Mythology for Christians:

An investigation and empirical test of C.G. Jung's

proposal that protestant theologians and adherents

should think of God as a mythologem.

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A thesis submitted for the degree of Psychoanalytic Studies

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Date of submission: 4 Apr. 2017

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Abstract

This research tests C.G. Jung's suggestion that if protestant Christians think of God as a mythologem then it advances consciousness. There is an implied benefit of greater religious tolerance. The research methodology is to investigate the theoretical concepts involved, operationalise them, and then conduct an empirical test of their relationship.

There are multiple problems that have to be overcome, including Jung's amorphous and protean use of terminology. His concept of myth, in this context, is clarified and positioned within his philosophy, the contemporary culture of materialism, and the primary beliefs of the target audience. The contemporary understanding of Jungian consciousness is also revisioned to incorporate Jung's notion of advancement based on the transcendent function.

There are no existing measures for 'thinking mythologically' nor 'advancement'. The concepts do not lend themselves to established psychometric principles. Therefore, two new forms of questionnaire are devised to measure these concepts, alongside two new questionnaires of conventional design that collect information about demographics and religious tolerance. There is an Information Technology sub-project, using a bespoke database and set of programs, to develop, publish, and promote the questionnaires on the internet. There are then two stages of statistical analysis: one to develop reliable and valid measures for each concept; the other to measure the relationships between the concepts.

The main result of the test is that the specific relationship Jung describes in the letter – between mythological thinking and advancement of consciousness – does not hold. However, the data does suggest there may be a direct relationship between mythological thinking and religious tolerance. Despite the failure of the main test, there are a number of useful lessons from the results and suggestions for future research. There are also several spin-offs from the thesis, in terms of both concepts and resources. These are reviewed in the final chapter.

Figure 1 – Carl Gustav Jung

I stick to my proposal that we take all talk of God as mythological and discuss these mythologems honestly… Let the Protestant theologian therefore… admit to the layman that he is mythologizing and is just as incapable as he is of expressing God himself… [This is so that] verbal image and object are no longer identical, i.e.… their participation mystique is abolished. I have this advance of human consciousness particularly at heart. It is a difficult task to which I have devoted all my life's work.

(Jung 1976, pp. 262-64)

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Declaration of prior work

This research is further development of research conducted as part of a preceding Masters in Jungian and Post Jungian Studies at the Centre for Psychoanalytic Studies, University of Essex (Myers 2009a). That dissertation researched the basis of Jung's televised statement about God – 'I don't need to believe, I know' (Jung 1959a, p. 428). It included an investigation of Jung's philosophy, which for a time he termed *esse in anima.* That work is used in the present thesis, primarily on pages 72 to 76 in the summary of others' views of Jung's philosophical standpoint.

Part I Introduction

1 Introduction

THE BERNET LETTER

This research is testing a suggestion made by C.G. Jung in a letter to Pastor Walter Bernet in 1955. Jung's proposal, reproduced above on the inside cover, is that if theologians treat God openly as a mythologem then it will help advance consciousness, with the implied social benefit of greater religious tolerance. The letter is a long one and has been used by various commentators – such as Nagy[1] (1991), Bishop[2] (2002), and Edinger[3] (1996) – to illustrate various points, such as the influence of Jung's father on the formation of his religious views. The letter is a response to Bernet's book, available only in German, on 'Content and limits of the religious experience: a study of the problems of religious experience in dealing with the psychology of C.G. Jung' (Bernet 1955, my translation). The editors of *Letters II,* Gerhard Adler in collaboration with Aniela Jaffé, record Bernet's book as being published in 1952 (Jung 1976, p.257fn), which is the same year that Jung published *Answer to Job* in German. However, this date is a typographical error, because Bernet's book was published in 1955 and it refers several times to *Answer to Job* (e.g. Bernet 1955, pp. 189, 196, 217). Bernet's book was, in part, a response to *Answer to Job* and he sent a copy to Jung for his comment.

In *Answer to Job*, Jung had treated God as a mythological motif 'even at the risk of being suspected of psychologism' (Jung 1952b, p. 362). Such a charge was not a new one, for Jung had previously been accused of psychologism (e.g. Jung 1933/1934, p. 144) and atheism (e.g. Jung 1973, p. 123). The book gave his critics even more ammunition through its portrayal of

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[1] Marilyn Nagy is a Jungian analyst.
[2] Paul Bishop is an English professor in the German language, who specialises in analytical psychology and German aesthetics.
[3] Edward Edinger was a psychiatrist and Jungian analyst.

