Cohen, The Evolution of, p.269.

autistic spectrum for religiosity is reduced when compared to the general population[41]. With so-called 'mindblindness'[42] (reduced capacity for ToM) people with autism are less able to infer meaning in words associated with religion. The symbolic meaning of the word 'Trinity' is more likely to be missed by people with autism since it may be interpreted literally, perhaps as meaning 'three things'. With mindblindness someone's capacities to structure language and for religiosity are both reduced which may highlight in the general population the significance of language in conveying religious meaning, a process facilitated by ToM.

Christians believe that God is transcendent and incorporeal yet may be recognised in the Trinity. The language of the Trinity is therefore vital as it conveys something of the identity of God which using ToM Christians may infer from Trinitarian language. Trinitarian grammar is not the only influence on the ways in which the words of doctrine are comprehended. An individual's childhood experiences, education, culture and many other factors may shade the subjective inferences made using ToM about the language of the Trinity. For example, early Christians experienced texts differently because Christians thought of the word 'God' as referring to Father and Son, and so saw Trinitarian signs as intended in places that Jews traditionally did not. With PE, which was discussed in Chapter Two, the meaning inferred from Old Testament language changed as the early Christians inferred new, dramatic meanings that reflected their new view of God.

One illustration of the power of Trinitarian language might be seen in disputes about the gender of the Trinity. The Nicene Trinity is central to the liturgy of the Church. However, the language of Fathership and Sonship has a different subjective meaning for some theologians, who may use ToM to infer symbolically oppressive connotations to the Trinity's male dominated phraseology[43]. The theologians' feel that their relationship with God is hindered as they experience the notion of an all-male Godhead as subordinating. Other

[41] W. Norenzayan, W. Gervais and K. Trzeniewski 'Mentalising Deficits Constrain belief in a Personal God', *PLOS ONE,* 7.5 (2012), pp.1-8 (p.2).
[42] S. Baron-Cohen, *Mindblindness: An essay on autism and Theory of Mind* (Cambridge MA & London: Bradford, 1995).
[43] E. Johnson, 'A Feminist Interpretation of the Triune Symbol', in *The Trinity. Global Perspectives,* ed. by V. Karkkainen (Louisville, Kentucky: Westminster John Know Press, 2007), pp.195-213.

female theologians find a different subjective meaning in the same words, envisioning them as symbolising a loving inclusive communion[44].

Using ToM, individuals' inferences about the meaning of language and the way in which another may receive it are subjective. Inferences about the language of the Trinity, for instance, are subjective, influenced by theology and personal factors. Experiences involving the Trinity are recognised, reflected upon and shared with others using language. It is therefore one way in which ToM may be involved in facilitating experiences believed to involve the Trinity.

Divine Providence

God's interaction with the World is known theologically as 'divine providence'[45]. When Christians use ToM to infer God's will, the theology of providence might inform their inferences. One challenge to this view is a possible divergence between divine providence and evolutionary psychology's notion of human 'will' that arises from the necessity of species reproduction. The imperative to reproduce is not necessarily aligned with the divine will, for example if choosing to harm others is against God's will but may offer increased reproductive opportunities. However, the human imperative for reproduction and the divine will are not inherently opposed, as discussed in Chapter One regarding the social and reproductive benefits of Christian marriage.

ToM may have contributed to the development of theologies of divine providence. Theologians have hermeneutically read, and re-read, providential theology, inferring meaning from its language, and using ToM to try linguistically to convey to others new meanings. Theologically, the nature of providence is variously described. So-called 'classical' notions pre-date Trinitarian theology. In the early books of the Old Testament the people of Israel are described as being free to obey God, or to choose otherwise but risk the consequences. From the exilic period (6th century BC) Yahweh (God) is increasingly portrayed as being in control of human lives[46].

[44] E. Johnson, *She Who Is. The Mystery of God in Feminist Theological Discourse* (New York: Crossroad, 1993), p.227.
[45] A. Jensen, *A Divine Providence and Human Agency Trinity, Creation and Freedom* (London: Routledge, 2015), pp.1-8.
[46] A. Dihle, *The Theory of Will in Classical Antiquity* (Berkley: University of California Press, 1982), p.76.

The works of God in creation and salvation have a Trinitarian form in Christian theology. Aquinas for example proposed that God allows limited human choice. Human will is moved by, and directed towards, the Trinitarian God. If human will is directed elsewhere, it is enslaved and so no longer free[47]. In recent years Jensen[48] has proposed that 'divine transcendence' found in the Trinity is key to both the divine will and to human agency. Jensen in summary proposes that the Father's will is carried into creation by the Son and then made known by the Spirit. Nature, including evolution, and human agency continue but through the Son and Holy Spirit humans are aware of God's transcendent presence to which humans respond.

Consistent with methodological agnosticism, this dissertation does not favour one theological account of providence over another. If, however, Christians use a theology of divine providence to make inferences about God's interaction with humanity, whether God as Trinity is believed to allow limited human choices or greater freedoms affects the inferences made using ToM about God's agency. The inferences influence the ways in which individuals believe that they may experience God.

The Atheist Perspective

Whilst ToM may theistically offer an account for Christians' experiences, ToM is also used to explain them atheistically. In CSR's so-called 'standard model', religion is often seen as a type of spandrel, a view endorsed by cognitive psychologists such as Atran[49] and Boyer[50], who see 'religion [and its experiences] as emerging from the tendency to perceive supernatural entities that are false positives'[51].

Religion is understood in the standard model as a 'cultural universal'[52], although the meaning of the term 'culture', and its role, are debated within the CSR[53]. The relationship between religion and culture has also been widely

[47] D. Burrell *Faith and Freedom: An Interfaith Perspective, Challenges in Contemporary Theology* (Oxford: Basil Blackwell, 2004), p.109.
[48] Jensen, *A Divine Providence,* p.187.
[49] Atran, *In gods,* p.15.
[50] Boyer, *Religion Explained.*
[51] Eames, *Cognitive Psychology,* p.142.
[52] Workman and Reader, *Evolutionary Psychology,* p.468.
[53] Eames, *Cognitive Psychology,* p.11-13.

debated within religious studies[54], from which religion and culture may at least be acknowledged as intertwined concepts. The Holy Trinity in the twenty-first century is part of Western secular culture, continuing to be used for instance in the names of Universities, or in the headlines of sports newspapers[55]. However, the 'standard model' describes 'religion' and its concepts such as the Trinity as cultural even when the concepts are used by others theistically. Boyer describes:

> the invisible hand of cultural selection [that] makes it the case that the religious concepts people acquire and transmit are in general the ones most likely to seem convincing to them, given their circumstances[56].

The Trinity in Western societies may be one example. Boyer describes religious belief as an inevitable by-product of the human mind since it has evolved the capacity for intuition primarily using an innate capacity for ToM. For Boyer, religious culture, such as the Holy Trinity, is used by ToM to provide an 'interpretation of, or report on'[57] human experiences that are yet to be understood but are falsely believed to describe God's presence. Berring (1975-present) proposes that humans have evolved an innate instinct to believe in god or gods[58] facilitated by ToM. He believes that so prominent are ToM processes that 'bad behaviours' are instinctively curtailed by individuals inferring a 'sense of being observed by a morally invested, reactive Other (whether God, Princess Alice, the ghost of a dead graduate student or some other supernatural agent)'[59]. Christians believe in divine providence. Berring may respond that such belief is an example of ToM falsely inferring that God is present and judging human behaviour.

From a Christian perspective Barrett criticises CSR's frequently atheist approach for being biased.

> BFFs [belief forming faculties] are always with us and are alleged to be important for forming a broad range of non-religious beliefs as well. If skepticism with regard to their religious outputs is merited, then so too

---

[54] B. Lincoln, 'Culture' in *Guide to the Study of Religion* ed. by W. Braun and R. McCutcheon (London, T&T Clark, 2000), pp.409-422.
[55] J. Beck, 'FC Barcelona: Luis Suárez and Creating a New Trinity' (2014). www.barcablaugranes.com/2014/7/8/5879341/luis-suarez-and-the-new-holy-trinity [last accessed on 15.8.21].
[56] Boyer, *Religion Explained*, p.330.
[57] Boyer, *Religion Explained,* p.305.
[58] J. Bering *The Belief Instinct The Psychology of Souls, Destiny and the Meaning of Life* (London: W. W. Norton & Company Ltd, 2011), pp.190-194.
[59] Bering *The Belief Instinct,* p.194.

would be a serious degree of skepticism regarding many common beliefs[60].

Debates about the nature of religion and how the human mind processes it continue within the CSR, for example in a succession of articles between Barrett, Shook who writes from an atheological perspective[61], and others in which theistic and atheistic perspectives critique each other inconclusively[62]. Whilst ToM is used in atheist accounts of religious experiences, it may equally credibly be used in theistic accounts.

Limitations of 'ToM'

The existence of ToM has often been deduced by studying individuals whose capacity for ToM is reduced when compared to the general population. Researchers have used so-called 'false belief tasks'[63]. Young children may not infer what another person is thinking or feeling as they have not yet fully developed the capacity to do so. In the so-called 'Sally-Anne' studies[64] a young child is asked to think about a doll called Sally-Anne and explain how the doll may solve a problem. According to the research in the absence of some ToM, young children are frequently unable to infer what the doll would need to do. Older children and adults could more reliably explain how the doll may solve the problem since they have more developed ToM. The validity of false belief tasks has however been criticised: for failing to consider factors other than theory of mind such as memory or the inherent implausibility of the task[65]; and because some children who 'fail' false belief tasks due to their young age are still able to engage in pretend play for which ToM may also be necessary to

[60] J. Barrett and I. Church, 'SHOULD CSR GIVE ATHEISTS EPISTEMIC ASSURANCE? ON BEER-GOGGLES, BFFS, AND SKEPTICISM REGARDING RELIGIOUS BELIEFS', *The Monist,* 96.3 (2013), pp 311-324 (p322).
[61] J. Shook, 'Scientific Atheology', *Science, Religion and Culture*, 1.1 (2014), pp.32-48.
[62] J. Shook, 'Are People Born to be Believers, or Are Gods Born to be Believed? *Method and Theory in the Study of Religion*, 29.4-5 (2017), pp.353-373.
J. Barrett, *'*On Naturalness, Innateness, and God-beliefs: A Reply to Shook', *Method and Theory in the Study of Religion,* 29.4-5 (2017), pp.374-386.
J. Exline, and others, 'God Belief as an Innate Aspect of Human Nature: A Response to John Shook and Questions for Justin Barrett', *Method and Theory in the Study of Religion,* 29.4-5 (2017), pp.387-399.
[63] Workman and Reader, *Evolutionary Psychology,* pp.14-143.
[64] Baron-Cohen and others, Does the autistic child, pp.40-44.
[65] P. Bloom and T. German, 'Two reasons to abandon the false belief task as a test of theory of mind', *Cognition*, 77 (2000), pp.B25-B31 (pp.B26-B28).

infer imaginary qualities in others[66]. Whilst ToM is a concept widely used in the CSR, the validity of false-belief tasks is open to challenge.

In other research the so-called 'Eyes Task'[67] is used. An individual is asked to read complex emotions from picture cards featuring faces with the eyes highlighted. The general population, but not people on the autistic spectrum, may reliably infer complex emotions. The research suggests that the Eyes Task may evidence greater ToM functioning in the general population than people on the autistic spectrum. However, the validity of the Eyes Test has been variously assessed as acceptable[68] or needing further development[69].

If ToM is used to explain religious experiences, it may offer an overly narrow account. ToM is a purely cognitive process that may ignore 'the primitive foundational character of our pre-reflective (noncognitive) engagement with one another, our emotion, our expression, our embodiment'[70]. ToM may not account for the various subjective 'sentiments' [71] such as anger, hurt or joy that may underlie relationships between individuals. In addition, ToM may not recognise the influence of childhood attachment experiences which are discussed in the next chapter. Research into combining theory of mind and attachment may have great potential for representing neural mechanisms more fully[72], one example of which is mentalization (Chapter Six).

In summary, ToM currently makes a significant contribution to the CSR, often being involved in atheistic accounts. It has also been proposed that individuals may theistically utilise ToM to make inferences about God's presence based upon knowledge of the Trinity, as well as more spontaneous personal thoughts.

---

[66] Bloom and German, Two reasons to, p.B29.
[67] S. Baron-Cohen, and others, 'Another Advanced Test of Theory of Mind: Evidence from Very High Functioning Adults with Autism or Asperger Syndrome', *Journal of Child Psychology and Psychiatry*, 38.7 (1997), pp.813-822.
[68] S. Baron-Cohen, and others, 'The 'Reading the Mind in the Eyes' Test Revised Version. A Study with Normal Adults and Adults with Asperger Syndrome or High Functioning Autism', *Journal of Child Psychology and Psychiatry*, 42.2 (2001), pp.241-251.
C. Thammanard and T. Lerthattaslip, 'The Reading the Mind in the Eyes Test: Validity and Reliability of the Thai Version' *Cognitive And Behavioral Neurology*, 30.3 (2017), pp.98-101.
[69] S. Baron-Cohen and others, 'The "Reading the Mind in the Eyes" Test: Complete Absence of Typical Sex Difference in ~400 Men and Women with Autism', *PLoS One,* 10.8 (2015), pp.1-17.
S. Olderbak and others, 'A psychometric analysis of the reading the mind in the eyes test: toward a brief form for research and applied settings', *Frontiers in Psychology*, 6 (2015), pp.1-14.
[70] R. Gripps, 'Autism and Intersubjectivity. Beyond cognitivism and the Theory of Mind', *Philosophy, Psychiatry and Psychology,* 11.3 (2004), pp.195-198 (p.195).
[71] Plastow, ToM II, p.2.
[72] Granqvist, *Attachment in Religion and Spirituality*, p296.

ToM may influence the meaning for an individual of Trinitarian language, responses to God's providence and so the ways in which God's agency is experienced. However, ToM has limitations so that perhaps some alternative cognitive theories need exploring. Two examples of theories which have been used in the field of religious studies are social exchange and anthropomorphism.

Social Exchange Theory

According to the theory, the human mind has evolved the capacity to make exchanges based on the so-called 'minimax' principle that in relationships individuals aim to maximise gains and minimise losses. The theory describes activity between two or more so-called 'actors' when each has something valued and sought by the other, so that exchange is mutually beneficial[73]. In religious studies, 'social exchange' describes the reciprocity that humans virtually everywhere hope to receive from gods in exchange for their devotion[74]. In a social exchange theory of religion, it is not actually necessary to know why God might enter a relationship with humanity[75] as the motivation of the 'other actor' does not need to be known for an exchange to occur.

Since religious experiences are subjective, social exchange theory needs to account for personal 'exchange experiences' with gods. Social exchange may involve emotions which are 'non-rational and outside the boundaries of rational choice'[76]. So-called 'affect theory' describes the ways in which 'emotions produced by exchange structures and processes are critical to an understanding of how and when social exchanges promote or inhibit solidarity in relations'[77]. If 'an exchange' is subjectively felt to be successful, individuals feel an emotional uplift, and solidarity may be increased. ToM has also been

[73] J. Thibaut, and H. Kelley, *The Social Psychology of Groups* (New York: Wiley, 1959).
G. Homans, *Social Behavior: Its Elementary Forms* (New York: Harcourt Brace Jovanovich, 1961).
R. Emerson, 'Exchange Theory Part 2: Exchange Rules and Networks', in *Sociological Theories in Progress Vol. 2,* ed. by J. Berger, M. Zelditch and B. Anderson (Boston, Houghton-Mifflin, 1973), pp.58–87.
[74] Kirkpatrick, *Attachment, Evolution*, pp.253-256.
[75] Kirkpatrick, *Attachment, Evolution,* p.253.
[76] E. Lawler, 'An Affect Theory of Social Exchange', *American Journal of Sociology* 107.2 (2001), pp.321-352.
[77] Lawler, An Affect Theory, p.322.

incorporated by some authors into social exchange theory[78], considering how one participant's inferences about the other participant's mental state might affect the terms of an exchange. A by-product of social exchanges explained by affect theory or ToM may be subjective exchanges believed to be with God. A feeling of joy when prayers are believed to have been answered by the Father or inferring through ToM the presence of the Holy Spirit in response to a request to God for help, may hypothetically be examples of exchanges believed to have been made with God as a by-product of an evolved capacity for social exchange.

Religious experiences might promote and affirm exchange relationships with God. Humans can be 'cost-avoiding and reward-seeking creatures who discover 'wholeness' when they experience justice, equity, and reciprocity in their relationships'[79]. The Bible describes exchanges with God that could offer a greater experience of 'wholeness', for example the possibility of receiving 'a crown that will last forever' (1 Corinthians 9.25); and seeing 'His face' (Revelation, 22.4). Religious tradition, such as a doctrine:

> persists among those for whom the tradition affords and articulates experiences of transcendence, which thereby revitalizes the tradition, and falls off among those for whom such experiences are absent. Insofar as each choice, however implicit, represents an epistemically warranted response to different experiences, each is epistemically rational[80].

Traditional concepts, such as the Trinity, are more likely to continue if the faithful experience exchanges that involve the concept and are believed to be exchanges with God. Other research highlights how exchanges involve uncertainty which religious experiences may reduce[81]. Uncertainty typically makes exchange riskier, and so less likely to happen. If supernatural experiences 'are believed by the partakers to be real interactions or exchanges with a god or gods'[82], increased faith and commitment may result.

---

[78] E. Ermer, and others, 'Theory of mind broad and narrow: Reasoning about social exchange engages ToM areas, precautionary reasoning does not', *SOCIAL NEUROSCIENCE*, 1.3-4 (2006), pp.196-219.
[79] E. Hill, 'A Theological Perspective on Social Exchange Theory', *Journal of Religion and Health,* 31.2 (1992), pp.141-148 (p.147).
[80] C. Jerolmack and D. Porpora, 'Religion, Rationality, and Experience: A Response to the New Rational Choice Theory of Religion', *Sociological Theory,* 22.1 (2004), pp.140-160 (p.158).
[81] K. Corcoran, 'Divine Exchanges: Applying social exchange theory to religious behaviour', *Rationality and Society,* 25.3 (2013), pp.335 –369.
[82] Corcoran, Divine Exchanges, p.361.

One view is that social-exchange reasoning about God may occur 'to various degrees in some Christian traditions, as in the belief that God's love and support is contingent on humans performing "good works" or repenting for sins'[83]. However, there can be a contradiction between seeking personal gain through social exchange and Christian doctrine. Social exchange theory may better describe relationships that are explicitly an exchange, such as employment relationships, than so-called 'communal relationships' which occur without the participants keeping count of gains and losses[84]. Christianity does not involve 'keeping score' with God. Some pro-theistic models of the human mind have incorporated social exchange. For example, in Barrett's model, social exchange is one of three so-called 'facilitators' whose role is to coordinate social activity in response to an individual's situation[85]. As a 'by-product', the 'facilitators' may enable interaction with gods too. In Barrett's model 'social exchange' facilitates thought about personal 'fortune and misfortune'[86] caused by gods. However thought about personal fortune may be inconsistent with belief in the Trinity which is 'three agents of one love' (discussed in Chapter Two). Their agency continues to influence human lives in ways that may seem to an individual devoid of 'fortune' when a loved one dies, or other misfortune occurs. Nonetheless, Christians believe that their relationship with God remains. Although social exchange theory might describe the ways in which human relationships with some non-Christian deities perhaps happen, social exchange does not readily describe the ways in which Christians experience relationships with God as Trinity who transcends any 'minimax' principle.

Anthropomorphism

The term refers to individuals' 'explicit assignment of human traits to that which is impersonal and usually not alive'[87]. All kinds of non-human things may be anthropomorphised, including computers, animals, ships, and airplanes[88]. Even

[83] Kirkpatrick, Attachment Theory and, p.237.
[84] M. Clark and J. Mills, 'The Difference between Communal and Exchange Relationships: What it is and is Not', *Personality and Social Psychology Bulletin*, 19.6 (1993), pp.684-691.
[85] Barrett, *Why Would Anyone,* pp.53-55.
[86] Barrett, *Why Would Anyone,* p.55.
[87] Hood and others, *The Psychology of Religion,* p.55.
[88] Guthrie, *Faces in the Clouds*, pp.94-95.

though ‘anthropomorphism is by definition mistaken, it also is reasonable and inevitable’[89] as it may help individuals make limited subjective sense of events.

The Greek philosopher Xenophanes first used ‘the term ‘anthropomorphism’ when describing the striking similarity between religious believers and their gods, with Greek gods having fair skin and blue eyes’[90]. More recently, Guthrie from a non-theistic perspective proposes that humans’ innate tendency to anthropomorphise the world of phenomena causes religion. ‘Religion makes nature human-like by seeing gods there’[91], often gods with human traits.

In the CSR attribution of human traits may be understood as a distinctive cognitive pattern possibly facilitated by ToM. Inferences based on human traits about non-human objects create ‘false positives’[92] but they may help individuals survive by ensuring notice is taken of complex or uncertain events that might otherwise be ignored. God from a theistic perspective is both complex and mysterious, and so perhaps a candidate to be understood anthropomorphically. Research studies have found varied anthropomorphic tendencies when Christians relate to God. In one study:

> participants not only attributed more psychological properties [anthropopathisms] to God than physiological properties, but they were also faster, more consistent, and more confident in making those attributions[93].

In another study, ‘when participants were more engaged in their religion overall, they did not think of God as having human-like psychological characteristics’[94], but did increasingly believe God has more human-like biological and physical characteristics, even though He is believed to be incorporeal. In summary, Christians might display anthropomorphic tendencies when they contemplate God, often resulting in personal images that may be inconsistent with theological concepts.

---

[89] Guthrie, *Faces in the Clouds,* p.204.
[90] A. Waytz, N. Epley and J. Cacioppo, ‘Social Cognition Unbound: Insights Into Anthropomorphism and Dehumanization’, *Current Directions in Psychological Science*, 19.1 (2010), pp.58–62 (p.59).
[91] Guthrie, *Faces in the Clouds*, p.177.
[92] Eames, *Cognitive Psychology,* p.9.
[93] A. Shtulman and A. Linderman, ‘God Can Hear But Does He Have Ears? Dissociations Between Psychological and Physiological Dimensions of Anthropomorphism’, *Journal Proceedings of the Annual Meeting of the Cognitive Science Society*, 36 (2014), pp.2931-2936 (p.2931).
[94] N. Shaman, A. Saide and R. Richert, ‘Dimensional Structure of and Variation in Anthropomorphic Concepts of God’, *Frontiers in Psychology,* 9 (2018), pp.1-16 (p.13).

The Trinity has anthropomorphic qualities[95], such as God being Father. Barrett distinguishes 'reflective' and 'non-reflective' beliefs[96]. The former are conscious, explicit, and refined deliberately, such as theological concepts. The latter are produced rapidly and automatically. Non-reflective beliefs, according to Barrett, accumulate in the mind, and so eventually contribute to an individual's reflective processes. For example, individuals may spontaneously (non-reflectively) think of God as father-like, or Christ being as son-like in His relation to God. The accumulation over time of similar non-reflective anthropomorphic thoughts and experiences, perhaps among early Christians, may then have led to God being recognised more widely using the language of Fathership and Sonship.

However, from the time of Origen onwards one view is that God's characteristics were no longer recognised as human-like[97]. Christianity stressed the otherness of God, as revealed by the Nicene Trinity, so that the ways in which humans see themselves cannot map straight into God. For example, in the Nicene Trinity the Son never grows older and becomes Father, whereas the same is not true for many human males who become a father. Eternal generation is not comparable to human life cycles. On the other hand, the language of Fathership and Sonship uses creaturely realities to try to conceptualise and find meaning from divine ones. In that more limited sense, when God is revealed through the Trinity, revelation may to some extent be anthropomorphic. One illustrative example of anthropomorphic thinking about the Trinity may be observed in children, who at a young age 'make sense' of gods by projecting their learning about people onto God, who becomes for a while human-like[98]. After developing greater ToM and learning that God is believed to be Trinitarian, non-temporal, transcendent and omnipotent, older children usually think of God as significantly different to humans. In summary, the Trinity has some anthropomorphic aspects but theistically anthropomorphism cannot fully explain experiences believed to involve God as Father, Son and Holy Spirit.

---

[95] Saarinen, The Trinity, p.418.
[96] Barrett, *Why Would Anyone* pp.10-17.
[97] S. Webb, *Jesus Christ, Eternal God: Heavenly Flesh and the Metaphysics of Matter* (Oxford: Oxford University Press, 2011), pp.87-89.
[98] Barrett, *Why Would Anyone,* pp.76-77.

Conclusions

Some cognitive theories appear inconsistent with Christians' belief in the Trinity. Social exchange may distort the Trinity's theological meaning, turning Trinitarian experiences into 'minimax' relationships with God. The Trinity may have anthropomorphic aspects but eternal generation is not human-like, so that anthropomorphism may not fully account for individuals' experiences believed to involve the Trinity. ToM is a concept that has limitations too. Nonetheless, ToM is a widely used in the CSR and may contribute to theistic accounts of God. Knowledge of Trinitarian theology may be used by ToM to infer God's presence and so distinguish it from other experiences. ToM may contribute to hermeneutics by facilitating the interpretation of language. However, ToM does not adequately account for all aspects of religious experiences, such as the influence of childhood attachment experiences which are discussed in the next chapter.

Chapter Five: Attachment Theory and the Trinity

Patterns of attachment developed in childhood have been strongly linked with individuals' religiosity by researchers such as Granqvist[1] and Kirkpatrick[2]. After outlining attachment theory, its possible role in shaping experiences involving the Trinity is considered. Attachment theory may help to explain the role in religious experiences of so-called 'god images' and 'god concepts', but the theory offers an incomplete theistic account.

Attachment Theory

Attachment was proposed as an ethological theory of child development by John Bowlby (1907-1990)[3]. In summary, it proposes that children have evolved the survival instinct to seek physical safety and emotional security from their main caregiver(s)[4] whose responses lead to the development by the young child of so-called 'attachment styles'. They consist of two broad categories: secure attachment (a child feels safe and comforted by the main caregiver); or insecure attachment (the child does not feel reassured by the caregiver's response). There are several classifications of insecure attachment including ambivalent, avoidant, and disorganised[5]. As a child grows older, he or she replicates in other relationships the attachment style that developed with the primary caregiver including, some researchers propose, replicating his or her attachment style when experiencing God's presence.

Individuals' capacity to form social attachments may be part of God's creation. One view is that:

> The psychological and biological processes necessary for the attachment system to exist, and for attachment relationships to develop, are there because we are made in the image of the triune God. These

---

[1] Granqvist, *Attachment in Religion.*
[2] L. Kirkpatrick, 'Attachment Theory and Religious Experience', in *Handbook of Religious Experience,* ed. by R. Hood (Religious Education Press: Birmingham Alabama, 1995), pp.446-475.
[3] J. Bowlby, *Attachment and Loss Volume 1,* pp.371-375.
J. Bowlby, *Attachment and Loss Volume 2* (London: Pimlico, 1969).
J. Bowlby, *The Making and Braking of Affectional Bonds* (London: Tavistock Publications, 1979).
J. Bowlby, *A secure base: Parent-child attachment and healthy human development* (New York: Basic Books, 1988).
I. Bretherton, 'The roots and growing points of attachment theory', in *Attachment Across the Life Cycle,* ed. by C. Murray, J. Parkes, J. Stevenson-Hinde and P. Marris (London: Routledge, 1991), pp.14-21.
J. Holmes, *John Bowlby & Attachment Theory* (London: Routledge, 1993), pp.67-84.
[4] Kirkpatrick, Attachment Theory and Religious Experience, p.447-448.
[5] Kirkpatrick, *Attachment, Evolution,* pp.34-36.

> attachment potentials then manifest themselves in human relationships as a living out of that image of God, distinct persons in a united love[6].

People might 'appear to be biologically and psychologically 'prepared''[7] for a relationship with God facilitated by attachment.

Experiencing a sense of love and security from God may be understood as a by-product of individuals' innate capacity to form social attachments[8]. When people believe that they experience God's agency, He might fulfil roles that are similar from a human perspective to a parental role, offering to someone the opportunity for relationship, offering love and care, and being receptive to the individual's child-like dependency[9]. However, 'attachment' with God can only be described as a 'perceived attachment'. Our childhood capacity for attachment with a primary caregiver is 'social' (human with human) and so differs from an individual's relationship with God[10]. For example, God is incorporeal, and so is not an individual comparable to a bodily human caregiver[11]. Relationships with God are believed by Christians to be eternal, whereas embodied, earthly relationships between primary caregiver and child end when one or other dies. An individual's perceived attachment to a transcendent God may feel like, but is qualitatively different from, social attachments.

Research has found positive correlations between an individual's social attachment style and their relationship with God[12]. Secure attachment 'can be characterised in terms of positive, non-defensive representations of self [and]

---

[6] M. Boccia, 'Human Interpersonal Relationships and the Love of the Trinity', *Priscilla Papers*, 25.4 (2011), pp.22-27 (p.26).
[7] M. Miner and M. Dowson, 'Spiritual Experiences reconsider: a relational approach to the integration of psychology and theology', *Journal of Psychology and Theology*, 40.1 (2012), pp.55-59 (p58).
[8] Kirkpatrick, Attachment Theory and Religious Experience, pp.452-453.
[9] Granqvist, *Attachment in Religion,* pp.44-49.
[10]M. Miner, 'Back to the basics in attachment to God: revisiting theory in light of theology' *Journal of Psychology and Theology* 35.2 (2007), pp.112-122 (p112).
[11] Granqvist, *Attachment in Religion*, pp.62-64.
[12] Kirkpatrick, *Attachment, Evolution,* pp.102-104.
T Clinton and J Straub, *God Attachment Why you believe, act and feel the way you do about God* (New York: Howard Books, 2010).
K. Flannelly, and K. Galek, 'Religion, Evolution, and Mental Health: Attachment Theory and ETAS Theory', *Journal of Religion and Health,* 49.3 (2010), pp.337-350 (p.345).
S. Schnitker and others, 'Attachment Predicts Adolescent Conversions at Young Life Religious Summer Camps', *The International Journal for the Psychology of Religion*, 22 (2012), pp.198–215.
S. Sandage and others, 'Attachment to God, adult attachment, and spiritual pathology: mediator and moderator effects', *Mental Health, Religion& Culture,* 18.10 (2015), pp.795-809.
Granqvist, *Attachment in Religion,* pp.123-153.

others'[13] with the individual seeing self as 'worthy of care'[14] including for Christians being worthy of God's love (the so-called 'correspondence pathway'). Attachment security provides resilience when what is meaningful in our lives is under threat. If faith is challenged, for example by a sudden bereavement, a secure attachment style may enable that challenge to be considered with a greater degree of honesty and resilience.

A so-called 'compensation pathway' has also been proposed, in which some people with insecure social attachment styles try to compensate by seeking communion with God[15], for example through rapid conversion. Conversion for some may be short lived though, as after initial enthusiasm for the new relationship, an individual with an insecure attachment pattern might become distrustful of God. Insecure attachment does not necessarily result in the breakdown of an individual's relationship with God. Some research correlates insecure social attachment with an increased level of mystical experiences[16]. One study found that disorganised, insecure attachment 'is overrepresented in members of traditional religions who undergo mind-altering experiences (e.g., mystical or 'trance' states)'[17].

However, an attachment theory of religion may be challenged by recent research. 'Children with certain genotypes are even more affected by their rearing environments than other children'[18]. The 'instinctive forming of attachments' may therefore be a product of not just the quality of care-giving received in our early years but genetic determinants that may also affect throughout life an individual's capacity to form perceived attachments with God.

There are other challenges to an attachment theory of religion.

---

[13] Granqvist, *Attachment in Religion,* p.99.
[14] Granqvist, *Attachment in Religion,* p.99.
[15] L. Kirkpatrick, 'A longitudinal study of changes in religious belief and behaviour as a function of individual differences in adult attachment style', *Journal for the Scientific Study of Religion*, 36 (1997), pp.207-217.
P. Granqvist, 'Religiousness and perceived childhood attachment: On the question of compensation or correspondence', *Journal for the Scientific Study of Religion*, 37 (1998), pp.350-367.
[16] P. Granqvist, B. Hagekull and T. Ivarsson, 'Disorganized Attachment Promotes Mystical Experiences via a Propensity for Alterations in Consciousness (Absorption)', *The International Journal for the Psychology of Religion*, 22.3 (2012), pp.180–197 (p.191).
[17] P. Granqvist, and others, 'Examining relations among attachment, religiosity, and New Age spirituality using the Adult Attachment Interview', *Developmental Psychology*, 43.3 (2007), pp.590–601 (p.598).
[18] Granqvist, Attachment, culture, p.96.
Luyten and others, *The mentalizing approach,* p.24.

> The relationship between attachment in childhood and developmental outcomes is less strong than may be expected from some traditional assumptions within attachment theory… and meta-analyses suggest only moderate stability of attachment across development[19].

'Moderate stability' contrasts with longstanding theoretical assumptions that attachment styles, once established at a young age, remain relatively constant throughout life. The link between attachment styles and religiosity may therefore have been oversimplified in earlier research.

The significance of exogeneous influences may have been understated.

> Historical, sociocultural, and environmental factors may determine the role and function of the attachment-behavioral system, which challenges Bowlby's original formulations of attachment as an innate, universal behavioral system[20].

Relationships with peers may be one factor[21]. If God is presented in a church community as punishing, this may for some people lead to a sense of insecurity[22] and prompt compensatory responses regardless of how an individual's social attachment has previously developed.

The attachment theory of religion has been challenged by research. It is an incomplete, yet prominent, evolutionary theory of religion about which Granqvist and Kirkpatrick have proposed nuanced but divergent approaches[23]. Kirkpatrick has placed greater focus on the instinctive forming of attachments with supernatural agents[24], alongside several other social cognitive processes such as social exchange[25] and ToM[26]. Kirkpatrick predicts the development of 'a broader evolutionary psychology of religion, within which attachment theory will continue to have an important role alongside many other equally 'good ideas' that, for now, await further development'[27].

Granqvist describes himself as placing a greater emphasis on how culture may interact with the innate capacity to form attachments[28]. Granqvist describes the

---

[19] Luyten and others, *The mentalizing approach,* p.23.
[20] Luyten and others, *The mentalizing approach,* p.23.
[21] J. Harris, *The nurture assumption: why children turn out the way they do* (London: Bloomsbury, 1999).
[22] Kirkpatrick, Attachment Theory and Religious Experience, p.461.
[23] Granqvist, *Attachment in Religion,* p.5.
[24] Kirkpatrick, *Attachment, Evolution,* pp.338-339.
[25] Kirkpatrick, *Attachment, Evolution,* pp.253-258.
[26] Kirkpatrick, *Attachment, Evolution,* pp.274-275.
[27] Kirkpatrick, 'Attachment Theory and', p.240.
[28] Granqvist, *Attachment in Religion,* pp.5-6.

way in which so-called 'religious subcultures'[29], such as Christians' belief in the Trinity, influence with which religious figures children may develop perceived attachments as they grow into adulthood. Granqvist[30] has recently hypothesised that correspondence pathways have two elements: an individual's 'psychological biases' towards secure or insecure attachments (so-called Internal Working Model correspondence); and social learning ('socialized correspondence'). The term 'social learning' refers to an individual learning vicariously by observing others[31]. Religion, according to Granqvist[32], may be an example of culture transmitted through social learning processes that are constrained by psychological biases. If a primary caregiver talks about the Trinity, this cultural knowledge is more likely to be learned by a child who is securely attached since the caregiver is the child's role model. The same cultural knowledge may be perceived less favourably by a child for whom his caregiver is not a secure, loving role model. To clarify his latest ideas, Granqvist calls for further research[33]. However, from a theistic perspective simply treating religious concepts as examples of culture marginalises Christian belief in God's agency. In a similar manner to some cognitive theories that understand religion as an example of culture (Chapter Four), if attachment solely facilitates the cultural transmission of Trinitarian knowledge, the significance of individuals' perceived attachments with an agentive God may be overlooked.

God as 'Concept' or 'Image'.

The literature about attachment primarily focuses on a generalised notion of 'god'. The work of Granqvist[34] and Kirkpatrick[35] does not engage in detailed theological considerations[36]. Granqvist for instance comments that the term 'god' might be filled by 'other religious figures'[37], and so may be interchangeable with the terms 'Father' or 'Jesus', thereby disregarding

[29] Granqvist, *Attachment in Religion,* p.81.
[30] Granqvist, Attachment, culture, p.105.
[31] Hood, *The Psychology of*, p.111.
[32] Granqvist, Attachment, culture, pp.103-105.
[33] Granqvist, Attachment, culture, p.107.
[34] Granqvist *Attachment in Religion.*
[35] Kirkpatrick, *Attachment, Evolution.*
[36] Miner, Back to the basics, p.113.
[37] Granqvist, *Attachment in Religion,* p.351.

theological distinctions such as Fathership, Sonship and eternal generation that were discussed in Chapter Two.

However, some attachment-based approaches describe so-called 'god concepts', a term that refers to:

> a person's theological set of beliefs about a specific divine attachment figure's traits; about how that divine attachment figure relates with, thinks about, and feels toward humans (including the self); and about how humans (including the self) should relate with, think about, and feel toward the divine attachment figure[38].

God concepts are theologically correct linguistic and verbal indicators 'that suggest a relationship with God'[39] such as a relationship with God as Trinity. For example, one study considers primary caregiving and suggests that social 'attachment to fathers (but not mothers) predicts attachment to God'[40] which may be 'supported by the view held by Judeo-Christians that God is a 'heavenly father''[41]. Perceived attachments to a god concept might influence Trinitarian hermeneutics. For instance, a sense of attachment to God as Father may contribute to the thoughts of a theologian when reading scripture, influencing how texts are interpreted.