God, which as Jung anticipated unleashed a theological tempest in response (Bair[4] 2003, p. 527). It is in this context of controversy and misunderstanding that Jung makes his suggestion, which contains four main elements. Jung proposes that (a) theologians treat God as a mythologem and (b) admit openly to the layman that they are mythologizing. This, he says, will (c) lead to the differentiation of verbal image and object (or abolition of participation mystique), which results in (d) the advancement of human consciousness. These four points establish a relationship between religion, mythology, philosophy and psychology in the advancement of consciousness which, Jung claims at the end of the letter, represents the essence of his life's work.

This research clarifies the two main concepts concerned (thinking of God as a mythologem and the advancement of consciousness) and tests their relationship. Ultimately, that particular test fails. However, there are several phoenixes that rise from the ashes of that failure to suggest Jung's suggestion still has merit, albeit not exactly in the way originally envisaged. The research in this document is therefore not an encapsulated piece of research, but the beginning of further development that could ultimately have a societal benefit. The results also present some significant challenges to accepted Jungian theory, and suggest various avenues for additional research.

PERSONAL BACKGROUND

My attention was drawn to Jung's specific suggestion through reading Aniela Jaffé's *The Myth of Meaning*. She quotes from the letter to Bernet to demonstrate that the advancement of consciousness represented the most important aspect of Jung's life's work (Jaffé 1970, pp.

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[4] Deidre Bair wrote a biography of Jung that is extensive in both research and content. She was granted access to Jung's unpublished papers by the family. She retained independence in formulating her descriptions and analysis of Jung's life and work.

103-4). However, the general idea for the research had emerged much earlier, from personal experiences, professional work, family history, church involvement, and reading some of Jung's books. One experience in particular that highlighted the value of Jung's theories occurred between 1996 and 2000. Whilst developing a new team role questionnaire, to use alongside the Myers-Briggs Type Indicator (*MBTI*), statistical problems arose. Investigation of the cause led to the discovery of some subtle but important differences between the typological theories of Isabel Briggs Myers and C.G. Jung. For example, Myers-Briggs typology associates the concrete-abstract dichotomy with sensing-intuition (e.g. Myers[5] 1980, p. 90), whereas Jung associates it with all the typological functions (Jung 1921a, p. 410). Also, Jung distinguishes between active and passive use of functions, whereas in Myers-Briggs typology the sensing function tends to be portrayed passively and the intuition function actively. When Jung's version of the theory was incorporated into the questionnaire, the statistical difficulties were resolved. The team role questionnaire was published in 2000 and a research version remained on the internet to become an alternative to the MBTI, the *Mental Muscle Diagram Indicator (MMDI).* A further adaptation of the MMDI is used in the present research.

This positive experience – in which insights from *Psychological Types* improved psychometric performance – prompted further reading, including *Answer to Job* in which he seemed to integrate science, psychology and religion using mythology. Although myth is not superordinate to them, the disciplines of science, psychology and religion all seemed to rely on myth, each containing different forms of myth, and myth being an integral part of Jung's philosophical standpoint. A similar idea was discovered, whilst doing some preliminary

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[5] All references to Myers prior to and including the 1980s are to the work of Isabel Briggs Myers, the co-creator (with her mother Katharine Briggs) of the Myers-Briggs Type Indicator (MBTI). References to 'Myers 1995' are to the writings of her son, Peter Briggs Myers, who assumed joint responsibility for the MBTI after her death. References in the 2000s and 2010s are to the work of the author of this dissertation, Steve Myers (no relation to Isabel Briggs Myers).

investigations for the proposal for the current research, in the philosophy of science of Karl Popper. Segal[6] suggests that, for Popper, science can be considered myth-like (Segal 2004, p. 28) – and indeed this is suggested by phraseology such as 'scientific discovery is *akin* to… myth making' (Popper 1963a, p. 7, emphasis added). However, elsewhere Popper goes further than this, not merely making science akin to myth, but asserting that scientific theories 'remain myths' (Popper 1963b, p. 172). He differentiates religious from scientific myths not by their nature but by pairing them with a supplementary process of refining the myths through critical discussion. In this interpretation of Popper's theory, new scientific theories originate through myth-making (conjecture) and are then refined through attempts at refutation. Religious myths remain unrefined.

Another influence on the shape of the Ph.D. research idea was a small book *The Pleroma: an Essay on the Origin of Christianity* (Carus[7] 1909). Carus played a role in bringing Buddhism to the West (Tweed[8] 1992) but there is no evidence that he had a direct influence on Jung. The various references to 'Carus' in Jung's works are to Carl Gustav Carus (Forryan & Glover[9] 1979, p. 140) – who was a doctor of medicine and philosophy, and a friend of Goethe. Jung credited C.G. Carus with recognising 'the unconscious as the essential basis of the psyche' (Jung 1940, p. 152). However, there may have been an indirect influence of Paul Carus on Jung, or a shared source of ideas, through the general milieu, common readings, and/or through some individuals. For example, Daisetsu Teitaro Suzuki translated Buddhist materials for Carus and wrote a book for which Jung provided a foreword (Jung 1939a, pp. 538-57)

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[6] Robert Segal is a professor of religion with particular interest in theories of myth.
[7] Paul Carus was a German-American author and philosopher of the same generation as Freud.
[8] Thomas Tweed is a professor of history and of American Studies.
[9] Barbara Forryan and Janet Glover compiled the *General Index* for Jung's Collected Works – i.e. volume 20.