Perceived attachments may form with 'spiritual figures'[42]. One study found that prayer experiences helped to develop a more secure perceived attachment with the Holy Spirit, resulting in improved emotional well-being[43]. The correlation was weaker with God as Father or Son. Another article asserts that 'Jesus is humankind's redemptive secure base and haven, offering believers a sense of safety and confidence that they, too, will overcome death and the

[38] E. Davis, G. Moriarty and J. Mauch, 'God Images and God Concepts: Definitions, Development, and Dynamics', *Psychology of Religion and Spirituality,* 5.1 (2013), pp.51–60 (p.52).
[39] V. Counted, 'Understanding God images and God concepts: Towards a pastoral hermeneutics of the God attachment experience', *Verbum et Ecclesia,* 36.1 (2015), pp.1-14 (p.1).
[40] A. Limke and P. Mayfield, 'Attachment to God: Differentiating the Contributions of Fathers and Mothers Using the Experiences in Parental Relationships Scale', *Journal of Psychology and Theology*, 29.2 (2011), pp.122-129 (p.127).
[41] Limke and Mayfield, 'Attachment to God', p.127.
[42] P Brandt, 'Attachment, psychopathology, and religion: introduction to this special section of Mental Health, Religion, & Culture', *Mental Health, Religion & Culture,* 17.8 (2014), pp.761–765.
[43] N. Monroe and P. Jankowski, 'The Effectiveness of a Prayer Intervention in Promoting Change in Perceived Attachment to God, Positive Affect, and Psychological Distress', *Spirituality in Clinical Practice,* 3.4 (2016), pp.237-249 (p.243).

grave'[44], since our innate capacity for attachment enables constant 're-attachment' to God.

One researcher, Miner, proposes that:

> a Trinitarian conception of God strengthens the Christian understanding of attachment to God in that the Godhead is seen as "self-giving love," which points to the need for altruistic, selfless love in human attachment bonds[45].

Miner concludes that attachment to God may develop from Him being experienced as a secure base from which friendship with Jesus and a more parent-like relationship with the Father may develop[46]. However, Miner focuses on Gunton's (1941-2003) social theology to provide a theological framework for her argument[47]. This is a narrow focus in the context of all other Trinitarian theologies. Gunton's work is not 'common ground' between theologians, and therefore may prompt limited acceptance of Miner's conclusions. More detailed research is needed to assess the extent to which individuals' perceived attachments may (or may not) form in relation to each of the three persons.

There may be an exaggerated link between attachment and God conceptualised as the Trinity. Attachment theory can be 'theologised'. Scripture has been analysed, with results purporting to show how 'the attachment behaviour system … is evident within the biblical story of creation'[48] including attachment with God as Father and Son. However, such an assumption cannot be verified using the methodologies associated with attachment theory and 'attachment' is not a word used in the Bible[49]. Some books suggest a simple connection between faith and attachment, as if the word 'belief' could just be substituted by the term 'attachment' in theological discourse. For example, Christians are taught in the Bible that 'God is our refuge' (Pslam 46.1), and so in a simple flight of thought in the book *Attachment. Why You Believe*[50], Christians are urged to equate God as 'refuge' with Him being an attachment

---

[44] J. Knabb and M Emerson, ''I Will Be Your God and You Will Be My People': Attachment Theory and the Grand Narrative of Scripture', *Pastoral Psychology,* 62 (2013), pp.827-841 (p.837).
[45] Knabb and Emerson, I Will be your God, p.829.
[46] Miner, Back to the basics, p.120.
[47] Miner, Back to the basics, p.116-118.
[48] Knabb and Emerson, I Will Be Your God, p.829.
[49] Biblegateway, 'Attachment', www.biblegateway.com/quicksearch/?search=attachment&version=NIV&searchtype=all [last accessed on 16.02.22].
[50] Clinton and Straub, *God Attachment Why you believe,* pp.88-99.

figure. If attachment theory is more thoroughly applied, it suggests that such 'theologising' is overly simplistic. Research has suggested that the quality of caregiving in childhood is a factor that influences the meaning including religious meaning that individuals find in their lives[51]. A Christian's early attachment experiences may affect perceived attachments with God, for instance someone growing up with a rejecting primary caregiver being more likely to experience God as rejecting[52]. Parents 'preaching and teaching may ultimately fall on deaf ears unless it is combined with placing a high priority on sensitive caregiving'[53]. Whether (or not) someone experiences God as 'a refuge' depends not just on Christian teaching but may primarily depend on the individuals' developmental experiences.

A 'god concept', such as the Trinity, is not necessarily how an individual experiences God[54]. The analytical term 'god image' refers to an individual's: 'experimental, relational, emotional, and sometimes implicit ideas about God'[55]; 'an internal working model of a specific divine attachment figure'[56]. God images are typically automatic responses through which individuals ascribe personal meanings in ways that reflect the individual's 'emotions and personality'[57]. A god image is therefore unlikely to conform strictly to theological notions of God. 'Theologising' attachment theory, as discussed above, overlooks 'god images'.

God images may exist in the human mind alongside god concepts[58]. Christians may hold differentiated beliefs with 'at least two representations of God'[59], perhaps doctrinal (such as the Trinity) and 'what they personally feel that God is like'[60] (god images). Some research suggests that 'intuitions about God as a person [god images] coexist with acquired Christian theology about God and

---

[51] Dewitte, Granqvist and Dezutter, 'Meaning Through Attachment', p.2251-2252.
[52] P. Granqvist and F. Nkara, 'Nature meets nurture in religious and spiritual development', *British Journal of Developmental Psychology,* 35 (2017), pp.142-155 (p.152).
[53] Granqvist, *Attachment in Religion*, p.138.
[54] Counted, 'Understanding God images', p.1.
[55] B. Zarzycka, 'Parental Attachment Styles and Religious and Spiritual Struggle: A Mediating Effect of God Image', *Journal of Family Issues,* 40.5 (2019), pp.575–593 (p.577).
[56] Davis, God Images and God, p.52.
[57] Sharp, One God but, p.101.
[58] C. Sharp, P. Rentfrow and N. Gibson, 'One God but Three Concepts: Complexity in Christians' Representations of God', *Psychology of Religion and Spirituality*, 9.1 (2017), pp.95-105.
[59] B. Zahl and N. Gibson, 'God Representations, Attachment to God, and Satisfaction With Life: A Comparison of Doctrinal and Experiential Representations of God in Christian Young Adults', *The International Journal for the Psychology of Religion,* 22 (2012), pp.216-230 (p.225).
[60] Zahl and Gibson, God Representations, p.225.

are not replaced even with maturation and extensive theological experience'[61], although this may be an over generalisation as for some people change occurs. Another study found that 'God as Father, Jesus and the Holy Spirit have characteristic conceptualisations which can be differentiated based on measures of descriptiveness, self/other overlap, emotions and personality'[62] (i.e. can be differentiated based on god images). The presence for Christians of both 'god concepts' and 'god images' may be consistent with the analysis in Chapter Two of subjective experiences involving the Trinity in which 'theological concept' and 'personal images' were present.

The role of gender in attachment may illustrate differentiation between god concept and god image. God can be understood theologically as both male and female, for example in the Catholic Church[63]. Although Bowlby wrote about women as the main caregivers[64], current attachment theories understand the role of primary caregiver as referring to someone who is a man or a woman, or who may identify as male or female. An individual's gender may not therefore be anticipated to affect attachment theory's application to relationships with God[65]. However, some studies highlight that if God is recognised through theological concepts in Western religions, they are dominated by male imagery[66], perhaps most prominently in the Trinity. Some individuals' perceived attachments with God may therefore rely on god images that are self-referenced to try to understand more clearly His feminine aspects[67].

From an attachment perspective, 'god concepts' may be known, but experience of God is dominated by god images, based on a perceived attachment to.an individual's unique 'internal working model'[68]. The idea that the faithful's

---

[61] M. Barlev, S. Mermelstein and T. German, 'Representational coexistence in the God concept: Core knowledge intuitions of God as a person are not revised by Christian theology despite lifelong experience', *Psychonomic Bulletin & Review,* 25 (2018), pp.2330–2338 (p.2335).
[62] Sharp, 'One God but', p.101.
[63] The Holy See, 'Catechism of the Catholic Church' Paragraph 239 (2003). http://www.vatican.va/archive/ENG0015/__P17.HTM. [last accessed 16.02.22].
[64]J. Bowlby, 'Maternal Care and Mental Health', *Bulletin of the World Health Organization,* 3.3 (1951), pp. 355–533.
[65] D. Bosworth, 'Ancient Prayers and the Psychology of Religion: Deities as Parental Figures', *Journal of Biblical Literature*, 134.4 (2015), pp.681-700, (p.699).
[66] F. Klopper, 'Women, monotheism and the gender of God', *In die Skriflig,* 36.3 (2002), pp.421-438.
[67] D. Reinert and C. Edwards, 'Attachment Theory and Concepts of God. Parent Referencing Versus Self-Referencing', *SAGE OPEN,* October-December (2014), p.7.
[68] Davis, God Images and God, p.52.

perceived relationships with God can be characterized as attachment to god symbols and images has been well established'[69]. God images can be influenced by a variety of personal experiences. Victims of abusive parents whose attachment styles are insecure may, for example, experience the Father as 'mean, distant, harsh or cold'[70]. In one research study 'respondents who assessed their relationship with their parents as avoidant or anxious reported greater strain in their relationships with God'[71] since an image of God as perhaps critical or cruel may mediate early childhood experiences by aligning the god image with the childhood experiences. Another study found in a group of young Christians insecure social attachments predicted subjective representations of God that were experienced less positively than doctrinal representations[72].

In short, perceived attachment with God appears strongly linked with so-called 'god images'. However, if perceived attachments primarily involve god images, theological insights may be marginalised by the dominance of personal interpretations. From a Christian perspective, a focus on god images may be an example of how science including psychology 'has a tendency to examine reality while excluding agency; conversely theology has a tendency to count on some forms of agency beyond the sheer human or social realm—what could be called 'transcendent agency''[73]. A focus on god images risks excluding God's agency which may be recognised in the Trinity. Any theoretical dominance for god images is inconsistent with many of the examples of experiences involving the Trinity that were discussed in Chapter Two. Many of the examples involved recognition of God's agency by making reference to the Trinity alongside personal images, rather than the Trinity being subsumed by personal images of God. A theoretical focus on perceived attachments to internal working models of God (god images) risks overlooking the truth of God's transcendent, agentive presence which Christians recognise in the Trinity.

---

[69] Zarzycka, Parental Attachment Styles, p.575.
[70] C. Kam, 'Integrating Divine Attachment Theory and the Enneagram to Help Clients of Abuse heal in Their Images of Self, Others and God', *Pastoral Psychology,* 67 (2018), pp.341-356 (p.341).
[71] Zarzycka, Parental Attachment Styles, p.587.
[72] Zahl and Gibson, God Representations, p.225.
[73] L. Oviedo, 'Religious Cognition as a Dual-Process: Developing the Model', *Method and Theory in the Study of Religion*, 27.1 (2015), pp.31-58 (p.55).

‘Heuristics’ need developing that enable psychology better to understand the religious mind[74], and so account for experiences involving the Trinity in ways that can consistently respect an authentically Christian relationship with God. One possibility is that by integrating attachment theory, ToM and other psychological approaches, a holistic account might emerge that more accurately describes human mental architecture and so may more reliably describe, from a Christian perspective, how the human mind facilitates experiences involving the Trinity. Such an approach faces challenges. Kirkpatrick proposed that attachment and 'many other equally ‘good ideas’’[75] may together describe the ways in which the human mind has evolved. Based upon these so-called ‘good ideas’, fifteen years ago Kirkpatrick hoped that evolutionary psychology may provide ‘a powerful metatheoretical paradigm for organising all social-scientific research on religion’[76]. However, Kirkpatrick’s ‘good ideas’ were criticised from within evolutionary psychology as speculative and lacking in empirical evidence[77]. Whilst Kirkpatrick has continued to write about attachment[78], evolutionary psychology’s integration of cognitive, attachment and other theories into a ‘powerful metatheoretical paradigm’ remains a work in progress. Granqvist describes an impasse when sharing ideas between fields of psychological study[79], even though theories may in principle be compatible but ‘simply deal with different parts of religion and spirituality’[80]. Granqvist’s work for example has focused on attachment rather than cognitive theories, although he has recently begun to hypothesise a greater role for social learning (discussed earlier in this Chapter). The CSR is interdisciplinary with insights from anthropology and philosophy contributing to the ways in which cognitive psychological processes are understood. Regarding ‘non-cognitive’ psychological approaches, Barrett, for example, has

[74] Oviedo, Religious Cognition as, p53.
[75] Kirkpatrick, Attachment Theory and, p.240.
[76] Kirkpatrick, *Attachment, Evolution*, p.354.
[77] F. Watts, ‘Attachment, Evolution and the Psychology of Religion: A Response on Lee Kirkpatrick’, *Archive for the Psychology of Religion*, 28 (2006), pp.63-69 (p.8).
[78] For example:
S. Pirutinskya , D. Rosmarinb and L. Kirkpatrick, ‘Is Attachment to God a Unique Predictor of Mental Health? Test in a Jewish Sample’, *The International Journal for the Psychology of Religion,* 29.3 (2019), pp.161–171.
J. Jackson and L. Kirkpatrick, ‘The structure and measurement of human mating strategies: toward a multidimensional model of sociosexuality’, *Evolution and Human Behavior,* 28 (2007), pp.382–391.
[79] Granqvist, *Attachment in Religion*, p.285.
[80] Granqvist, *Attachment in Religion*, p.298.

recently acknowledged, albeit in just a few paragraphs, attachment processes that may operate alongside cognitive ones[81]. However, in general the CSR's integration with other psychological perspectives has a way to go[82]. The CSR may perhaps distrust attachment theory because of its psychodynamic origins[83]. One example of dis-integration within the evolutionary psychology of religion may perhaps be found in the recently published *Oxford Handbook of Evolutionary Psychology and Religion*[84] that has chapters about cognitive theories. The book lacks chapters about attachment or mentalization, even though attachment is a well-established approach within the psychology of religion.

Evolutionary psychology may benefit from the wisdom of Trinitarian theology. The mutually dependent relations between the persons of the Trinity, described in Chapter Two, may prompt reflection about more open and mutually dependent relations between people and their theories which are potentially compatible. Mentalization might be a step in that direction.

[81] Barrett and King, 'Thriving with Stone Age', p.64.
[82] J. Barrett, 'Cognitive Science of Religion: Looking Back, Looking Forward', *Journal for the Scientific Study of Religion*, 50.2 (2011), pp.229-239 (pp233-234).
[83] Granqvist, *Attachment in Religion*, p.285.
[84] J. Liddle, and T. Shackelford (eds.), *The Oxford Handbook of Evolutionary Psychology and Religion* (Oxford: Oxford University Press, 2021).

Chapter Six – 'Mentalization' and the Trinity.

This chapter draws upon the work of Fonagy[1] (1952-present) and colleagues. They have little to say about religion, having developed their approach to treat people with personality disorders, but their approach may be transferable[2]. After introducing mentalization and the theories that inform it, the extent to which it may theistically account for experiences involving the Trinity is explored. Mentalization may offer a more holistic account than the cognitive and attachment theories previously considered since it integrates some of them to describe the human mind. Mentalization's proponents describe it as a work in progress. Nonetheless it may offer another step towards understanding the ways in which our evolved mental processes might facilitate Trinitarian experiences.

Introducing Mentalization

The term 'mentalization' refers to:

> the quintessential human capacity to understand the self and others in terms of intentional mental states, such as feelings, desires, wishes, attitudes, and goals. It is a fundamental capacity that enables people to navigate the complex social world they live in[3].

Neuroscience suggests that the human mind may have evolved so that it is 'pre-wired for mentalization'[4]. An ability to mentalize is advantageous since without it humans would be lost in a world of 'ever-changing interpersonal relationships that require a high degree of collaboration and cooperation based on mutual understanding'[5].

The term 'mentalization' was originally used psychodynamically, but two different approaches within psychology have now emerged.

> [The psychodynamic approach] is more clinical in orientation, more focused on meaning and interpretation, and relying primarily on the traditional case study method; the other is more research-oriented,

---

[1] J. Allen and P. Fonagy, *Handbook of Mentalization-Based Treatment,* (Chichester: Wiley, 2006).
Luyten and others, *The mentalizing approach.*
[2] H. Schaap-Jonker & J. Corveleyn, 'Mentalizing and religion: a promising combination for psychology of religion, illustrated by the case of prayer', *Archive for the Psychology of Religion*. 36 (2014), pp.303-322.
[3] Luyten and others, *The mentalizing approach,* p.4.
[4] Luyten and others, *The mentalizing approach,* p.4.
[5] Luyten and others, *The mentalizing approach,* p.4.

> focused on cause-and-effect relationships and relying primarily on methods borrowed from the natural and social sciences[6].

The latter, positivist approach is discussed in this chapter. It understands poor mentalization as a 'deficit'[7] in an individual's capacity to mentalize rather than an unconscious response that may offer meaning through its psychodynamic interpretation. In religious studies one strength in using the positivist approach is the possibility of moving beyond Freud's, and others', psychodynamic rejection of theism (Chapter One). The positivist approach to mentalization may be a model of the mind that considers with less prejudice how religious experiences occur, particularly if mentalization is combined with insights from theology and religious studies. Being a positivist approach, mentalization might seem incompatible with studying a transcendent God who is beyond human knowing. However, as discussed in Chapter One, theistic belief in God as Trinity and evolutionary psychology may in principle be compatible. God's presence may be recognised by individuals in the Trinity, which this dissertation hypothesises may be a process facilitated by mentalization.

Since it integrates some of the theories previously considered, such as attachment and ToM, mentalization challenges some of the reductionist tendencies within evolutionary psychology which were discussed at the end of the last chapter. Mentalization might be criticised for metaphorically putting old wine, such as attachment theory, in new bottles. Mentalization may be 'too broad and multifaceted, with too much overlap with related constructs'[8]. Nonetheless, the blending of 'old wines' has resulted in a distinctive and increasingly respected approach with more than 4000 published articles[9].

This dissertation proposes that mentalizing a relationship with God may be a 'by-product' of individuals' capacity for social mentalization. Christians might object to the notion that God's 'mind' can be mentalized. Scripture states that 'no-one knows the thoughts of God except the Spirit of God' (1 Corinthians 2.10-12). However, mentalization does not assume that the mental states of

---

[6] P. Luyten, S. Blatt, and J. Corveleyn, 'Minding the Gap Between Positivism and Hermeneutics in Psychoanalytic Research', *Journal of the American Psychoanalytic Association* 54.2 (2006), pp.571-610 (p.571).
[7] J. Holmes, 'Mentalizing From A Psychoanalytic Perspective: What's New?', in *Handbook of Mentalization-Based Treatment* ed. by J. Allen and P. Fonagy (Chichester: John Wiley and Sons Ltd, 2006), pp.31-50 (p.46).
[8] Schaap-Jonker & Corveleyn, Mentalizing and religion, p.309.
[9] P. Luyten and P. Fonagy, 'The Neurobiology of Mentalizing' *Personality Disorders: Theory, Research and Treatment* 6.4 (2015) pp.366-379 (p.366).

self or others can be known. Mentalization is about an individual's beliefs about intentional mental states which are based upon inferences made by the mentalizing mind.

Religiosity may correlate positively with so-called 'mind perception' (the ability to perceive and 'read' mental states)[10] but mentalization as presented by Fonagy and colleagues has only been applied to the study of Christianity 'to a limited extent'[11]. In the relatively small amount of research so far, neurological studies have shown similarities in brain activity between Christian prayer and 'human with human' social interaction, suggesting the possibility that mentalizing with another human and mentalizing believed to be with God perhaps utilise similar areas of the brain[12]. Mentalization has been identified in one PhD dissertation as an approach 'grounded in ongoing empirical and neuroscience research projects'[13] with so far little consideration of Christianity, even though mentalization may be concordant with pastoral theology, offering new methods and insights[14]. Other articles about mentalization and Christianity are discussed in the remainder of the chapter, but overall a comparatively small number of studies have so far occurred.

In the absence of more research, this chapter is in places conjectural and so might be criticised for lacking empirical evidence. Nonetheless, this chapter aims to explore possible ways in which mentalization may offer a step forward in the evolutionary psychology of religion. One of mentalization's potential strengths is its more open-minded, transtheoretical approach when compared to some other theories, so that mentalization could perhaps be receptive to research about religion. For example Baron-Cohen's research about ToM is referenced in texts about mentalization[15]. His ideas about ToM facilitating religious belief (Chapter Four) might be integrated into mentalization too, as discussed later in this chapter.

---

[10] W. Gervais, 'Perceiving minds and gods: How mind perception enables, constrains, and is triggered by belief in gods', *Perspectives on Psychological Science*, 8.4 (2013), pp.380-394 (p.387).
[11] Schaap-Jonker & Corveleyn, Mentalizing and religion, p.303.
[12] Schaap-Jonker & Corveleyn, Mentalizing and religion, p.311-312.
[13] A. Kreiselmaier, *An Evolutionary and Developmental Science Framework for Integrating Attachment, Mentalization, and Mindfulness: Implications for Religious Practice and Moral Development (*PhD Dissertation Submitted to the Faculty of the Graduate School of Vanderbilt University, 2017), p.324.
[14] Kreiselmaier, *An Evolutionary and,* pp.319-320.
[15] Fonagy and others, *Affect Regulation, Mentalization*, pp.483-484.

Agency Detection

When socialising with other people, mentalization describes people as having a 'social detection system' which is cognitive and carries out 'basic perceptual processes on social stimuli'[16] for example a patient and therapist 'detecting' each other's body language. Mental health, not religion, has been the focus of research about mentalization. The ways in which supernatural agency may be detected is not a focus of clinical literature. Hypothetically, if mentalization is to be used in the study of religion, HADD might perhaps be explored as part of the mentalizing mind alongside a social detection system. HADD might provide the mentalizing mind with information about a possible transcendent or supernatural presence. Further research is however needed.

Intersubjectivity and culture

Once a supernatural presence may have been detected, this chapter considers the ways in which the mentalizing mind might respond. Mentalization proposes that human relationships are experienced as being 'intersubjective'[17], a term in mentalization theory that refers to the subjective relationships between individuals when each is mentalizing, and so interpreting the mental state of self and the other[18]. Theologically, one view is that 'what is fundamental about 'body'… is the capacity for intersubjectivity relationality, entailing intersubjective recognition, intersubjective identity and intersubjective communication'[19]. When God relates with humans, He presumably needs to reveal Himself in intersubjective ways that humans can comprehend. For example, the 'intersubjective existence animated and characterised by the agency and sanctifying action of the Holy Spirit'[20] might intersubjectively engage with human minds. Hypothetically, the mentalizing mind may respond intersubjectively to God's agency as a by-product of the mind's capacity for social mentalization.

---

[16] P. Fonagy, 'The Mentalization-Focused Approach To Social Development', in *Handbook of Mentalization-Based Treatment,* ed. by J. Allen and P. Fonagy (Chichester: John Wiley and Sons Ltd, 2006), pp.53-100 (p.57).
[17] Schaap-Jonker & Corveleyn, Mentalizing and religion, p.304.
[18] Allen, Mentalizing in Practice, pp.7-8.
[19] Thiselton, *The Hermeneutics of*, p.578.
[20] Thiselton, *The Hermeneutics of*, p.564.

For some theologians, 'the divine persons are increasingly depicted as engaged in intersubjective relations… with one another'[21]. However, asserting that the divine persons relate intersubjectively with each other likely entails a revision to traditional descriptions of the unity of God. Instead of monotheistic faith in God, an intersubjective relationship between Father, Son and Holy Spirit could be understood as tri-theistic, as three gods intersubjectively relating. Although the human mind may relate with others and self intersubjectively, this does not mean that God's internal dynamics are necessarily intersubjective. Human psychology and the divine nature are not the same and anthropomorphically attributing human psychological traits to the Trinity in an unqualified way changes the Nicene Trinity in which most Christians believe.

Intersubjective social interaction, according to mentalization theory, facilitates the transmission of culture between individuals. Fonagy and colleagues propose that humans are 'equipped to acquire knowledge shared by a community (culture) very rapidly'[22]. As discussed in previous chapters, from a theistic perspective 'religion' is more than just culture. However, focusing for now on the cultural aspects of 'religion', mentalization proposes that the transmission of culture occurs because 'the most important aspect of human culture concerns human subjectivity, which… is not a culturally invariant absolute but a social construct shaped by the social experiences of infancy'[23]. Fonagy proposes that:

> attachment to the caregiver may be important precisely because, through sensitivity and the contingent interaction that are the markers of caregiving behavior, … a sense of epistemic trust is created in the child. Feeling securely attached to a particular adult also tells the child that the information relayed by that person may be trusted and learned[24].

Transmission of religious doctrines, such as the Trinity, may therefore be influenced by childhood experiences. The more that a child trusts a primary caregiver, the more knowledge about the Trinity shared by the caregiver may also be trusted. As the child then grows older, he or she interacts with self and others intersubjectively using knowledge, such as Trinitarian theology, that will

[21] J. Bracken, 'Relationality and Intersubjectivity within a Socially Oriented Metaphysics: A Note on Ecclesiology', *Theological Studies,* 80.2 (2019), pp.436–448 (p.436).
[22] Luyten and others, *The mentalizing approach*, p.7.
[23] P. Fonagy, 'Mutual Regulation, Mentalization, and Therapeutic Action: A Reflection on the Contributions of Ed Tronick to Developmental and Psychotherapeutic Thinking', *Psychoanalytic Inquiry,* 35 (2015), pp.355–369 (p.363).
[24] Fonagy, Mutual Regulation Mentalization, pp.363-364.

develop new personal meanings through the interactions. For example, early Christians' knowledge of traditional Jewish beliefs learned in infancy may have morphed into Christianity partly through intersubjective exchanges with others about the 'new view of God'.

Recently Granqvist[25] proposed that attachment processes might transmit culture including religion (Chapter Five), so that the doctrine of the Trinity and other aspects of religion are cultural phenomena. Fonagy is cited in Granqvist's article as having reviewed its drafts, and so it might be inferred that Fonagy and colleagues, like Granqvist, understand religion and its experiences to be a cultural universal. However, understanding religion as an example of 'culture' may be another instance of positivist psychology examining its 'reality while excluding agency'. From a Christian perspective, as discussed in the last two chapters, cultural knowledge of the Trinity on its own gives a limited experience of God. The remainder of this chapter explores an alternative view that human mentalization might facilitate intersubjective relationships with God whose agency is theistically recognised in human lives from the Trinity. Mentalization is considered in two stages: the role of early life experiences; and Fonagy and colleagues' neurological model.

Early Life Development, Mentalization and Religious Experience.

Attachment theory, as presented in Chapter Five, has been described as reductionist by Fonagy[26]. It does not adequately account for key parts of the mentalizing system, such as ToM, and primarily focuses on the development in infancy of different attachment styles. Whilst mentalization theory does not dispute that 'secure' and 'insecure' attachments develop, according to Fonagy attachment's primary purpose is more accurately understood as ensuring 'that the brain processes that serve social cognition are appropriately organised and prepared to enable us to live and work with other people'[27]. Some other research contradicts this, for example finding 'no relation between attachment security and children's ToM performance'[28]. However, proponents of mentalization disagree, proposing that:

[25] Granqvist, Attachment culture, pp.103-105.
[26] Fonagy, Mutual Regulation Mentalization, pp.357-359.
[27] Fonagy, Mutual Regulation Mentalization.', p.359.
[28] E. Meins, and others, 'Maternal Mind-Mindedness and Attachment Security as Predictors of ToM Understanding', *Child Development*, 73.6 (2002), pp.1715-1726 (p.1722).

> the capacity for mentalizing is not a constitutional given but is largely a developmental achievement that depends initially on the quality of the individual's attachment relationships, in particular early attachments during infancy [29].

The so-called 'Social Biofeedback Model'[30] developed by Gergely has been incorporated into mentalization. In summary, it proposes that infants learn through social interaction that others have minds. Babies learn 'from the outside in' as primary caregivers instinctively respond to cues from their infant through so-called 'mirroring displays', such as facial or oral responses, showing the child that they are attuned with his or her internal mental states. Through so-called 'mirroring' displays, the infant's 'feelings become recognisable; they do not have to be acted out'[31] by the infant.

> The extent to which attachment figures have been able to respond with contingent and marked affective displays of their own experience in response to the infant's subjective experience is thought to be positively associated with the child's ability to develop mentalizing capacities, that is, second-order representations of his or her own subjective experiences[32].

Good mentalizing relies upon the second-order, cognitive representations of feelings and experiences. When feelings and experiences occur, they are mentalized and the second-order representations developed in infancy may be used to make intersubjective responses to self and others, thereby avoiding the need to act out the raw feeling or experience in a baby-like way. Gergely's theory has been criticised, and alternatives proposed. Kohut's psychodynamic theory, for example, proposes that 'mirroring' develops from 'the inside out'[33] when a baby's initial feeling of omnipotence is re-formed by mirroring the caregiver. However, the role of 'mirroring' in infancy from 'the outside in' remains central to mentalization.

An intuitive leap might then be to compare caregiver to child 'mirroring' with experiences of God whom Christians seek to mirror. Scripture for instance refers to the 'Face of God' (His countenance). One perspective is that if humans 'form one another's identities by the act of mutual mirroring, mutual

---

[29] Luyten and Fonagy, The Neurobiology of Mentalizing, p.367.
[30] Fonagy and others, *Affect Regulation, Mentalization*, pp.145-202.
[31] Holmes, 'Mentalizing From', p.81.
[32] Luyten and Fonagy, The Neurobiology of Mentalizing, p.367.
[33] H. Kohut, *The analysis of the self: A systematic approach to the psychoanalytic treatment of narcissistic personality disorders.* (New York, NY: International UP, 1971).

regard'[34], in relation to God they may mirror the 'foundational myth' which is the Trinity so that:

> to live out the mystery of the Trinity leads not to an introverted spirituality but to a mirroring of this divine love in social responsibility and in the building of community[35].

However, there are limits to the extent to which 'mirroring' God as Trinity is possible. Christians do not literally see God's countenance in the same manner as a child mirroring a caregiver's responses. Indeed, Christians are warned by God in Exodus 33:20.23 that 'You cannot see My face, for no-one may see Me and live'. Any comparisons between childhood experiences of 'mirroring' that influence the subsequent capacity to mentalize, and 'mirroring' God as if He is a human caregiver are too literal. Rather, early childhood experiences might result in second-order representations of different feelings or experiences. If similar feelings or experiences are evoked by God's presence, hypothetically, mentalized responses to Him may be based on the second-order representations developed in infancy. Although there is no way retrospectively to know the childhood experiences of those contributing to the Archive (Chapter Two), individuals' second-order representations of particular feelings might have influenced the ways in which God's presence was experienced. For example in 'Archive i)', a widow describes feeling 'some inner peace', an experience which she may perhaps recognise from a second-order representation. However, God's presence may at times be felt or experienced as unlike any prior event, and so feel overwhelming, as an individual may have no 'secondary representation' that matches God's presence. The Trinity might then be used to try to cognitively make sense of the experience, perhaps being used cognitively to regulate emotions, a process discussed in more detail later in the chapter.

The neurological processes that might facilitate recognition of God's presence in the Trinity are now considered in more detail.

Neurological structures

Fonagy and colleagues propose a neurological model of the mentalizing mind that they describe as an 'approximation that will undergo major changes in the

[34] B. Popoveniuc, 'Transecumenical Filioque', *Journal for the Study of Religions and Ideologies*, 18.52 (2019), pp.31-47 (p.40).
[35] D. Marmion, 'Trinity and Relationships', *The Way,* 43.2 (2004), pp.104-118 (p.109).

future'[36]. Nonetheless it may be a good enough model from which to begin to understand how the brain mentalizes. The model describes four so-called 'polarities', each corresponding to neural systems (or 'circuits')[37]. Their development in early childhood, which is unique to each person, primarily 'depends on the quality of attachment relationships'[38], since those relationships shape how an individual develops the use of each neural system. Other factors such as trauma to the brain might also be influential, causing deficits in neural functioning.

The four polarities

Mentalization is:

> all about the balance between the systems underlying the four polarities and *potential imbalances* (e.g. being overly sensitive to the emotional states of others at the expense of reflective awareness of one's own state of mind). Good mentalizing thus balances the various systems that are responsible for being aware of how one feels oneself, what one thinks and what others feel and think[39].

The 'four polarities', or neural systems, are described by Fonagy and colleagues as follows.

1.'Self-versus-others', which are connected to each other developmentally (i.e. poorly developed capacity to mentalize self is linked to limited capacity to mentalize others)[40]. Neuroimaging studies may have identified the involvement of a core network of neural systems including the medial prefrontal cortex and temporal poles. The self-reflective system may include:

> a more implicit, visceral, bodily based, frontoparietal mirror-neuron system without the need for high-level cognitive processing, based on a similarity of neural activation while experiencing, and observing others experiencing, states of mind[41].

The so-called 'mirror-neuron system' may have evolved to facilitate aspects of 'mirroring' described by the Social Biofeedback Model.

[36] Luyten and Fonagy, The Neurobiology of Mentalizing, p.376.
[37] Luyten and others, *The mentalizing approach,* pp.7-11.
Luyten and Fonagy, The Neurobiology of Mentalizing, p.368.
[38] Luyten and Fonagy, The Neurobiology of Mentalizing, p.367.
[39] Luyten and Fonagy, The Neurobiology of Mentalizing, p.368.
[40] Luyten and Fonagy, The Neurobiology of Mentalizing, pp.371-372.
[41] Luyten and others, *The mentalizing approach,* p9.

2.Cognitive (rational) and affective (emotional) aspects of mentalization are hypothesised to lie on separate, interacting neural pathways[42].

> Cognitively orientated mentalizing recruits several areas in the pre-frontal cortex whereas the VMPFC [ventromedial prefrontal cortex] appears to play a key role in affectively oriented mentalizing[43].

3.'Implicit-automatic versus explicit-controlled'. Implicit mentalization is 'perceived, nonconscious, nonverbal and non-reflective'[44]. It may involve the dorsal anterior cingulate cortex and the lateral temporal cortex. Explicit mentalization is typically interpreted, reflective, conscious and verbal. It involves:

> the lateral prefrontal cortex, medial prefrontal cortex, lateral parietal cortex, medial parietal cortex, medial temporal lobe, and rostral anterior cingulate cortex[45].

4.'Internally or externally focused'. A focus on 'mental interiors' means directly considering thoughts, feelings and experiences whereas external features are a more immediate experience of someone or something[46].

> Relatively speaking, mentalizing based on external features of self and others (such as facial expressions, posture, and prosody) tends to recruit a lateral frontotemporoparietal network… Mentalization focused on internal features (which requires the intention to represent the internal mental states of self and others), on the other hand, activates a medial frontoparietal network[47].

'Neurotheology' has developed in recent decades premised on the notion that as humanity's understanding of the brain's structures and mechanisms grows, 'so the origins of religious experiences and ritual behaviour will be revealed'[48]. Neuroscience might have identified brain lobes active during mystical and other experiences that are believed to be religious[49]. There may be similarities in human brain activity during these experiences, and during mentalization, since 'an essential dimension of religious experience involves social–relational

---

[42] Luyten and Fonagy, The Neurobiology of Mentalizing, p.372.
[43] Luyten and others, *The mentalizing approach,* p10.
[44] Luyten and Fonagy, The Neurobiology of Mentalizing, pp.370-371.
[45] Luyten and Fonagy, The Neurobiology of Mentalizing, p.370.
[46] Luyten and Fonagy, The Neurobiology of Mentalizing, p.370.
[47] Luyten and Fonagy, The Neurobiology of Mentalizing, p.370.
[48] G. Chryssides and R. Greaves, 'Methodology in Religious Studies', in *The Study of Religion An introduction to key ideas and methods, 2nd Edition,* ed. by G. Chryssides and R. Geaves (London: Bloomsbury, 2014), pp.39-66 (p.60).
[49] P. Fenwick, 'The Neurophysiology of Religious Experience', in *Psychosis and Spirituality. Consolidating the New Paradigm Second Edition,* ed. by I. Clarke (Chichester: Wiley-Blackwell, 2010), p.17.

cognition'[50] For example, while reading the 23rd Psalm, participants in one study reported a religious experiential state and at the same time activity in their pre-frontal cortex increased[51], an area of the brain also associated with several of the neural pathways involved in mentalization. Brain scans have shown increased activity in lobes associated with reflective functioning (mentalizing) when reciting the Lord's Prayer[52] using the language of Fathership and Sonship. Other research found that brain activity in the right temporal lobe with a large frontal and thalamic component[53], and in frontal and parietal lobes[54] is possibly linked to religious experience. Similar brain activity in the neurological structure of mentalization is linked with cognitive and explicit mentalizing. The similarities in brain activity during experiences that are believed to be religious and during mentalization may not be surprising since religious experience 'is an essentially cognitive phenomenon, for which thoughts and beliefs play a major role'[55]. Comparing research in neurotheology and mentalization may perhaps begin to show which areas of the mentalizing mind respond if a supernatural, perhaps divine, presence is sensed.

However, the results of neurotheology for now may not be reliable. They are inconsistent and diversity in approaches make cross-validation difficult[56]. The field of neuro-theology is in its infancy and may suffer from: the over generalisation of research results from one group of people to others; inconsistently defined terms such as 'religious experience' and 'mystic'; the oversimplification of complex theological beliefs; and a loss of objectivity if research is undertaken from a particular religious or non-religious perspective[57]. Neurology can only begin to provide a causal account of the ways in which religious experience is linked to types of neurological activity[58]. For example, neurological activity whilst praying to the Father may be a

---

[50] N. Azari, J. Missimer and R. Seitz, 'Religious Experience and Emotion: Evidence for Distinctive Cognitive Neural Patterns', *International Journal for the Psychology of Religion,* 15.4 (2005), pp.263–281 (p.263).
[51] N. Azari, and others 'Neural correlates of religious experience', *European Journal of Neuroscience,* 13 (2001), pp.1649-1652.
[52] Schaap-Jonker & Corveleyn, Mentalizing and religion, p.311-312.
[53] Fenwick, The Neurophysiology of, p.17.
[54] Azari and others, Neural correlates of, pp.649-652.
[55] Azari, Missimer and Seitz, Religious Experience and Emotion, p.276.
[56] B. Spilka and K. Ladd, *The Psychology of Prayer A Scientific Approach* (New York: The Guilford Press, 2013), p.33.
[57] M. Weke, 'Searching for Neurobiological Foundations of Faith and Religion', *Studia Humana,* 5.4 (2016), pp.57-63 (pp.61-62).
[58] Hood and others, *The Psychology of Religion*, p66.

mentalized response to divine agency or a social response to another individual who is praying or who wrote the prayer. A neurological scan may not distinguish between these possible causes of the brain activity. 'Perhaps the enthusiasm to construct a principled system that seeks to integrate neurology and theology for the benefit of humankind is a noble but premature effort'[59]. Understanding neurologically the ways in which the mentalizing mind may respond to God's agency may need to await further developments in neurotheology.