Carus integrated Christianity and mythology in a manner that is similar to Jung's, and his argument illuminated certain aspects of *Answer to Job*. Like Jung, he applied mythology in a constructive way, suggesting Christianity has a close historical relationship with pagan myth but also needs to incorporate science in the future. Carus positions Christianity as the pleroma (by which he means fulfilment) of pre-Christian myth. He describes how 'several religious developments… were combined into a higher unity' (Carus 1909, p. 2). He illustrates it using the analogy of Galton's composite photography, an analogy that Jung used later to suggest the stereotypical nature of psychological type descriptions (Jung 1921a, p. 405). Sir Francis Galton, a pioneer in psychometrics, superimposed short exposures of many faces to produce a picture containing their common features (Carus 1909, pp. 123-25). Carus therefore portrays Christianity as the composite of prior myths. However, he pits myth and science against each other, as alternative views of truth. Carus regarded Christianity as too dependent on myth (Kitagawa[10] 1968, p. 194) and saw its future survival as dependent on its ability to 'assimilate the new truths of science' (Carus 1909, p. 131). He therefore calls for scientific truth to be put on the same level as theological truth, which he argues will result in a new, higher, and more tolerant set of beliefs. That is, Carus predicts that if we put theology and science on an equal footing then something new and better will emerge.

Carus' book played an important role in the development of the research question by helping to illuminate Jung's view of the relationship of mythology, religion and science. Carus' view chimes with the views of both Jung and Popper to the extent that it recognises there are commonalities between science and religion – though they also differ in that for Carus the commonality is based on truth, whereas for Jung and Popper it is based on myth. Carus' argument also loosely corresponds to Jung's view on how consciousness advances between opposites – that is, by giving them equal parity something will emerge that transcends them

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[10] Joseph Kitagawa was a professor of religion.

both. The main difference between the three men is primarily *how* the conflict between science and religion is to be resolved. For Popper, religion needs to develop the skill of critical reflection. For Carus, both science and religion will be transcended by truth – which is independent of human reason, can be discovered, and will subsume meaning and morality to become the 'God of truth' (Carus 1909, p. 143). Jung's view is a combination of these two perspectives – recognising the need for religious critical reflection (as per Popper) and that it will lead to a new viewpoint that transcends science and religion (as per Carus). Unlike Carus, however, Jung sees that third thing not as objective truth but as a new, transformed mythology. We do not discover a new God of truth, rather we dream the existing myths onwards (Jung 1940, p. 160).

THE CHALLENGE OF MYTHOLOGY

Another significant influence on the formation of the research question was the impact of mythology on contemporary Christian faith, and the reclassification by many of Christianity as being myth. From the earliest days of Orthodox Christianity the church has known about pagan myths and rituals that pre-date and parallel the Christian story. As the writers of a popular but extensively researched book demonstrate, early Christians found these parallels 'so disturbing that they tried to erase all evidence of them' (Freke & Gandy[11] 1999, p. 1). The term myth was first used in relation to theology in the 19th century (Wiles[12] 1976b, p. 149) and there are many parallels that were brought to public attention, most notably by Frazer[13] (1922, pp. 358ff). This includes Easter, which is the most important and foundational event on

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[11] Timothy Freke and Peter Gandy are the authors of popular, but nevertheless extensively-researched, books on consciousness, religion, and spirituality. Their book *The Jesus Mysteries* examined the pagan roots of Christianity and it appeared on The Sunday Times' bestsellers list.

[12] Maurice Wiles was an Anglican priest and professor of divinity.

[13] James Frazer was the author of *The Golden Bough.*

which the Christian faith rests, and which Joseph Campbell compares to the myths of Dumuzi, Adonis, Attis, and Dionysos (Campbell 1964, p. 138).