Nonetheless, mentalization's four 'neurological structures' may provide a framework for hypothesising about ways in which experiences believed to involve the Trinity might be facilitated. In response to social stimuli, such as hearing another speak, the various neural systems of the mentalizing mind respond. If supernatural or divine agency is another stimulus, perhaps detected by a HADD, this dissertation suggests that a by-product of social mentalization might be attempts to mentalize the supernatural presence. Mentalization is proposed as a heuristic that explains subjective (i.e. intersubjective) experience whilst acknowledging agency including experiences believed to involve the Trinity.

'Self-versus-others'

Theologically, God is not part of the psychological 'self' but is 'other', as discussed in Chapter Four. For Christians, to experience an intersubjective relationship with God is therefore to relate with the divine truth which Christians recognise in the Trinity. Individuals' mentalizing minds that have evolved little since the Stone Age may use the Trinity, and other theological insights, to try to bridge the gap between the human mind and the otherness of God.

The mentalizing system as a whole contributes to the ways in which an individual's self-concept, self-image and other aspects of self are mentalized by the neural pathway associated with self. So-called 'mindfulness' (the capacity to be aware of and to attend to one's own internal mental states) is a 'core feature of mentalizing the self' [60]. Our awareness of self begins in infancy during 'mirroring displays' which were discussed earlier in the chapter. Later in

[59] Eames, 'Cognitive Psychology of', p.27.
[60] Luyten and others, *The mentalizing approach,* p.11.

life the psychological self may also be influenced from the 'outside in'. When Christians believe that they experience God's presence from 'the outside in', the event may influence their self-concept. For example, through his conversion to Christ, Paul appears to have experienced a new self-concept that included his conversion to the Church (Chapter Two). In the mentalizing mind this new self-concept may hypothetically have been formed by the neural circuit associated with self, using input from cognitive, affective and other neural circuits that mediate the content and meaning of an external event, which for Paul was 'a light from Heaven' (Acts 9.3).

Cognitive mentalizing.

Neurotheology, insofar as it is able, suggests that those areas of the brain involved in cognitive processes may also be involved in facilitating experiences that are believed to be religious.

> Mentalizing clearly involves cognitive features, including the capacity for perspective-taking (being able to see that others may have a different perspective) and belief-desire reasoning (the capacity to explain and predict another's behavior on the basis of understanding their desires and beliefs)[61].

'Perspective-taking' and 'belief-desire reasoning' are facilitated by ToM. It was considered in Chapter Four and is one cognitive feature of mentalization. In the mentalizing mind, ToM is part of the mentalizing network so that cognitive inferences made using ToM are influenced by input from the other neural circuits. When ToM is involved in mentalization, an individual is 'perspective-taking', and so with good mentalizing may be aware that God has a different perspective to the individual. Whilst terms such as 'belief' and 'desire' are creaturely words, Christians may use theologies of the Trinity and divine providence to mentalize, including using them with ToM to make inferences about God's providence and agency. Inferences may be made by Christians about their relationships with others, for instance using Trinitarian theology to make inferences about the wisdom of non-Christian religions as *vestigia Trinitas* (Chapter Two).

If the purpose of communication is to change or confirm the knowledge state of another, the communicator needs to use ToM to consider how the recipient will

[61] Luyten and others, *The mentalizing approach,* p.10.

receive the communication (Chapter Four). When the meaning of words is mentalized using ToM, communication becomes intersubjective, 'a social act that people perform together' and so not just 'a behavioural sign indicating the states and attitudes of the speaker'[62]. For example, a mother soothing a child conveys meaning intersubjectively through words and intonation[63], mentalizing how her words may convey meaning to her infant. The language of the Trinity may similarly be mentalized using ToM. Christians may cognitively infer the meaning of Trinitarian language based upon their theological knowledge as well as their experiences, feelings and other input from the mentalizing system. The mentalization of Trinitarian language may affect the personal meaning for a Christian of experiences believed to involve the Trinity about which the individual may reflect (explicit-controlled mentalization) using Trinitarian language.

Mentalization proposes another purpose for cognition: regulation of an individual's emotional responses. This may be advantageous from an evolutionary perspective since heightened emotional responses can unbalance the mentalizing system and overwhelm our minds. In mentalization, 'regulation' entails 'revaluing and not simply modulating emotions'[64]. 'Regulation means grappling with the elusiveness of our affects and the difficulty of understanding their meaning'[65]. For example, an individual may fear God, perceiving Him as vengeful or harsh. The fears might be cognitively regulated by 'prophetic and redemptive concepts of God that see God as a shepherd, servant, wise fool or paraclete'[66], a process that may be facilitated by the mentalizing mind.

So-called 'inhibitory controls' are one example of cognitive regulation. These controls first develop in early childhood and are 'necessary for the child to suppress the pre-potent assumption that everyone else shares the same knowledge and beliefs'[67]. In adulthood, 'good mentalizing' balances feelings, for example sadness, with thoughts that 'inhibit' those feelings. A feeling of

---

[62] R. Moran, 'Speech, Intersubjectivity, and Social Acts', in *The Exchange of Words: Speech, Testimony, and Intersubjectivity,* by R. Moran (ed.) (Oxford, Oxford University Press, 2018), pp.1-35 (p.1).
[63] Fonagy and others, *Affect Regulation, Mentalization*, p.49.
[64] L. Lewis, 'Enhancing Mentalizing Capacity Through Dialectical Behavior Therapy Skills Training And Positive Psychology', in *Handbook of Mentalization-Based Treatment,* ed. by J. Allen and P. Fonagy (Chichester: John Wiley and Sons Ltd, 2006), pp.171-182 (p.172).
[65] Fonagy and others, *Affect Regulation, Mentalization*, p.87.
[66] Counted, Understanding God images, p.12.
[67] Fonagy, 'The Mentalization-focused Approach, p.59.

sadness and insecurity may for a Christian perhaps be 'inhibited' by knowledge of the Trinity's loving presence. A Christian's mentalizing mind may use thoughts about the Trinity to 'inhibit' lustful feelings or the erotic materialism described by Williams, or to embrace feelings of desire in ways variously described by theologians such as Coakley, Millbank and Tonstad (Chapter Two).

'Belief attribution' is another form of 'cognitive regulation'. It involves 'reasoning about false beliefs or making judgements about someone's knowledge or ignorance'[68]. Within the mentalizing system, ToM responses are hypothesised to regulate emotional responses to falsehoods by detecting and evaluating them, and so enabling the proportionality of any emotional response to be evaluated too. ToM inferences based upon the Nicene Trinity may regulate Christians' responses to falsehoods. The Nicene Trinity describes God, and so for Christians may be used to regulate emotional responses to alluring idols that ToM infers to be false. In one study when children in a Catholic school were asked about the thoughts and behaviours of a human, a dog, a robot and God, imaginative responses were attributed to the first three agents[69]. The children's insights into the ways that God might respond in certain circumstances were far more closely matched to theological knowledge. One interpretation of these results might suggest that at least in the school setting, the children's knowledge of the Trinity was regulating their emotions and imaginations, giving them to some extent new expectations about God that enabled them to infer that their imaginative thoughts and feelings about God were incomplete.

The role of cognitive mentalizing (ToM and emotional regulation) may perhaps be illustrated by re-considering disputes about the Trinity in the fourth century Church. Hypothetically, its leaders might have mentalized the intersubjective meaning of language using ToM in their hermeneutics, whilst also perhaps cognitively 'regulating' hostile human feelings towards other leaders with different views. On occasion their regulation of emotions might have been

[68] Fonagy, The Mentalization-focused Approach, p.59.
[69] C. Di Dio and others, 'Growing Up Thinking of God's Beliefs: Theory of Mind and Ontological Knowledge', *SAGE Open* October-December (2018), pp.1–14.

overwhelmed, perhaps leading to dysregulated acts such as brutal or tyrannical behaviour which was discussed in Chapter Two.

In summary, cognitive mentalizing (ToM and emotional regulation) is a vital part of the mentalizing mind. Mentalization might offer a heuristic that accounts for the subjectivity of Trinitarian and other experiences whilst cognitively using the Trinity and its language to keep in mind God's agency.

Affective mentalizing.

Affective features of mentalizing ground 'mentalizing in an affectively felt reality'[70], especially feelings of empathy.

> Empathy is the ability to recognize another's thoughts and feelings, and to respond to these with an appropriate emotion. Cognitive empathy is synonymous with theory of mind or 'mind-reading', the ability to place oneself in another person's shoes… Affective empathy is the drive to respond to another person's mental states with an appropriate emotion[71].

Using affective mentalizing, Christians may empathise emotionally with the reportedly huge physical pain of crucifixion, not because they have been nailed to a cross, but due to physical pain being a shared human experience that empathically for Christians adds meaning to Sonship. Empathy based upon cognitive perspective-taking involves ToM and can infer feelings unfamiliar to the empath. It might for example infer the feelings experienced by someone being crucified that are not emotions familiar to the empath.

Christians might try to empathise with the Father or the Son. In one study greater capacity for 'empathy was associated with higher declared religiosity'[72]. However, an individual empathising with a supreme deity who is incorporeal is problematic. Whether God has emotions is disputed among theologians. One theological response is a doctrine of 'strong passibility'[73] (strong emotion) that, in summary, points to scripture showing the ways in which God reveals Himself through His emotions, for example displaying love or wrath. However, there is

---

[70] Luyten and others, *The mentalizing approach,* p.10.
[71] D. Greenberg and others, 'Elevated empathy in adults following childhood trauma', *PLuSONE,* 13.10 (2018), pp.1-13 (p.2).
[72] P. Łowicki and M. Zajenkowski, 'No empathy for people nor for God: The relationship between the Dark Triad, religiosity and empathy', *Personality and Individual Differences,* 115 (2017), pp.169–173 (p.171).
[73] T. Oord, 'Strong Passibility', in *Divine Impassibility Four Views of God's Emotions and Suffering,* ed. by R. Matz and A. Thornhill (Downers Grove, Illinois: Inter-Varsity Press, 2019), pp.129-151.

also a powerful doctrinal tradition of 'strong impassibility' which 'maintains that God is without passions. He neither undergoes affective change nor feels the actions of creatures on Himself'[74]. Although God is in scripture described as having emotions, such as anger, 'all passion language is anthropopathic'[75]. Empathy when mentalizing a relationship with God is therefore problematic since He is not believed to have the emotions to which affective human mentalizing responds.

In keeping with an approach based on methodological agnosticism, this dissertation does not judge the theologies of passibility, but strong impassibility is the longest established and dominant view within Christianity, which mentalization needs to address if it is to account for experiences involving the Trinity. In Chapter Two eternal generation is described as showing the never-ending cycle of divine love between the Father and Son. As a proxy for God's love, seemingly selfless actions by other people, such as the love of a caring parent, may be known to an individual. The proxy might be thought of as offering glimpses of selfless love that might approximate to divine love. Any experience mentalized using a proxy for God's love might use ToM to make cognitively empathic make inferences about divine love.

'Implicit-automatic versus explicit-controlled mentalization'.

Explicit-controlled mentalization is typically 'interpreted, conscious, verbal and reflective'. Implicit-automatic mentalization is 'largely automatic'[76]. In the last chapter 'god concept', such as the Trinity, and 'god image' were binarily associated with explicit-controlled and implicit-automatic mental processes. However, mentalization involves not just a binary (implicit verses explicit) but includes other neural pathways that may contribute to good mentalizing. 'Recent social neuroscientific evidence indicates that implicit and explicit inferences on the mind of another person (i.e., intentions, attributions or traits) are subserved by a shared mentalizing network'[77].

[74] J. Dolezal, 'Strong Impassibility', in *Divine Impassibility Four Views of God's Emotions and Suffering,* ed. by R. Matz and A. Thornhill (Downers Grove, Illinois: Inter-Varsity Press, 2019), pp.13-52 (p.13).
[75] R. Matz and A. Thornhill, 'Introduction' in *Divine Impassibility Four Views of God's Emotions and Suffering,* ed. by R. Matz and A. Thornhill (Downers Grove, Illinois: Inter-Varsity Press, 2019), pp.1-12 (p.4).
[76] Luyten and Fonagy, The Neurobiology of Mentalizing, p.369-370.
[77] F. Van Overwalle and M. Vandekerckhove, 'Implicit and explicit social mentalizing: the dual processes driven by a shared network', *Frontiers in Human Neuroscience*, 7 (2013), pp.1-6.

Iterative reprocessing of thoughts, feelings and experiences within the mentalizing network allows an individual 'to take in more and richer information which enables observers to verify and flexibly correct their original intuition'[78]. Theological concepts such as the Nicene Trinity are discerned reflectively ('explicit-controlled' mentalization) with the hermeneutics hypothetically being facilitated by the mentalizing network that includes ToM ensuring the language of the Trinity conveys its intended meaning. 'Automatic responses' are linked to the whole mentalizing system too. A fast mentalizing response to another might be instinctive and non-reflective, perhaps a sudden sense of a divine presence. The automatic response may subsequently stimulate feelings, thoughts and experience elsewhere in the mentalizing mind. The whole mentalizing system may quickly become involved. Hypothetically, early Christians' spontaneous, automatic responses to God's presence may have prompted reflective, cognitive and affective mental processes that in turn contributed to 'internally focused', experiential mentalizing of so-called 'appearances' that were discussed in Chapter Two. Personal knowledge or memories about Jesus' life, empathy towards Him on the cross and other information may have been processed and re-processed by the mentalizing network, thereby adding meaning to the initial 'implicit-automatic' experience of a divine presence.

In response to stress or arousal, automatic and controlled mentalizing play a key role.

> With increasing stress or arousal, there is a switch from neural systems associated with controlled mentalizing to those associated with automatic mentalizing. The evolutionary advantage of this switch is clear: the fight/flight response that arises when faced with threat relies on fast, and thus automatic, processing of threatening information[79].

Some of the examples of religious experiences discussed in Chapter Two involve stress, such as being lost on a mountain (Archive example xii)) when the individual in the moment believes three sheep are the Trinity. Theologically, of course, sheep are not God. However, in the heat of the moment this might hypothetically be an example of automatic mentalization regulating stress by instinctively sensing God's presence but the individual's mind at that time having limited capacity for more reflective thinking. When the individual later

[78] Van Overwalle and Vandekerckhove, Implicit and explicit social mentalizing, p.5.
[79] Luyten and others, *The mentalizing approach,* p.8.

reports that God appeared as three sheep, others are likely to be sceptical, but in that stressful moment on the mountain, God's presence was perhaps automatically associated with the sheep, a subjective belief that remains in the individual's memory. Barrett, who was discussed in Chapter Four, proposed that non-reflective information might accumulate in the mind, and contribute to an individual's reflective processes. If enough people reflect similarly about their experiences, they may then be recognised as religious concepts such as the Father and Son emerging as theological concepts from the experiences of early Christians. Although Barrett was not writing about mentalization, the accumulation of non-reflective information that he describes may perhaps be understood as implicit-automatic responses to God that are then processed iteratively by an individual's mentalizing mind. Possible skepticism about the Trinity being three sheep may be because others do not experience God in that way, whereas experiences of God as Father, Son or Holy Spirit were mentalized by many early Christians. Hypothetically their experiences accumulated and contributed to Christian theology.

'Internally or externally focused'

Mentalization of external features in human-to-human relationships includes acknowledging others' posture or facial expressions[80]. External mentalization on its own is quite literal and so shallow in its meaning without the involvement of other 'polarities' of the mentalizing mind. God is incorporeal and so has no bodily features that may engage externally focused mentalizing. If hypothetically a divine presence is detected, externally focused mentalizing might experience that presence literally with little further interpretation.

Internally focused mentalizing facilitates 'a second order'[81] representation of externally focused events by directly and reflectively 'considering thoughts, feelings, and experiences'[82]. Other polarities of the mentalizing network contribute to internally focused mentalizing, adding depth, context and meaning to the ways in which self or others are experienced. 'Internally focused' mentalizing might facilitate PE (Chapter Two) in which Old Testament scripture

[80] Luyten and Fonagy, The Neurobiology of Mentalizing, p368.
[81] Fonagy and Luyten, A developmental, mentalization-based approach, p.1359.
[82] P. Fonagy and P. Luyten, 'A developmental, mentalization-based approach to the understanding and treatment of personality disorder', Development and Psychopathology, 21 (2009), pp.1355-1381 (p.1359).

was re-interpreted as one God ‘speaking’ as Father and Son, a technique that inferred into the text the presence of the Trinity. The mentalizing mind may have used ToM to make these inferences. Some writers suggest PE may have resulted in early Christians experiencing a ‘theodrama’ with the characters in the text experienced as if speaking in a play. Hypothetically such a dramatic experience might be mentalized by ‘internally focused’ neural circuits influenced by cognitive, affective and the other neural pathways in the mentalizing network.

One illustration of internally or externally focused mentalizing might involve Smart’s dimensions of religion (Chapter One) that, apart from the ‘experiential dimension’, are man-made features external to an individual’s mind. The dimensions of religion include the words and sentences of doctrines such as the Trinity, and Smart’s material dimension such as a stain glass window. The aspects of the human mind that respond to ‘external features’ may mentalize literally, for example seeing words on a page or a stained-glass window as coloured glass. Only when the rest of the mentalizing system is involved may externalities and their meanings be more fully inferred. When considered by the whole mentalizing mind, doctrinal texts or the stain glass window are experienced with greater depth and meaning as part of ‘internally focused’ mentalizing. In one interpretation their meaning is cultural and non-theistic, perhaps being experienced as a work of literature or art, but for Christians the internally focused experience has theistic meaning and may perhaps attune their minds towards God. Other externalities that may prompt the human mind to attune with, and so more readily recognise, God’s presence could include scripture, liturgy and the communion of the church.

Overview

Mentalization may offer a heuristic that accounts for the subjectivity of experiences whilst recognising agency. Mentalization, as proposed by Fonagy and colleagues, is a speculative model in which four so-called ‘polarities’ (neural pathways) may each contribute to good, balanced mentalizing. As a by-product of the capacity for social mentalizing, it has been suggested in this chapter that individuals might detect God’s agency, perhaps using HADD, which the human mind then attempts to mentalize. Good mentalizing of relationships with God may facilitate an experience of communion with Him.

Some hypotheses have been described regarding the ways in which each of the four polarities might contribute to experiences believed to involve God as Trinity. These experiences might be facilitated by the 'internally focused' neural pathway using input from the whole of the mentalizing network including cognitive input (ToM and regulation) that may use the Trinitarian concept to recognise God's agentive presence and hold it in mind during intersubjective experiences. For Christians, experiences believed to involve the Trinity may be formative in human lives, including being a possible prompt for greater communion in human relationships and influencing perceptions of self (Chapter Two). The mentalizing mind might facilitate greater communion in social relationships since experiences involving the Trinity might influence the mentalizing network, perhaps prompting greater empathy or explicit (reflective) mentalizing as part of social cognition with self or others.

Mentalization and 'Blocks' to Experiences.