The impact of such developments on the protestant church is illustrated by the reaction to the seminal and controversial book *Honest to God* (Robinson[14] 1963), for which there was a conference in 2003 to look at its 'legacy and continuing influence' (Cheetham[15] 2004, p. vii). The book draws primarily on the ideas of theologians Paul Tillich, Dietrich Bonhoeffer, and Rudolf Bultmann to argue against the idea of a supernatural God. Tillich had observed the trend towards an understanding of God that is less literal. The advances in astronomy had shown beyond doubt that God was not *up there* in the heavens, but other advances of knowledge had also made untenable the more contemporary idea of a God *out there* – as a being external to mankind. Tillich therefore reframed God as the *ground of our being* and the experience of God as being manifest in the love expressed in our relationships. Bonhoeffer's contribution was to call for Christianity *without religion*. He used the term 'religion' to denote a turning away from the world and focusing on God as the cause of those things that mankind could not explain. Bonhoeffer called for a *worldly* Christianity, one that engages with the world whilst recognising the powerlessness and suffering of God. Bultmann recognised that Christian myth is not distinctive from other forms of myth and called for Christianity to be demythologised (for the myth to be removed). This means focusing not on the Biblical stories, as historical or mythical events, but on the central message and meaning of the cross. The significance of the publication of *Honest to God* and the response to it was summed up by the editor of the 2003 conference book:

> It was a watershed experience that changed lives, and certainly the Church of
>
> England... *Honest to God* represents a phenomenon [that sparked] frequently fierce

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[14] John Robinson was an Anglican Bishop and a scholar of the New Testament.
[15] Richard Cheetham is a Bishop in the Church of England, who contributed a foreword to the conference book.

debate. [For some readers it had a similar impact to] John F. Kennedy's assassination or the death of Diana, Princess of Wales. The *continuing* theological impact is crucial [for it] is now regarded as a very mild pussycat among significant radical texts… Over 40 years, however, the background has changed [due to] the politicising of debate [which] sets up hard-edged boundaries of what is, or is not, acceptable as 'orthodoxy'… If Robinson's vision were to be truly realized, then… all their perspectives would be seen as provisional.

(Slee[16] 2004, pp. 2-5, original emphasis)

Just as there have been many diverse and stormy reactions to *Honest to God,* there are also many ways that lay members of the church can respond to the challenge of pagan mythology and the re-designation of Christianity as mythology. These fall into five main groups. The first is to deny or remain unaware of the evidence provided by pre-Christian mythology, or to view claims that Christianity is myth as being false. Some Jungian analysts see value in this approach, because most people are best served 'by creating outer images of the archetypes and then staying at a respectful distance' (Roy[17] 2004, p. 72). Dogma can play a role in providing a defence against undesirable contents of the unconscious (e.g. Jung 1937a, p. 46, or Neumann[18] 1954, p. 322).

A second way to respond is to acknowledge that there are various myths but to assert that the Christian myth is the one that is true (e.g. Throckmorton[19] 1959). That is, the existence of pagan myth is accepted but dismissed as being false, and the charge of Christianity being myth is accepted on the basis that Christianity happens to be a true myth. The early church took this dogmatic approach, for example Justin Martyr attacking pagan parallels as 'deceitful

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[16] Colin Slee was the Dean of Southwark Cathedral.
[17] Manisha Roy is a psychological anthropologist and Jungian analyst.
[18] Erich Neumann was a psychologist, philosopher, and friend of Jung's.
[19] Burton Throckmorton was a professor of theology specialising in the New Testament.

fabrications by evil demons designed to reduce the Christian story to a 'mere tale of wonders like the stories told by the poets'' (Young[20] 1977, p. 101). A modern variation on this theme is C.S. Lewis, who argued that Christianity is myth become fact (Lewis 1970, pp. 54-60). Another who takes a similar approach is Barth[21], who initiated a radical change in Protestant thought in the 20th century by demanding 'a return to the prophetic teaching of the Bible' (Doniger[22] 2006, p. 113). Barth introduced dialectical theology which, on the surface, might seem to have an affinity with Jung's theories because it involves paying attention to the paradoxical nature of God. However, Jung was very dismissive of Barth (Jung 1973, p. 471), because his approach affords no role to self-understanding in the understanding of God (e.g. see Barth 1962, p.86). It therefore represents the type of unreflecting belief of which Jung disapproved (Jung 1957a, p. 265).

The third type of response is to distinguish between mythology and truth, and to focus on the kernel of truth that lies behind the myth. That is, there may be layers of myth in Christianity which, like pagan myth, are false, but at its heart Christianity holds a central truth. This is the approach suggested by Rudolf Bultmann's process of demythologisation. He focuses on the kerygma, the substantive Christian message that the New Testament contains, which is primarily the existentialist efficacy of the cross (Bultmann 1953, p. 41). Bultmann's argument has itself provoked a wide range of reactions, some reasserting a dogmatic position (Bartsch[23] 1954, p. 1-2) and others, such as Barth, dismissing him as heretical (Grau[24] 1973, p. 144).

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[20] Frances Young is a lecturer in New Testament Studies.

[21] Karl Barth was a Swiss Reformed theologian, a contemporary of Jung who was highly influential in protestant theology. In the Collected Works, Jung made a small number of passing references to him, but did not overtly address Barth. In his letters, Jung makes some sarcastic or dismissive references to Barth's beliefs (Jung 1973, pp. 58, 471,; Jung 1976, pp. 140, 145).

[22] Wendy Doniger is a professor of religion and editor of *Brittanica Encyclopedia of World Religions.* Entries in the encyclopedia are not attributed to individuals so all references in this dissertation use Doniger's name.

[23] Hans-werner Bartsch was a German protestant theologian who edited a book – *Kerygma and Myth: A Theological Debate* – that brought together Bultmann's original essay on demythologisation, various responses to it, and Bultmann's replies to those responses.

[24] Gerhard Grau was a doctoral student at Princeton Theological Seminary, who published a paper examining the correspondence between Bultmann and Barth.

Some responses are more positive, however, such as seeing Bultmann's category of myth as 'the mode in which God has chosen to reveal himself' (Lohmeyer[25] 1944, p. 137). Jung read Bultmann but dismissed his argument as failing to recognise the distinction between consciousness and archetypal forces (Jung 1938/1954b, p. 104). This leads to the 'impoverishment of symbolism' (Jung 1976, p. 7) which is to the detriment of Protestants.

The fourth type of response to the challenge of mythology is to lose one's faith. That is, the parallels between pagan and Christian mythology show that both are entirely false, including Christianity. A variation of this is the argument presented by Giegerich[26] (2003) and Heller[27] (2006), that people need to come to terms with the absence of myth. However, from a classical Jungian perspective this 'death of god' runs the risk that the balance between the two psychic halves of the mind is lost (Jung 1951a, p. 180). Alternatively, the projections that were once located in the god-image might be displaced elsewhere – for example, into a hero in popular culture that takes the place of a god (Segal 2004, pp. 140-142).

Finally, the fifth type of response is to step off the truth-falsity axis of debate, and to adopt a new way of thinking – one that accepts a mix of truth and falsity within both pagan and Christian mythology and seeks to integrate and understand them in a constructive and transformative way. This was the aim of *Honest to God* – to promote a new 'way of thinking' (Robinson 1963, p. 48). Slee's commentary 40 years later (op. cit.) laments the fact that this way of thinking has not been widely adopted. On the contrary, the boundaries between the different viewpoints have subsequently hardened. Robinson predicted in his book that there would be opposition to this new way of thinking:

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[25] Ernst Lohmeyer was a protestant theologian and professor of the New Testament.
[26] Wolfgang Giegerich is a Jungian analyst.
[27] Sophia Heller is an independent scholar who holds a Ph.D. in mythological studies from Pacifica Graduate Institute.

[Using] mythological language [is something we have to] become used to doing… We may have to pass through a century or more of reappraisal before this becomes possible and before this language ceases to be an offence to faith for a great many people. However, the signs are that we are reaching the point at which the whole concept of a God 'out there'… is itself becoming more of a hindrance than a help.

(Robinson 1963, pp. 15-16).

Jung's proposal in the Bernet letter has some similarities with Robinson's approach, because both shift the emphasis onto the mythological and use the term in a similar way. Many writers regard 'mythological thinking' as a primitive mode of thought, but Jung and Robinson see it in opposite terms, as an advanced mode of thought, as a form of symbolic thinking. This term – symbolic – can also be viewed in many ways, such as mathematicians using the term 'symbol' to identify certain types of content of formulae. However, Jung (and Robinson) see the term symbol in a much more sophisticated manner, as representative of multiple truths and meanings, and not merely a representation of something that is unambiguous. For the latter type of term, Jung used the term 'sign'. In that context, Jung and Robinson both see mythological thinking as an advance, not as a reversion to a primitive type of thought, and thinking of God in these terms may be the only way for Christianity to adapt and survive. They differ, ironically, in Jung affording greater objective reality to God than does the Anglican bishop, through his concepts of archetypes, the objective psyche, and – as we shall see later – affording spirit an independent ontology. Jung and Robinson are not the only writers who saw the term 'myth' as necessary for the future survival of Christianity. For example, one theologian argues that a 'major theological development is called for in this last part of the twentieth century [based on] a recognition that Jesus… as God incarnate… is a mythological or poetic way of expressing his significance for us' (Hick[28] 1977, pp. ix-x, 183).

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[28] John Hick is a professor of theology.

Nevertheless, the use of the term *mythologem* in relation to God, as Jung proposes, is itself a significant challenge and a double-edged sword.