Religious experience may include times when God feels distant or is rejected by an individual. Mentalization may account for some of these times when so-called 'good mentalizing' is disrupted. 'Mirroring', which was discussed earlier in this chapter, does not necessarily lead to healthy child development. The 'Social Biofeedback Model' proposes that an 'overly realistic emotionally arousing display'[83] by the caregiver overwhelms the infant's attempts to develop a secondary representation of the feeling, in future years possibly leading to projective identification (attributing aspects of self to others). It is a social defence mechanism used by an individual to cope with the mismatch that has developed between actual feelings and learned responses, attributing the 'mismatch' to the other person rather than its real cause. God's presence may be mentalized negatively due to projective identification, blaming God using a hostile learned response to cope with certain human feelings evoked by Him.

Another possible block to experiencing God's presence may be a so-called 'false self'. From birth a sense of 'self' develops. If a primary caregiver is not attuned to a baby's emotions, the baby may (as predicted by the Social Biofeedback Model) develop in later life a so-called 'false self'[84]; an 'empty self' struggling to make emotional connections, relating 'mechanically' with others

[83] Fonagy and others, *Affect Regulation, Mentalization*, p.10.
[84] Fonagy and others, *Affect Regulation, Mentalization*, p.195.

and possibly 'looking for powerful others to merge with'[85]. An adult who uses a 'false self' may be unable to connect with his or her feelings, and so may lack emotional intelligence when relating with others. Hypothetically, some Christians might profess faith in the Trinity due to relying on a 'false self', quoting Trinitarian doctrine, scripture or liturgy 'mechanically', and so perhaps feeling aligned to a powerful other. In terms of Buber's 'I-It' analysis (Chapter One), the Trinity is objectified by a 'false self'. In contrast the development of an 'I-Thou' relationship with God requires openness to His presence that may be facilitated by good mentalizing. Christians may for instance reflect about Jesus' own understanding of his relation to the Father. In scripture Jesus describes Himself as 'the one and only Son who came from the Father' (John 1.14); doing 'the will of Him who sent Me' (John 6.38). A so-called false-self may for a Christian objectify the Father-Son relationship. The individual may align cognitively with it giving a limited experience of God and a grandiose self-image. In contrast, a balanced mentalizing perspective in touch with self and aware of human frailties may reflect on Jesus' relationship with His Father more fully.

Mentalization might account in other ways for times when God's presence subjectively feels diminished. An individual might lack the 'bandwidth' to mentalize due to stress or arousal. Fonagy describes an example of his own mentalization failing when driving with his wife. He feels stressed and starts to feel angry about her inexact map reading. Eventually he is too stressed, and his emotions overwhelm his mind, so that he is no longer mentalizing as part of his relationship with her. Fonagy's mind is blinded by his own anger[86]. At times in life a Christian may feel similarly blinded to God's presence. Factors in an individual's environment, such as work pressures, or the day-to-day attrition felt by a parent caring for young children, may reduce an individual's bandwidth to mentalize God's presence.

An individual's capacity to mentalize may be further reduced by poorly developed mental strategies for coping with stress or arousal[87]. Individuals with so-called 'attachment hyperactivating strategies' (strategies that desperately

[85] Fonagy and others, *Affect Regulation, Mentalization*, p.196.
[86] P. Fonagy, 'When Mentalization Breaks Down' (2016). www.youtube.com/watch?v=dhEWephIvkg [Last accessed 18.2.22].
[87] Luyten and Fonagy, The Neurobiology of Mentalizing, p.368.

seek security to compensate for insecure attachment styles) may be characterised under stress or arousal by a high propensity for mentalization disruption[88]. If for example a child's main caregiver traumatised the child, as an adult the child may respond to stress or fear by hyperactivating a desire for secure attachment that overwhelms mentalizing processes in what may instinctively feel like a desperate scramble to survive. 'Attachment hyperactivating' may hypothetically be consistent with the 'compensation pathway' described in Chapter Five when rapid conversion to a religion is motivated by a desire to find security through experiences involving God. The rapid conversion is often not sustained, and God as Trinity might increasingly be perceived as hostile or untrustworthy just like others with whom the individual tries to form relationships.

With so-called 'attachment deactivating strategies'[89] an individual's capacity for 'good mentalization' is undermined by a tendency to ignore his or her attachment needs. This tendency may develop in childhood, enabling the individual to feel less distressed about rejection by primary caregivers. However, a habit of ignoring attachment needs in adulthood may result during longer periods of stress or arousal in loss of mentalizing capacity. The denial of attachment needs eventually distorts perceptions of self and others so that mediated experiences of the world are distorted. God's presence may for instance be experienced as inadequate if someone under constant stress ignores their own need for emotional security and instead blames Him. 'Attachment hyperactivating strategies' and 'attachment deactivating strategies' may inhibit relationships with others, including perhaps experiences of a relationship with God as Trinity.

Mentalization has been developed to treat people with personality disorder who may have dominant 'false self', 'projective identification', 'attachment hyperactiviating' or other traits in their psychological development that can consistently hinder mentalization. However, everyone may have some of these traits, even if they are not dominant. They might result in certain contexts or circumstances in a reduced capacity to mentalize, and so a reduced or hostile sense of God's presence. One might speculate whether some of the behaviour

[88] Luyten and Fonagy, The Neurobiology of Mentalizing, p.373.
[89] Luyten and Fonagy, The Neurobiology of Mentalizing, p.373.

of 4th Century Christian leaders, who were described as ‘tyrannical’ or ‘brutal’ (Chapter Two), could have been influenced by traits in their mental development that at times hindered their mentalization of God’s presence.

Conclusion

Mentalization is an emerging model that unifies disparate psychological approaches such as ToM, neurology and attachment theory. Significant research outside religious studies already supports Fonagy and colleagues’ approach. From a Christian perspective God is agentive and transcendent, characteristics that are recognised in the Trinity. The conjectures in this chapter have suggested that individuals’ experiences that are believed to involve the Trinity may be facilitated as a by-product of the mentalizing human mind. Cognitive mentalizing for example may use the concept of the Trinity to make inferences about, and to regulate emotions aroused by, God’s presence.

Some themes identified from experiences involving the Trinity were suggested in Chapter Two. It was suggested that experiences of God’s presence are subjective and personally meaningful; may influence the psychological self; and may influence hermeneutics. In the account offered in this chapter, experiences involving the Trinity may be mentalized in ways that are subjective, personally meaningful, influence self and may contribute to the way the mentalizing mind hermeneutically interpret texts using ToM as part of the mentalizing network. Mentalization may also account for more negative human responses in which there are ‘blocks’ to fully experiencing God’s presence.

Mentalization also has limitations as a theory, including a lack of empirical research about possible links between mentalization and religious experience. The limitations of mentalization are discussed in more detail in the final chapter.

Chapter Seven: Conclusion.

The Holy Trinity is the central doctrine of Christianity, describing the relationships between the Father, the Son and the Holy Spirit. The Trinity is believed by Christians to reveal the nature of God, not just historically, but as an agentive and transcendent presence in human lives today. The analysis in this dissertation has considered the more general notion of 'religious experience' and then applied the analysis to the more specific example of 'experiences involving the Trinity'. Since belief in the Trinity is fundamental to Christianity, if evolutionary psychology cannot account for experiences involving the Trinity, its ability to account for religious experiences in general may be called into question. Considering 'experiences involving the Trinity' is therefore consistent with so-called 'maximal integration' (Chapter One) which uses theology to comment on the validity of psychological theories.

The dissertation has proposed that from a human perspective, experiences involving the Trinity are personally meaningful, being a subjective mix of theological concepts and an individual's other thoughts, emotions and prior experiences. Chapter Two considered how personal experiences of God as Father or Son were prominent in early Christianity. They offered a new view of God that through hermeneutics was eventually conceptualised as the Nicene Trinity. To the present day, Christians make Trinitarian judgements about the nature of their subjective experiences. For example, theologians such as Coakley, Millbank, Tonstad and Kilby study ways in which God's presence may (or may not) be experienced by individuals in their personal relationships. Experiences, such as those selected from the Archive in Chapter Two, might involve a vision or a sense of God's loving presence in which Christians recognise God by referencing the Trinity.

Evolutionary theories often understand religious experiences as the product of the human mind, not as a human response to divine agency. However, this dissertation has argued that evolutionary theories may be consistent with Christianity and describe part of God's creation, although the precise way in which this happens is uncertain from a human perspective. In Chapter Three some psychological theories were chosen that might account for religious experience as a so-called 'by-product' of our mental architecture. Whilst God is eternal and so may not distinguish product and by-product, first made and

second, from a human perspective the notion of ‘by-product’ is a useful analytic tool that avoids making possibly unreliable assumptions about what may, or may not, be an adaptation.

The CSR, and its so-called ‘standard model’, primarily offers atheistic accounts, which do not respect the truth of the Trinity as Christians understand it (Chapter Four). The Trinity is believed by Christians to be ‘an eternal communion of love’[1] outpouring into human lives, not just another example of human culture as some theories within the CSR suggest. When cognitive psychology offers theistic accounts, some struggle to account for Trinitarian experiences. One example is social exchange theory since God’s love is not believed by most Christians to be equivalent to ‘minimax’ relationships. Anthropomorphism may explain some aspects of the Trinity but may not account for other aspects such as eternal generation that are not human-like. A more generalised approach, theory of mind (‘ToM’), may describe how an individual makes inferences about the minds of others based upon his or her prior experiences and knowledge. Chapter Four discussed the ways in which someone might use ToM to make inferences about God’s agentive presence using knowledge of the Trinity. ToM is however an approach with limitations.

Attachment theories are prominent in the psychology of religion. Research has identified correlations between social attachment in childhood and subsequent perceived relationships with God (Chapter Five). However, attachment theories mostly understand God as a ‘god image’, a personally constructed reality filtered through the human mind that may disregard God’s agency. Research into perceived attachments with the Father, Son or Holy Spirit, as opposed to attachments with the more generalised concept of ‘God’, is limited in scope. In addition, psychological research has recently suggested that our evolved attachment processes may not yet be understood. More research is needed.

So-called ‘maximal integration’ depends on psychology being respected but also responding to theological insights. The Trinity may prompt a re-evaluation of reductionist tendencies within evolutionary psychology. The three persons are believed by Christians to relate openly, thereby conveying to humanity the complexity and mystery of the one God. The wisdom of the Trinity might prompt

[1] Karkkainenm, *The Trinity. Global Perspectives,* p387.

researchers in evolutionary psychology and their theories to relate more openly too, not because Trinitarian theology offers an account of the human mind, but because integrating psychological theories may more holistically explain its complexity. However, the integration of theories within the evolutionary psychology of religion is still in its early stages.

One transtheoretical approach, mentalization, is considered in Chapter Six. It has so far been little applied to the study of religion. In response to social stimuli, mentalization describes social cognition facilitated by a neurological system whose development during infancy is primarily influenced by social attachment. Mentalization may already account for the human mind transmitting religion as a 'cultural universal'. This dissertation proposes that mentalization may go further. Mentalization might theistically explain some ways in which the human mind as a by-product of social mentalization may facilitate an individual's intersubjective relationship with God. Internally focused neural pathways might facilitate experiences, such as those believed to involve the Trinity, by drawing upon other neural processes such as empathy and ToM to infer greater meaning. The involvement of cognitive mentalizing (ToM and emotional regulation) may offer a heuristic that accounts for the subjectivity of experiences whilst recognising God's agency that is conceptualised in the Trinity.

Mentalization's limitations as an account of experiences involving the Trinity

Mentalization may have the potential to contribute to religious studies but at our present state of knowledge its model of the mind is incomplete. Mentalization is described by Fonagy and colleagues as a provisional model. They highlight the need for further research[2] including a better understanding of neural systems, research into the validity of measures of mentalizing and related constructs, and 'longitudinal research documenting the development of mentalizing in relation to other psychosocial and biological factors'[3].

Mentalization was originally proposed as a theory about social relationships. Mentalizing a transcendent, incorporeal God is fundamentally different to mentalizing people. Further clarification is needed as to the ways in which the

[2] Luyten and others, *The mentalizing approach, p3.*
[3] Luyten and others, *The mentalizing approach, p40.*

mentalizing mind may respond to those differences, for example whether a HADD may contribute to mentalization.

Neurotheology studies the brain's structures and mechanisms so that the origins of religious experiences including those involving the Trinity may be better understood. However, as a field of study, neurotheology is in its infancy. There is a lack of empirical evidence as to the ways in which the four 'polarities' may facilitate religious experiences. Further research into mentalization and its role in religious experiences could be purposeful, for example considering the ways in which Trinitarian theology may (or may not) be used by different areas of the brain to mentalize God's agency.

Mentalization does not account for God's mode of existence being Trinitarian. Other modes of existence that could reveal God to humanity might be imagined by humans, but theological debates beyond a point may become a 'distraction'[4]. No theology can articulate adequately God's transcendence. Although theology and mentalization may complement each other, God's depth and meaning may not be fully comprehended by either.

Mentalization's Strengths

Some strengths of a mentalization-based approach include it being positivist and so amenable to research. It has a transtheoretical approach that in its development so far has been willing to adopt new insights. Further research applying mentalization to religious studies may therefore be possible including the study of Trinitarian experiences. In this endeavour, other fields involved in the study of religion, such as anthropology, might collaborate, offering insights to which a truly transtheoretical approach may be receptive.

Mentalization, at first glance, may offer a more complex account for experiences involving the Trinity than some other theories. However, as 'stand-alone' theories, ToM or attachment may only link one or two aspects of human mental architecture with religious experiences. Mentalization is more nuanced, relying on four so-called 'polarities' that offer a more holistic description of the human mind which might therefore be less prone to distorting what Christians believe.

[4] Thiselton, *The Hermeneutics of*, p463.

This dissertation has not considered mentalization as an account for personal experiences in non-Christian religions. Since human evolution is broadly similar across peoples, hypothetically mentalization might provide a framework for inter-religious dialogue, showing for example similarities, and differences, in mentalizing activity involved in Christians' experiences and those of other religions.

To answer the dissertation's titular question, 'processes of the mind', consistent with evolutionary psychology, might facilitate experiences believed to involve the Trinity, not as the cause of the experience, but as a response to God's agency. However, an evolutionary psychology of religion cannot yet provide a complete, theistic account for the ways in which religious experiences are believed to happen. By considering Trinitarian and other theological insights, evolutionary psychology may learn more about itself and so develop further. Mentalization may be a promising part of that development.

Bibliography

Alister Hardy Society for the Study of Spiritual Experience, www.studyspiritualexperiences.org [last accessed 05.05.18]

Allen, J., 'Mentalizing in Practice', in *Handbook of Mentalization-Based Treatment,* ed. by J. Allen and P. Fonagy (Chichester: John Wiley and Sons Ltd, 2006), pp.3-30

Allen, J., and P. Fonagy, *Handbook of Mentalization-Based Treatment,* (Chichester: Wiley, 2006)

Astington, J., and C. Hughes, 'Theory of Mind: Self-Reflection and Social Understanding', in *The Oxford Handbook of Developmental Psychology Volume 2 Self and Other,* ed. by P. Zelazo (Oxford: Oxford University Press, 2013), pp.398-424

Atran, S., *In Gods We Trust. The Evolutionary Landscape of Religion* (Oxford: Oxford University Press, 2002)

Augustine, *On the Trinity* (United States of America, Beloved Publishing/Amazon, c.400/2014)

Ayres, L., 'At the Origins of Eternal Generation: Scriptural Foundations and Theological Purpose in Origen of Alexandria', in *Retrieving Eternal Generation,* ed. by F. Sanders and S. Swain (Grand Rapids: Zondervan, 2017), pp.149-162

Ayres, L., 'Augustine on the Trinity', in *The Oxford Handbook of the Trinity,* ed, by G. Emery and M. Levering (Oxford: Oxford University Press, 2011), pp.123-127

Ayres, L., *Nicaea and its Legacy An Approach to Fourth-Century Trinitarian Theology* (Oxford: Oxford University Press, 2004)

Azari, N., J. Missimer and R. Seitz, 'Religious Experience and Emotion: Evidence for Distinctive Cognitive Neural Patterns', *International Journal for the Psychology of Religion,* 15.4 (2005), pp.263–281

Azari, N. and others 'Neural correlates of religious experience', *European Journal of Neuroscience,* 13 (2001), pp.1649-1652

Baker, R., *Saving Belief. A Critique of Physicalism* (Princeton: Princeton University Press, 1987)

Barlev, M., S. Mermelstein and T. German, 'Representational coexistence in the God concept: Core knowledge intuitions of God as a person are not revised by Christian theology despite lifelong experience', *Psychonomic Bulletin & Review,* 25 (2018), pp.2330–2338

Baron-Cohen, S., ‘The evolution of theory of mind’, in *The Descent of Mind: Psychological Perspectives on Hominid Evolution,* ed. by M. Corballis and S. Lea (Oxford: Oxford University Press, 2000)

Baron-Cohen, S., A. Leslie A and U. Frith U., ‘Does the autistic child have a ‘Theory of Mind?’, *Cognition*, 21.1 (1985), pp.37–46

Baron-Cohen, S., and others, ‘Another Advanced Test of Theory of Mind: Evidence from Very High Functioning Adults with Autism or Asperger Syndrome’, *Journal of Child Psychology and Psychiatry*, 38.7 (1997), pp.813-822

Baron-Cohen, S., and others, ‘The ‘Reading the Mind in the Eyes’ Test Revised Version. A Study with Normal Adults and Adults with Asperger Syndrome or High Functioning Autism’, *Journal of Child Psychology and Psychiatry*, 42.2 (2001), pp.241-251

Baron-Cohen, S., and others, ‘The “Reading the Mind in the Eyes” Test: Complete Absence of Typical Sex Difference in 400 Men and Women with Autism’, *PLoS One,* 10.8 (2015), pp.1-17

Baron-Cohen, S., *Mindblindness: An essay on autism and Theory of Mind* (Cambridge MA & London: Bradford, 1995)

Barrett, J. and P. King, *Thriving with Stone Age Minds Evolutionary Psychology, Christian Faith and the Quest for Human Flourishing* (Downer’s Grove, Illinois: Inter-Varsity Press, 2021)

Barrett, J., ‘Cognitive Science of Religion: Looking Back, Looking Forward’, *Journal for the Scientific Study of Religion*, 50.2 (2011), pp.229-239

Barrett, J., *‘*On Naturalness, Innateness, and God-beliefs: A Reply to Shook’, *Method and Theory in the Study of Religion,* 29.4-5 (2017), pp.374-386

Barrett, J., and I. Church, ‘SHOULD CSR GIVE ATHEISTS EPISTEMIC ASSURANCE? ON BEER-GOGGLES, BFFS, AND SKEPTICISM REGARDING RELIGIOUS BELIEFS’, *The Monist,* 96.3 (2013), pp 311-324

Barrett, J., *Why Would Anyone Believe in God?* (Lanham MD: Altamira Press, 2004)

Bates, M., *The Birth of the Trinity: Jesus, God, and Spirit in New Testament and Early Christian Interpretations of the Old Testament* (Oxford: Oxford University Press, 2016)

Bauckham, R., *God Crucified Monotheism & Christology in the New Testament* (Carlisle, Cumbria: Paternoster Press, 1998)

Beck, J., ‘FC Barcelona: Luis Suárez and Creating a New Trinity’ (2014), www.barcablaugranes.com/2014/7/8/5879341/luis-suarez-and-the-new-holy-trinity [last accessed on 15.8.21]