If the rise of Christian fundamentalism has been, in part, a reaction to the theory of evolution (Doniger 2006, p. 362) then using the terminology of *myth* is also likely to provoke a negative reaction in some people (as Robinson predicts). Jung saw that type of reaction during his lifetime in the many letters he exchanged with theologians. Near the end of his life, he lamented the fact that he not been able to change the theological way of thinking, which he attributed to the 'theologian [being] afraid of having to think psychologically about the objects of his belief' (Jung 1976, p. 629). He also expressed the wish that someone else would follow up this line of research. The present research does just that – not by examining a new theological perspective, nor by examining the philosophical issues associated with the existence or nature of God. Rather, it is examining the mythical mode of thinking that Jung identified, based on symbolism and allegory rather than literality. Jung's proposal in the Bernet letter requires the recognition of myth not only as influencing our perception of God, but also as shaping our everyday understanding and explanations.

TARGET AUDIENCE

In the Bernet letter, Jung directs his proposal specifically at Protestant theologians (Jung 1976, p. 262). Jung identifies himself as a Protestant (Jung 1944b, pp. 645-7) and throughout his writings often directs his main criticism at the belief and practice of Protestantism, which is the most heterogeneous of the three major branches of Christianity (Doniger 2006, p. 888). The largest branch is Roman Catholicism, which mostly has a single church structure headed by the Pope – apart from a few breakaway churches. The denominations of Orthodoxy are also relatively limited, including the Eastern and Oriental Orthodox Churches, and the smaller

Assyrian and Ancient Churches of the East. Protestantism, however, has multiplied into hundreds of autonomous denominations, and a much larger number of independent churches that declare no denominational association. This multiplicity arose from the reformation, and particularly Martin Luther's 95 theses of 1517. They afforded authority to scripture alone and rejected the authority of the church's structure and tradition (p. 911). When Martin Luther was banned, 6 princes and 14 cities opposed that ban with a formal protestation in 1529. The central belief it expressed was that 'in matters which concern God's honour and salvation and the eternal life of our souls, everyone must stand and give an account before God for himself' (p. 888). It is this focus on individual conscience rather than church authority that led to the proliferation of denominations.

Although Jung sometimes compares Protestantism with Catholicism, he omits any discussion of Orthodoxy for the most part (Papadopoulos[29] 2002). Jung regarded the Protestant shift in focus, from the church to the individual, as the loss of a defence against God, though it also presented an opportunity:

> The Protestant is left to God alone… He has to digest his sins by himself… If a Protestant survives the complete loss of his church and still remains a Protestant, that is to say a man who is defenceless against God and no longer shielded by walls or communities, he has a unique spiritual opportunity for immediate religious experience.
>
> (Jung 1937a, pp. 48-49)

The terms protestant and catholic can be used to describe both an attitude and church structures. The complex relationship between the two terms can be seen in the history and politics of the Anglican Church, which broke from the Roman Catholic Church in the 1530s so that Henry VIII could annul his marriage to Catherine of Aragon. This was shortly after the

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[29] Renos Papadopoulos is a professor of analytical psychology.

formal protestation but not in response to it, and the Anglican church still views itself as catholic even though many members might describe themselves as protestant. At one point in history, a substantial part of the Church of England was persuaded to 'repudiate the word Protestant as a description of their church' (Doniger 2006, p. 888). The present research is not concerned with church structures but with the individual's mode of thinking – the association between mythological thinking and the advancement of consciousness. It is targeted at those who have a protestant attitude – a particular religious attitude that involves believing in God and giving priority to scripture and conscience as to the conduct of their lives, content of their beliefs, and future destiny. Such people may be found outside formal church structures, and there are people within Protestant denominations whose attitude is more 'catholic' because they privilege organised church or the views of church leaders over their personal conscience or interpretation of scripture.

When forming the research question, the two main concepts – mythological thinking and advancement of consciousness – were anticipated as being primarily of psychological significance and independent of formal religion. That is, although some religions may tend more towards mythological thinking than others, it would be possible to separate religion from the psychological relationship being measured, and psychology would be the dominant influence in the results. In the event, as a result of the participation of other religions in this research, the data has shown this assumption to be profoundly incorrect. Religion has proven to be more dominant than the psychological principles.

RESEARCH APPROACH

This research contains three main elements. The first two are theoretical investigations of the two key concepts at the heart of Jung's letter to Pastor Bernet – Jung's use of mythology

(within the context of his philosophy) and his process of advancement of consciousness (which turns out to be virtually the same as individuation). In both cases, the research involves a clarification of the concepts involved and a reframing of them in a form that can be measured. They are then used in the third element of the research, a statistical investigation, which tests whether there is a relationship between the two concepts.

Analytical psychology, like psychoanalysis, is not reputed for using scientific methods (e.g. Segal 2014, p. 82). In *Jung and the Question of Science,* the editor points to the nature of Jungian research as a key issue for the future of analytical psychology. She begins by noting that one of the deeper issues of the book is 'the credibility of Jung's theory' (Jones[30] 2014, frontispiece). She concludes by calling for the scientific investigation of Jungian premises, which involves 'seeking to ascertain their tenability (and risking their disconfirmation)' (Jones 2014, p. 183). Jung's theory of consciousness is often regarded as mystical (e.g. Papadopoulos 2006) but Jung rejects this charge and claims to approach the topic of mysticism scientifically and empirically (Jaffé 1989). Jung engages with mysticism to gain experiential data, not to use it as the arbiter of knowledge, and he scrutinises his experiences critically to find (in his view) the best explanation for them. He recognises that his empiricism has its limitations (e.g. Jung 1921a, p. 307) and, late in life, finds he is taken to task over his claims to be scientific by E.A. Bennett, his friend and biographer. Their exchange of letters, which has been summarised by Shamdasani[31] (2003, pp. 98-99), shows that Jung's approach is primarily based on an abductive reasoning, or inference to the best explanation, but stops short of engaging with more recent scientific concepts such as prediction, testing/falsification, and reproducibility. In Jung's final letter in the series to Bennett (Jung 1976, p. 567) he argues that prediction and testing is not possible in psychology. However, Jung's claim is

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[30] Raya Jones is a social psychologist with particular interests in analytical psychology and the philosophy of science.
[31] Sonu Shamdasani is a historian of psychiatry and psychology, with a particular interest in the work of C.G. Jung.

contradicted not only by the extensive research undertaken in mainstream psychology but also by the fact that he himself conducted or supported experiments during his life that tended towards this approach. Examples include the word association test (Jung & Riklin[32] 1904-7, 1910), Rhine's experiments, or his investigations of synchronicity (Jung 1952a). Also, in the last letter to Bennett, he argues that terms such as *archetype* are not parts of a theory but merely the naming of a collection of observable facts. Such a claim is untenable – his theory of archetypes goes beyond the mere accumulation and classification of experiences, which he elsewhere acknowledges (Jung 1938/1940a, p. 5).

This introduces a second involvement of Karl Popper in this research (in addition to providing a view on myth). The research uses a scientific technique (testing a hypothesis through falsification) that Popper developed (Jarvie[33] 2005, p. 820). Popper was a prominent but controversial philosopher of science (e.g. see Watkins[34] 1994) who did not make any direct reference to Jung. However, as a prominent critic of Freud, it is likely he may have held some scorn for Jung as a pseudo-scientist (Raphael[35] 1999, p. 22). Popper acknowledged the view that social and natural sciences involve different methods (which Jung had claimed in his final letter to E.A. Bennett). However, Popper felt this was due to a misunderstanding of the methods of natural science and there is in fact 'a great deal in common between them' (Popper 1963a, p. 155). The present study adopts this viewpoint and uses the scientific approach that Raya Jones has called for and Popper has argued is possible. It takes a Jungian premise (that thinking of God as a mythologem advances consciousness), operationalises it in a measurable form that can be falsified, and conducts a test to establish whether it has some 'verisimilitude or truthlikeness' (Popper 1963b, p. 297). This research therefore has a very

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[32] Riklin was a psychiatrist working alongside Jung at the Burghölzli hospital.
[33] Ian Jarvie wrote the entry on Popper in *The Shorter Routledge Encyclopedia of Philosophy.*
[34] John Watkins was a professor of philosophy.
[35] Frederic Raphael is a biographer, novelist, and journalist.

broad scope. It encompasses theoretical investigation, psychometric design, online computer programming, and statistical analysis.

RESEARCH QUESTION

Mythological Thinking

Much of the work in this document involves clarifying the research question and developing a measurable understanding of the concepts involved. The first clarification is of what it means to treat God as a *mythologem*. The research examines not only how this term is used in the context of Jung's philosophy – *esse in anima* (Jung 1926, p. 328) – but at how its meaning emerged from the work of the early philosophers in distinguishing between mythos and logos. Logos was a form of overt reasoning, the truth of which was demonstrable, whereas mythos was the disclosure of what was hidden, which cannot be substantiated. The modern colloquial association of mythology with falsehood can be traced back to the psychology and projections of these early philosophers, as they sought to establish their identity by associating themselves with logos and disparaging mythos as 'other'. This original distinction between logos and mythos informs our understanding of Jung's neo-Kantian philosophy and his description of science, psychology, and religion as being myth. They are all concerned with the mediation between consciousness and that which is hidden or unseen. We label our perceptions as matter, psyche, or spirit, depending on how we experience the mediatory product. However, Jung's philosophy goes further than just mediation because he views myth as playing a role with consciousness (and the external world) in co-creating reality.