Bender, A., ‘The Role of Culture and Evolution for Human Cognition’, *Topics in Cognitive Science,* 12.4 (2020), pp.1403-1420

Bering, J., *The Belief Instinct The Psychology of Souls, Destiny and the Meaning of Life* (London: W. W. Norton & Company Ltd, 2011)

Biblegateway, ‘Attachment’, www.biblegateway.com/quicksearch/?search=attachment&version=NIV&searchtype=all [last accessed on 16.02.22]

Bloom, P., and T. German, ‘Two reasons to abandon the false belief task as a test of theory of mind’, *Cognition*, 77 (2000), pp.B25-B31

Boccia, M., ‘Human Interpersonal Relationships and the Love of the Trinity’, *Priscilla Papers*, 25.4 (2011), pp.22-27

Bosworth, D., ‘Ancient Prayers and the Psychology of Religion: Deities as Parental Figures’, *Journal of Biblical Literature*, 134.4 (2015), pp.681-700

Bowlby, J., ‘Maternal Care and Mental Health’, *Bulletin of the World Health Organization,* 3.3 (1951), pp. 355–533

Bowlby, J., *A secure base: Parent-child attachment and healthy human development* (New York: Basic Books, 1988)

Bowlby, J., *Attachment and Loss Volume 1* (London: Pimlico, 1969)

Bowlby, J., *Attachment and Loss Volume 2* (London: Pimlico, 1969)

Bowlby, J., *The Making and Braking of Affectional Bonds* (London: Tavistock Publications, 1979)

Boyer, P., ‘Out of Africa: Lessons from a By-Product of Evolution’, in *Religion as a Human Capacity: A Festschrift in Honor of E. Thomas Lawson,* ed. by T. Light and B. Wilson (Leiden: Brill, 2004), pp.27-43

Boyer, P., *Religion Explained The Evolutionary Origins of Religious Thought* (New York: Basic Books, 2001)

Bracken, J., ‘Relationality and Intersubjectivity within a Socially Oriented Metaphysics: A Note on Ecclesiology’, *Theological Studies,* 80.2 (2019), pp.436–448

Brandt, P., ‘Attachment, psychopathology, and religion: introduction to this special section of Mental Health, Religion, & Culture’, *Mental Health, Religion & Culture,* 17.8 (2014), pp.761–765

Bretherton, I., ‘The roots and growing points of attachment theory’, in *Attachment Across the Life Cycle,* ed. by C. Murray, J. Parkes, J. Stevenson-Hinde and P. Marris (London: Routledge, 1991), pp.14-21

Buber, M., *A believing humanism: My testament, 1902-1965* (New York: Simon & Schuster, 1967)

Buber, M., *I and Thou* (London: Bloomsbury Academic, 1923/ 2013)

Burrell, D., *Faith and Freedom: An Interfaith Perspective, Challenges in Contemporary Theology* (Oxford: Basil Blackwell, 2004)

Cambridge Dictionary, *experiences* (2021). www.dictionary.cambridge.org/dictionary/english/experience?q=experiences [last accessed 10.9.21]

Cambridge Dictionary, *father* (2022), https://dictionary.cambridge.org/dictionary/english/father [last accessed 12.2.22]

Carrette, J., ‘Post-structuralism and the study of religion’, in *The Routledge Companion to the Study of Religion (second edition),* ed. by J. Hinnells (Abingdon: Routledge, 2010), pp.274-290

Cassel, J., D. Cassel, and L. Manning, ‘Review From Augustine of Hippo’s Memory Systems to Our Modern Taxonomy in Cognitive Psychology and Neuroscience of Memory: A 16-Century Map of Intuition before Light of Evidence’, *Behavioural Sciences,* 3 (2013), pp.21–41

Catholic Bridge, *Text of the New English Roman Catholic Mass* (2010) www.catholicbridge.com/catholic/catholic-mass-full-text.php [last accessed 04.02.22]

Catholic Online, *The Nicene Creed* (2022). www.catholic.org/prayers/prayer.php?p=495 [last accessed 10.2.22].

Chadwick, H. *Augustine of Hippo A Life* (Oxford, Oxford University Press, 2009)

Chryssides, G., ‘The tools of the trade’, in *The Study of Religion An introduction to key ideas and methods, 2nd Edition,* ed. by G. Chryssides and R. Geaves (London: Bloomsbury, 2014), pp.7-38

Chryssides, G., and R. Greaves, ‘Methodology in Religious Studies’, in *The Study of Religion An introduction to key ideas and methods, 2nd Edition,* ed. by G. Chryssides and R. Geaves (London: Bloomsbury, 2014), pp.39-66

Church of England, *Common Worship Main Volume* (London: Church House Publishing, 2000)

Churchland, P., *Matter and Consciousness. A Contemporary Introduction to the Philosophy of Mind Revised Edition* (London, England: The MIT Press, 2001)

Clark, M., and J. Mills, 'The Difference between Communal and Exchange Relationships: What it is and is Not', *Personality and Social Psychology Bulletin*, 19.6 (1993), pp.684-691

Clinton, T., and J. Straub, *God Attachment Why You Belive, Act and Feel The Way You Do about God* (New York: Howard Books, 2010)

Coakley, S., 'Sacrifice Regained: Evolution, Cooperation and God' *The Gifford Lectures 2012.* Available at: www.giffordlectures.org/lectures/sacrifice-regained-evolution-cooperation-and-god (last accessed on 16.08.22)

Coakley, S., *God, Sexuality and the Self* (Cambridge, Cambridge University Press, 2013)

Corcoran, K., 'Divine Exchanges: Applying social exchange theory to religious behaviour', *Rationality and Society,* 25.3 (2013), pp.335 –369

Cosmides, L., 'The logic of social exchange: has natural selection shaped how humans reason? Studies with the Watson selection task', *Cognition,* 31.3 (1989), pp.187-276

Cosmides, L., and J. Tooby, 'Cognitive Adaptations for Social Exchange', in *The Adapted Mind: Evolutionary Psychology and the Generation of Culture,* ed. by J. Barkow, L. Cosmides and J. Tooby (Oxford: Oxford University Press, 1992), pp.163-228

Counted, V., 'Understanding God images and God concepts: Towards a pastoral hermeneutics of the God attachment experience', *Verbum et Ecclesia,* 36.1 (2015), pp.1-14

Cox, J., *Religion without god: methodological agnosticism and the future of religious studies. The Hibbert Lecture 13 April 2003* (2003). www.s3-eu-west-1.amazonaws.com/img.thehibberttrust.org.uk/Hibbert-Lecture-2003-Dr-James-L-Cox.pdf?mtime=20161116150000 [Last accessed: 11.04.18]

Creationism.org *Articles* (2022), www.creationism.org/ [last accessed: 5.2.22]

Davis, E., G. Moriarty and J. Mauch, 'God Images and God Concepts: Definitions, Development, and Dynamics', *Psychology of Religion and Spirituality,* 5.1 (2013), pp.51–60

Dawkins, S., *The God Delusion* (London: Random House, 2006)

D'Costa, G., 'The Trinity in Interreligious Dialogues', in *The Oxford Handbook of the Trinity,* ed, by G. Emery and M. Levering (Oxford: Oxford University Press, 2011), pp.573-585

Dewitte, L., P. Granqvist and J. Dezutter, ‘Meaning Through Attachment: An Integrative Framework’, *Psychological Reports*, 122.6 (2019), pp.2242-2265

Dictionary.com, *experiences* (2021). www.dictionary.com/browse/experiences [last accessed 10.9.21]

Di Dio, C., and others, ‘Growing Up Thinking of God’s Beliefs: Theory of Mind and Ontological Knowledge’, *SAGE Open* October-December (2018), pp.1–14

Dihle, A., *The Theory of Will in Classical Antiquity* (Berkley: University of California Press, 1982)

Dolezal, J., ‘Strong Impassibility’, in *Divine Impassibility Four Views of God’s Emotions and Suffering,* ed. by R. Matz and A. Thornhill (Downers Grove, Illinois: Inter-Varsity Press, 2019), pp.13-52

Dowd, M., *Thank God for Evolution. How the marriage of science and religion will transform your life and our World* (New York, Plume, 2009)

Duclow, D., ‘William James, Mind Cure and the Religion of Healthy-Mindedness’, *Journal of Religion and Health*, 41.1 (2002), pp.45-56

Eames, K., *Cognitive Psychology of Religion* (Long Grove IL: Waveland Press Inc, 2016)

Emerson, R., ‘Exchange Theory Part 2: Exchange Rules and Networks’, in *Sociological Theories in Progress Vol. 2,* ed. by J. Berger, M. Zelditch and B. Anderson (Boston: Houghton-Mifflin, 1973), pp.58–87

Emery G., and M. Levering, ‘Introduction’, in *The Oxford Handbook of the Trinity,* ed. by G. Emery and M. Levering (Oxford: Oxford University Press, 2011)

Ermer, E., and others, ‘Theory of mind broad and narrow: Reasoning about social exchange engages ToM areas, precautionary reasoning does not’, *SOCIAL NEUROSCIENCE*, 1.3-4 (2006), pp.196-219

Exline, J., and others, ‘God Belief as an Innate Aspect of Human Nature: A Response to John Shook and Questions for Justin Barrett‘, *Method and Theory in the Study of Religion,* 29.4-5 (2017), pp.387-399

Fenwick, P., ‘The Neurophysiology of Religious Experience’, in *Psychosis and Spirituality. Consolidating the New Paradigm Second Edition,* ed. by I. Clarke (Chichester: Wiley-Blackwell, 2010)

Fitzgerald, T., ‘Experience’ in *Guide to the Study of Religion,* ed. by W. Braun and R. McCutcheon (London: Continuum, 2000), pp.125-139

Flannelly, K., and K. Galek ‘Religion, Evolution, and Mental Health: Attachment Theory and ETAS Theory’ *Journal of Religion and Health,* 49.3 (2010), pp.337-350

Fonagy, P., and P. Luyten, ‘A developmental, mentalization-based approach to the understanding and treatment of personality disorder’, Development and Psychopathology, 21 (2009), pp.1355-1381

Fonagy, P., ‘Mutual Regulation, Mentalization, and Therapeutic Action: A Reflection on the Contributions of Ed Tronick to Developmental and Psychotherapeutic Thinking’, *Psychoanalytic Inquiry,* 35 (2015), pp.355–369

Fonagy, P., ‘The Mentalization-focused Approach to Social Development’, in *Handbook of Mentalization-Based Treatment,* ed. by J. Allen and P. Fonagy (Chichester: John Wiley and Sons Ltd, 2006), pp.53-100

Fonagy, P., ‘When Mentalization Breaks Down’ (2016). www.youtube.com/watch?v=dhEWephIvkg [Last accessed 18.2.22]

Fonagy, P., G. Gergely, E. Jurist and M. Target, *Affect Regulation, Mentalization, and the Development of Self* (London: Karnac, 2004)

Forster, M., ’Hermeneutics’, in *The Oxford Handbook of Continental Philosophy,* ed. by B. Leiter and M. Rosen (Oxford: Oxford University Press, 2007), pp.30-75

Gervais, W., ‘Perceiving minds and gods: How mind perception enables, constrains, and is triggered by belief in gods’, *Perspectives on Psychological Science*, 8.4 (2013), pp.380-394

Gilhus, I., ‘Hermeneutics’, in *The Routledge Handbook of Research Methods in the Study of Religion,* ed. by M. Stausberg and S. Engler (London: Routledge, 2014), pp.275-285

Giussani, L., *The Religious Sense* (Montreal & Kingston: McGill-Queen’s University Press, 1997)

Granqvist, P., ‘Attachment, culture, and gene-culture co-evolution: expanding the evolutionary toolbox of attachment theory’, *Attachment and Human Development,* 23.1 (2021), pp.90-113

Granqvist, P., ‘Religiousness and perceived childhood attachment: On the question of compensation or correspondence’, *Journal for the Scientific Study of Religion*, 37 (1998), pp.350-367

Granqvist, P., and F. Nkara, ‘Nature meets nurture in religious and spiritual development’, *British Journal of Developmental Psychology,* 35 (2017), pp.142-155

Granqvist, P., and others, ‘Examining relations among attachment, religiosity, and New Age spirituality using the Adult Attachment Interview’, *Developmental Psychology*, 43.3 (2007), pp.590–601

Granqvist, P., *Attachment in Religion and Spirituality A Wider View* (New York: The Guildford Press, 2020)

Granqvist, P., B. Hagekull and T. Ivarsson 'Disorganized Attachment Promotes Mystical Experiences via a Propensity for Alterations in Consciousness (Absorption)', *The International Journal for the Psychology of Religion*, 22.3 (2012), pp.180–197

Greenberg, D., and others, 'Elevated empathy in adults following childhood trauma', *PLuSONE,* 13.10 (2018) pp.1-13

Gripps, R., 'Autism and Intersubjectivity. Beyond cognitivism and the Theory of Mind', *Philosophy, Psychiatry and Psychology,* 11.3 (2004), pp.195-198

Guthrie, S., *Faces in the Clouds A New Theory of Religion* (Oxford, Oxford University Press, 1993).

Hamer, D., *The God Gene: How Faith Is Hardwired Into Our Genes* (New York City: Anchor Books, 2005)

Hankey, W., 'Mind', in *Augustine through the Ages. An Encyclopedia,* ed. by A. Fitzgerald (Grand Rapids, Michigan, Wm. B. Eerdmans, 2009), pp.563-567

Hardy, A., *The Biology of God A scientist's study of man the religious animal* (London: Jonathan Cape, 1975)

Harris, J., *The nurture assumption: why children turn out the way they do* (London: Bloomsbury, 1999)

Haught, J., *Responses to 101 Questions on God and Evolution* (New York: Paulist Press, 2001)

Hervieu-Leger, D., *Religion as a Chain of Memory* (Cambridge, Polity Press, 2000)

Hildebrand, S., 'The Trinity in the Ante-Nicene Fathers', in *The Oxford Handbook of the Trinity,* ed. by G. Emery and M. Levering (Oxford: Oxford University Press, 2011), pp.95-108

Hill, E., 'A Theological Perspective on Social Exchange Theory', *Journal of Religion and Health,* 31.2 (1992), pp.141-148

Holmes, J., 'Mentalizing From A Psychoanalytic Perspective: What's New?', in *Handbook of Mentalization-Based Treatment* ed. by J. Allen and P. Fonagy (Chichester: John Wiley and Sons Ltd, 2006), pp.31-50

Holmes, J., *John Bowlby & Attachment Theory* (London: Routledge, 1993)

Holmes, S., *The Quest for the Trinity. The Doctrine of God in Scripture, History and Modernity* (Downers Grove, Illinois: Intervarsity Press, 2012)

Homans, G., *Social Behavior: Its Elementary Forms* (New York: Harcourt Brace Jovanovich, 1961)

Hood, R., P. Hill and B. Spilka, *The Psychology of Religion, Fourth Edition: An Empirical Approach* (New York: Guildford Press, 2009)

Howe, D., *The Emotionally Intelligent Social Worker* (Basingstoke: Palgrave Macmillan, 2008)

Hunsinger, G., 'Karl Barth's Doctrine of the Trinity, and Some Protestant Doctrines After Barth', in *The Oxford Handbook of the Trinity,* ed. by G. Emery and M. Levering (Oxford: Oxford University Press, 2011), pp.294-313

Hurtado, L., *Lord Jesus Christ. Devotion to Jesus in Earliest Christianity* (Michigan: Wm. B. Eerdmans Publishing Co, 2005)

Jackson, J., and L. Kirkpatrick, 'The structure and measurement of human mating strategies: toward a multidimensional model of sociosexuality', *Evolution and Human Behavior,* 28 (2007), pp.382–391

James, W., *The Principles of Psychology Volume One* (Cosimo: New York, 1890/2007)

James, W., *The Varieties of Religious Experience. A Study in Human Nature* (London: Penguin Books Ltd, 1902/1985)

Jensen, A., *A Divine Providence and Human Agency Trinity, Creation and Freedom* (London: Routledge, 2015)

Jerolmack, C., and D. Porpora, 'Religion, Rationality, and Experience: A Response to the New Rational Choice Theory of Religion', *Sociological Theory,* 22.1 (2004), pp.140-160

John Paul II, *Humans are Spiritual and Corporeal Beings (*1986), www.inters.org/John-Paul-II-Catechesis-Spiritual-Corporeal [last accessed 04.03.20]

Johnson, E., 'A Feminist Interpretation of the Triune Symbol', in *The Trinity. Global Perspectives,* ed. by V. Karkkainen (Louisville, Kentucky: Westminster John Know Press, 2007), pp.194-213.

Johnson, E., 'The Three Faces of Integration', *Journal of Psychology and Christianity,* 30.4 (2011), pp.339-355

Johnson, E., *She Who Is. The Mystery of God in Feminist Theological Discourse* (New York: Crossroad, 1993)

Julian of Norwich, *Revelations of Divine Love* (London: Penguin Books Ltd: 1966)

Kam, C., ‘Integrating Divine Attachment Theory and the Enneagram to Help Clients of Abuse heal in Their Images of Self, Others and God’, *Pastoral Psychology,* 67 (2018), pp.341-356

Karkkainen, V., *The Trinity: Global Perspectives* (Westminster London: John Knox Press, 2007)

Kilby, K., ‘Trinity and Politics: An Apothatic Approach’, in *Advancing Trinitarian Theology Explorations in Constructive Dogmatics*, ed. by O. Crisp and S. Sanders, (Grand Rapids Michigan, Zondervan, 2014), pp.75-93

Kilby, K., *God, Evil and the Limits of Theology* (London, t&t clark, 2020)

Kirkpatrick, L., ‘A longitudinal study of changes in religious belief and behaviour as a function of individual differences in adult attachment style’, *Journal for the Scientific Study of Religion*, 36 (1997) pp.207-217

Kirkpatrick, L., ‘Attachment Theory and Religious Experience’, in *Handbook of Religious Experience,* ed. by R. Hood (Religious Education Press: Birmingham Alabama, 1995), pp.446-475

Kirkpatrick, L., ‘Attachment Theory and the Evolutionary Psychology of Religion’, *The International Journal for the Psychology of Religion,* 22 (2012), pp.231–241

Kirkpatrick, L., ‘From “.of religion” to “Psychology of.”: Commentary on Ann Taves’ Religious Experience Reconsidered’, *Religion*, 40.4 (2010), pp.300-304

Kirkpatrick, L., ‘The role of evolutionary psychology within an interdisciplinary science of religion’, *Religion,* 41.3 (2011), pp.329-339

Kirkpatrick, L., ‘Toward an Evolutionary Psychology of Religion and Personality’, *Journal of Personality,* 67.6 (1999), pp.921-952

Kirkpatrick, L., *Attachment, Evolution, and the Psychology of Religion* (New York: The Guilford Press, 2005)

Klinck, D., ‘Vestigia Trinitatis in Man and his Works in the English Renaissance’, *Journal of the History of Ideas*, 42,1 (1981) pp.13-27

Klopper, F., ‘Women, monotheism and the gender of God’, *In die Skriflig,* 36.3 (2002), pp.421-438

Knabb, J., and M Emerson, ‘’I Will Be Your God and You Will Be My People’: Attachment Theory and the Grand Narrative of Scripture’, *Pastoral Psychology,* 62 (2013), pp.827-841

Kohut, H., *The analysis of the self: A systematic approach to the psychoanalytic treatment of narcissistic personality disorders.* (New York, NY: International UP, 1971)

Kombo, J., *Theological Models of the Doctrine of the Trinity* (Carlisle, Langham Global Library, 2016)

Kreiselmaier, A., *An Evolutionary and Developmental Science Framework for Integrating Attachment, Mentalization, and Mindfulness: Implications for Religious Practice and Moral Development (*PhD Dissertation Submitted to the Faculty of the Graduate School of Vanderbilt University, 2017)

Lawler, E., 'An Affect Theory of Social Exchange', *American Journal of Sociology* 107.2 (2001), pp.321-352

Lewis, L., 'Enhancing Mentalizing Capacity Through Dialectical Behavior Therapy Skills Training And Positive Psychology', in *Handbook of Mentalization-Based Treatment,* ed. by J. Allen and P. Fonagy (Chichester: John Wiley and Sons Ltd, 2006), pp.171-182

Liddle, J., and T. Shackelford, 'An Introduction to Evolutionary Perspectives on Religion', in *The Oxford Handbook of Evolutionary Psychology and Religion*, ed. by J. Liddle and T. Shackelford (Oxford: Oxford University Press, 2021), pp.1-17

Liddle, J., and T. Shackelford (eds.), *The Oxford Handbook of Evolutionary Psychology and Religion* (Oxford: Oxford University Press, 2021)

Limke, A., and P. Mayfield, 'Attachment to God: Differentiating the Contributions of Fathers and Mothers Using the Experiences in Parental Relationships Scale', *Journal of Psychology and Theology*, 29.2 (2011), pp.122-129

Lincoln, B., 'Culture', in *Guide to the Study of Religion,* ed. by W. Braun and R. McCutcheon (London, T&T Clark, 2000), pp.409-422

Lindbeck, G., *The Nature of Doctrine Religion and Theology in a Postliberal Age* (Louisville Kentucky: Westminster John Knox Press, 2009)

Lisdorf, A., 'What's HIDD'n in the HADD?', *Journal of Cognition and Culture*, 7.3-4 (2007), pp.341-353

Łowicki, P., and M. Zajenkowski, 'No empathy for people nor for God: The relationship between the Dark Triad, religiosity and empathy', *Personality and Individual Differences,* 115 (2017), pp.169–173

Luyten, P., and others, *The mentalizing approach to psychopathology: State of the art and future directions* (2020), pp.1-63. www.discovery.ucl.ac.uk/id/eprint/10083780/ [last accessed 4.2.22]

Luyten, P., and P. Fonagy, ‘The Neurobiology of Mentalizing’ *Personality Disorders: Theory, Research and Treatment,* 6.4 (2015), pp.366-379

Luyten, P., S. Blatt, and J. Corveleyn, ‘Minding the Gap Between Positivism and Hermeneutics in Psychoanalytic Research’, *Journal of the American Psychoanalytic Association,* 54.2 (2006), pp.571-610

Marmion, D., ‘Trinity and Relationships’, *The Way,* 43.2 (2004), pp.104-118

Martin, R., and J. Barresi, ‘History as Prologue: Western Theories of the Self’ in *The Oxford Handbook of the Self,* ed. by S. Gallagher (Oxford: Oxford University Press, 2011), pp.34-56

Matz, R., and A. Thornhill, ‘Introduction’, in *Divine Impassibility Four Views of God’s Emotions and Suffering,* ed. by R. Matz and A. Thornhill (Downers Grove, Illinois: Inter-Varsity Press, 2019), pp.1-12

McCauley, R., *Why Religion is Natural and Science is Not* (Oxford: Oxford University Press, 2011)

McCloughry. R., and W. Morris, *Making A World of Difference Christian Reflections on Disability* (London: SPCK, 2002)

McCutcheon, R., ‘Introduction’, in *The Insider/Outsider Problem in the Study of Religion,* ed. by R. McCutcheon (London and New York: Cassell, 1999), pp.215-220

McGrath, A., *Christian Theology, An Introduction Third Edition* (Oxford: Blackwell Publishers Ltd, 2001)

McGrath, A., *Inventing the Universe: Why we cannot stop talking about science, faith and God (*London: Hodder and Stoughton, 2015)

McNamara, P., *The Neuroscience of Religious Experience* (Cambridge: Cambridge University Press, 2009)

Meins, E., and others, ‘Maternal Mind-Mindedness and Attachment Security as Predictors of ToM Understanding’, *Child Development*, 73.6 (2002), pp.1715-1726

Mercier, B., S. Kramer and A. Shariff, ‘Belief in God: Why People Believe, and Why They Don’t’, *Current Directions in Psychological Science*, 27.4 (2018), pp.263-268

Millbank, J., C. Pickstock and G. Ward, ‘Introduction. Suspending the material: the turn of radical orthodoxy’ in *Radical Orthodoxy. A New Theology*, ed. by J. Millbank, C. Pickstock and Graham Ward (London, Routledge, 1999)

Millbank, J., *Being Reconciled: Ontology and Pardon* (London, Routledge, 2003)

Milbank, J., *The Suspended Middle* (Grand Rapids Michigan, William B. Eerdmans Publishing Company, 2005)

Millbank, J., *Theology and Social Theory Beyond Secular Reason (Second Edition)* (Oxford, Blackwell Publishing, 2006)

Miller, K., *Finding Darwin's God. A Scientists Search for Common Ground Between God and Evolution* (New York: Harper Perennial, 2002)

Miner, M., and M. Dowson, 'Spiritual Experiences reconsider: a relational approach to the integration of psychology and theology', *Journal of Psychology and Theology*, 40.1 (2012), pp.55-59

Miner. M., 'Back to the basics in attachment to God: revisiting theory in light of theology', *Journal of Psychology and Theology,* 35.2 (2007), pp.112-122

Monroe, N., and P. Jankowski, 'The Effectiveness of a Prayer Intervention in Promoting Change in Perceived Attachment to God, Positive Affect, and Psychological Distress', *Spirituality in Clinical Practice,* 3.4 (2016), pp.237-249

Moran, R., 'Speech, Intersubjectivity, and Social Acts', in *The Exchange of Words: Speech, Testimony, and Intersubjectivity,* by R. Moran (ed.) (Oxford, Oxford University Press, 2018), pp.1-35

Nasr, S., 'The Islamic View of Christianity', in *Christianity through Non-Christian Eyes,* ed. by P. Griffiths (New York: Orbis Books, 1990), pp.128-129

New International Version (London: Hodder and Stoughton, 1979)

Nieuwenhove, R., 'In The Image of God: the Trinitarian Anthropology of St Bonaventure, St Thomas Aquinas and the Blessed Jan van Ruusbroec'. *Irish Theological Quarterly,* 66 (2001), pp 109- 121

Norenzayan, W., W. Gervais and K. Trzeniewski ,'Mentalising Deficits Constrain belief in a Personal God', *PLOS ONE,* 7.5 (2012), pp.1-8

Numbers, R., 'The Creationists', in *God and Evolution A Reader,* ed. by M. Cunningham (Abingdon: Routledge, 2007) pp.90-121

Olderbak, S., and others, 'A psychometric analysis of the reading the mind in the eyes test: toward a brief form for research and applied settings', *Frontiers in Psychology*, 6 (2015), pp.1-14

Oliver, S., *Creation A Guide for the Perplexed* (London: Bloomsbury T&T Clark, 2017)

Oord, T., 'Strong Passibility', in *Divine Impassibility Four Views of God's Emotions and Suffering,* ed. by R. Matz and A. Thornhill (Downers Grove, Illinois: Inter-Varsity Press, 2019), pp.129-151

Otto, R., *The Idea of the Holy An Inquiry into the non-rational factor in the idea of the divine and its relation to the rational* (Oxford: Oxford University Press, 1923/1958)

Oviedo, L., 'Religious Cognition as a Dual-Process: Developing the Model', *Method and Theory in the Study of Religion*, 27.1 (2015), pp.31-58

Peels, R., 'Does Evolution Conflict with God's character?', *Modern Theology,* 34.4 (2018), pp544-564

Pike, K., *Language in Relation to a Unified Theory of the Structure of Human Behavior* (The Hague: Mouton, 1967)

Pirutinskya, S., D. Rosmarinb and L. Kirkpatrick, 'Is Attachment to God a Unique Predictor of Mental Health? Test in a Jewish Sample', *The International Journal for the Psychology of Religion,* 29.3 (2019), pp.161–171

Plastow, M., ''ToM' II: difficulties and critiques', *Australasian Psychiatry,* 20.4 (2012), pp.1-4

Platinga, A., *Where the Conflict Really Lies. Science, Religion and Naturalism* (Oxford: Oxford University Press, 2011)

Popoveniuc, B., 'Transecumenical Filioque', *Journal for the Study of Religions and Ideologies*, 18.52 (2019), pp.31-47

Pyysiäinen, I., and M. Hauser, 'The origins of religion: evolved adaptation or by-product?' *Trends in Cognitive Sciences,* 14.3 (2010), pp.104-109

Reinert, D., and C. Edwards, 'Attachment Theory and Concepts of God. Parent Referencing Versus Self-Referencing', *SAGE OPEN,* October-December (2014), p.7

Saarinen, R., 'The Trinity, Creation and Christian Anthropology', in *The Oxford Handbook of the Trinity,* ed. by G. Emery and M. Levering (Oxford: Oxford University Press, 2011), pp.414-427

Saint Teresa of Avila, *Autobiography of St. Teresa of Avila* (New York: Dover Publications, c.1567/2010)

Sandage, S., and others, 'Attachment to God, adult attachment, and spiritual pathology: mediator and moderator effects', *Mental Health, Religion& Culture,* 18.10 (2015), pp.795-809

Sanders, F., *The Triune God* (Grand Rapids: Zondervan, 2016)

Saussere, F., *Course in General Linguistics* (London: Peter Owen, 1916/1974).

Schaap-Jonker, H., & J. Corveleyn, ‘Mentalizing and religion: a promising combination for psychology of religion, illustrated by the case of prayer’, *Archive for the Psychology of Religion*. 36 (2014), pp.303-322

Schnitker, S., and others, ‘Attachment Predicts Adolescent Conversions at Young Life Religious Summer Camps’, *The International Journal for the Psychology of Religion*, 22 (2012) pp.198–215

Schultz, C., *The Pope Would Like You to Accept Evolution and the Big Bang* (2014), www.smithsonianmag.com/smart-news/pope-would-you-accept-evolution-and-big-bang-180953166/ [last accessed: 5.2.22]

Scott, T., *Augustine. His Thought in Context* (New York: Paulist Press, 1995)

Shafranske, E., ‘Freudian Theory and Religious Experience’, in *Handbook of Religious Experience,* ed. by R. Hood (Alabama: Religious Education Press, 1995), pp.200-230

Shakespeare, S., *Radical Orthodoxy A Critical Introduction* (London, Society for Promoting Christian Knowledge, 2007)

Shaman, N., A. Saide and R. Richert, ‘Dimensional Structure of and Variation in Anthropomorphic Concepts of God’, *Frontiers in Psychology,* 9 (2018), pp.1-16

Sharf. R., ‘The Rhetoric of Experience and the Study of Religion’, *Journal of Consciousness Studies,* 7.11–12 (2000), pp.267–287

Sharp, C., P. Rentfrow and N. Gibson, ‘One God but Three Concepts: Complexity in Christians’ Representations of God’, *Psychology of Religion and Spirituality*, 9.1 (2017), pp.95-105

Shook, J., ‘Are People Born to be Believers, or Are Gods Born to be Believed?’, *Method and Theory in the Study of Religion*, 29.4-5 (2017), pp.353-373

Shook, J., ‘Scientific Atheology’, *Science, Religion and Culture*, 1.1 (2014), pp.32-48

Shtulman, A., and A. Linderman, ‘God Can Hear But Does He Have Ears? Dissociations Between Psychological and Physiological Dimensions of Anthropomorphism’, *Journal Proceedings of the Annual Meeting of the Cognitive Science Society*, 36 (2014), pp.2931-2936

Shults, F., ‘Dis-integrating Psychology and Theology’, *Journal of Psychology & Theology,* 40.1 (2012), pp.21–25

Slater, A., *Radical Orthodoxy in a pluralistic World Desire, Beauty, and the Divine* (London, Routledge, 2018)

Smart, N., *Dimensions of the Sacred. An Anatomy of the World's Beliefs* (Berkeley: University of California, 1996)

Smart, N., *The Religious Experience of Mankind* (Glasgow: Fount Paperbacks, 1977)

Smith, J., 'The Fourth Century Fathers', in *The Oxford Handbook of the Trinity,* ed. by G. Emery and M. Levering (Oxford: Oxford University Press, 2011), pp.109-122

Sosis, R., 'The Adaptationist-Byproduct Debate on the Evolution of Religion: Five Misunderstandings of the Adaptationist Program', *Journal of Cognition and Culture,* 9 (2009), pp.315–332

Spilka, B., and D. McIntosh, 'Attribution Theory and Religious Experience' in *Handbook of Religious Experience,* ed. by R. Hood (Birmingham Alabama: Religious Education Press, 1995), pp.421-445

Spilka, B., and K. Ladd, *The Psychology of Prayer A Scientific Approach* (New York: The Guilford Press, 2013)

Stagnaro, M. and D. Rand, 'The Coevolution of Religious Belief and Intuitive Cognitive Style via Individual-Level Selection', in *The Oxford Handbook of Evolutionary Psychology and Religion,* ed. by J. Liddle and T. Shackelford (Oxford: Oxford University Press, 2021), pp.153-173

Stark, R., 'A Taxonomy of Religious Experience'*, Journal for the Scientific Study of Religion*, 5.1 (1965), pp.97-116

Strenski, I., *Thinking About Religion An Historical Introduction to Theories of Religion* (Oxford: Blackwell Publishing, 2006)

Szocik, Z., 'Religion and Religious Beliefs as Evolutionary Adaptations', *Zygon*, 52.1 (2017), pp.24-52

Taves, A., 'Ascription, attribution, and cognition in the study of experiences deemed religious', *Religion*, 38.2 (2008), pp.125-140

Taves, A., *Religious Experience Reconsidered A Building Block Approach to the Study of Religion and Other Special Things* (Princeton New Jersey: Princeton University Press, 2009)

Thammanard, C., and T. Lerthattaslip, 'The Reading the Mind in the Eyes Test: Validity and Reliability of the Thai Version', *Cognitive And Behavioral Neurology*, 30.3 (2017), pp.98-101

The Alister Hardy Religious Experience Research Centre, *Alister Hardy RERC Archive Database* (2022). www.studyspiritualexperiences.org [last accessed 4.2.22]

The Alister Hardy RERC Archive Database, (2022). www.studyspiritualexperiences.org [last accessed 7.2.22]

The Alister Hardy Trust, (2022). www.studyspiritualexperiences.org [last accessed 4.2.22]

The Archbishop of Canterbury, *Archbishop of Canterbury reflects on God as a father "who loves me unconditionally* (2018). www.archbishopofcanterbury.org/news/latest-news/archbishop-canterbury-reflects-god-father-who-loves-me-unconditionally#:~:text=The%20Most%20Revd%20Justin%20Welby%20said%20that%20calling,know%20myself%20and%20yet%20still%20loves%20me%20profoundly [last accessed 27.2.21]

The Church of England, *Creeds and Authorised Affirmations of Faith* (2022). www.churchofengland.org/prayer-and-worship/worship-texts-and-resources/common-worship/common-material/new-patterns-28 [last accessed 26.5.21]

The Holy See, 'Catechism of the Catholic Church' Paragraph239 (2003). *http://www.vatican.va/archive/ENG0015/__P17.HTM* [last accessed 16.02.22]

Thibaut, J., and H. Kelley, *The Social Psychology of Groups* (New York: Wiley, 1959)

Thiselton, A., *The Hermeneutics of Doctrine* (Grand Rapids, MI/Cambridge: William B. Eerdmans Publishing Company, 2007)

Tonstad, L., *God and Difference. The Trinity, Sexuality, and the Transformation of Finitude,* (London: Routledge, 2016)

Tonstad, L. *Queer Theology* (Eugene, Oregon, Cascade Books, 2018)

Van Overwalle, F. and M. Vandekerckhove, 'Implicit and explicit social mentalizing: the dual processes driven by a shared network', *Frontiers in Human Neuroscience*, 7 (2013), pp.1-6

Visala, A., 'The Evolution of Divine and Human Minds: Evolutionary Psychology, the Cognitive Study of Religion and Theism', in *Evolution, Religion, and Cognitive Science: Critical and Constructive Essays,* ed. by F. Watts and L. Turner (Oxford: Oxford Scholarship, 2014)

Wallace, A. 'Revitalization Moments', *American Anthropologist,* 58 (1956), pp.264-281

Watts, F., 'Attachment, Evolution and the Psychology of Religion: A Response on Lee Kirkpatrick', *Archive for the Psychology of Religion*, 28 (2006), pp.63-69

Waytz, A., N. Epley and J. Cacioppo, 'Social Cognition Unbound: Insights Into Anthropomorphism and Dehumanization', *Current Directions in Psychological Science*, 19.1 (2010), pp.58–62

Webb, S., *Jesus Christ, Eternal God: Heavenly Flesh and the Metaphysics of Matter* (Oxford: Oxford University Press, 2011)

Weke, M., 'Searching for Neurobiological Foundations of Faith and Religion', *Studia Humana,* 5.4 (2016), pp.57-63

Whaling, F., 'A brief history of the study of religion'*, DISKUS,* 7 (2006), www.jbasr.com/basr/diskus/diskus7/whaling.htm [last accessed: 06.05.18]

Williams, C., *Archbishop of Canterbury backs evolution. Well, he is a Primate* (2006). www.theregister.co.uk/2006/03/21/archbishop_backs_evolution/ [last accessed 4.2.22]

Williams, R., 'The deflections of desire: negative theology in trinitarin desire', in *Silence and the Word. Negative Theology and Incarnation,* ed. by O. Davies and D. Turner (Cambridge: Cambridge University Press, 2002), pp.115-135

Wilson, D., *Darwin's Cathedral. Evolution, Religion and the Nature of Society* (Chicago: University of Chicago Press, 2002)

Workman, L. and W. Reader, *Evolutionary Psychology (Third Edition)* (Cambridge: Cambridge University Press, 2014)

Wyschogrod, M., 'Judaism and Evangelical Christianity', in *Christianity through Non-Christian Eyes,* ed. by P. Griffiths (New York: Orbis Books, 1990), pp.128-129

Young, F., *From Nicaea to Chalcedon. A Guide to the Literature and Its Background. Second Edition* (London: SCM Press, 2010)

Zahl, B., and N. Gibson, 'God Representations, Attachment to God, and Satisfaction With Life: A Comparison of Doctrinal and Experiential Representations of God in Christian Young Adults', *The International Journal for the Psychology of Religion,* 22 (2012), pp.216-230

Zangwill, N., 'The myth of religious experience', *Religious Studies,* 40.1 (2004), pp.1-22

Zarzycka, B., 'Parental Attachment Styles and Religious and Spiritual Struggle: A Mediating Effect of God Image', *Journal of Family Issues,* 40.5 (2019), pp.575–593