From this research into mythos and logos, an 8-fold model – a myth-map – is developed to show how myth relates to the categories of truth, meaning, and critical reflection. The myth-map can be used to show various life-cycles of myth – how the nature of a myth changes over time in the eyes of the individual and/or society. For example, popular fiction is often considered untrue, meaningful, and it is not critically examined – but some fictional stories may change through history to become regarded as true accounts of events. Many scientific facts may be considered true, critically-examined, and not meaningful – but over time through the advancement of

Figure 2 - Myth Map
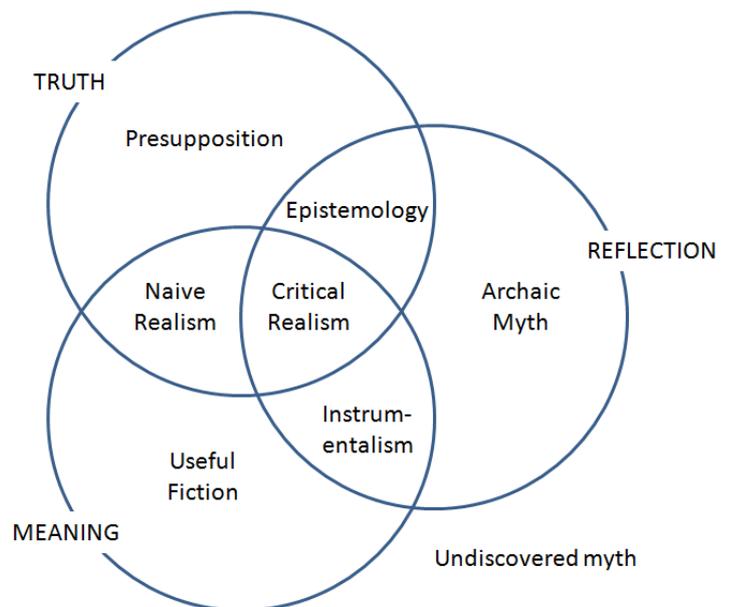
knowledge, technology, or techniques, they may be shown to be false. In the centre of this myth-map is a realm where reflection does not establish a division between truth and falsity, nor between meaning and insignificance. Rather, truth, meaning, and reflection combine in what Grant[36] calls 'broken myth' – a myth that is no longer taken as a literal truth (or falsity) but as a symbolic representation of various truths. This fills the identified need for a 'middle ground between wholesale identification with myth and outright rejection of it' (Segal 2002, p. ix) though it extends the argument much further – into the realm of epistemology. That is, we recognise that our only means of knowing, for that which we cannot experience directly, is through myth. And for even what we can experience, myth shapes our understanding or knowledge of it.

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[36] Colin Grant is a professor of religion.

The type of mythological thinking that Jung was proposing in the Bernet letter needs to be viewed in the context of Jung's philosophy, and particularly his epistemology, which makes some unarticulated assumptions about the protean nature of myth. This leads to a natural extension of the application of mythology, especially when informed by Popper's view of science as myth, to include all that we encounter in daily life and to give it a significant role in the formation of an individual *weltanschauung*. That is, even some of the most mundane things that we experience are shaped or informed by underlying myths. For example, when watching television there is a tacit myth that explains the origin of the images we see and helps us understand and interpret them. This enables us to distinguish between what might otherwise be identical images of a disaster movie, a disaster news-report, a disaster that is about to enter our living room, or a work of art that portrays disaster. The process of perception rests on a mythological foundation so that the image we see is animated by the imagination – even though it may not seem that way and what is seen appears to be objective truth. This mythological process – although not recognised as such – is often exploited by marketers, politicians, hoaxers, terrorists, etc. to achieve their goals. There is often a battle of mythologies as each side seeks for their myth to be adopted as the dominant viewpoint and accepted as the truth.

Regarding God as a mythologem involves engaging with the broken myth that lies at the centre of the myth-map. In practical terms, this means moving away from a literal and binary perception of truth and falsity, or meaning and insignificance, and moving towards a more symbolic mode of thought. This involves recognising the role of myth not only in explaining that which we cannot see, but also in our interpretation of those things that we *can* see. This research develops a form of measurement that indicates the extent to which people think mythologically (symbolically) as opposed to thinking literally.

Jung sometimes described this way of thinking as *psychological.* However, the term 'psychological' is not being used in this research as the main identifier of that style of thinking because it, too, could cause problems, albeit of a different kind. As with the term myth, it presents an initial obstacle to a non-academic, Christian audience because it suggests psychologism – a charge that Jung rejected – which implicitly requires the protestant-minded individual to accept from the outset that there is no objective reality or spirit involved in God. It also raises additional problems that are not present using the word 'myth'. The term *psychological* misrepresents Jung's proposal in the Bernet letter. It severs the link with the 2,000 year old debate on the relation of Christianity to pagan myth. It fails to direct attention to the mythic aspect of human nature. It obscures the argument that myth-making shapes not only our understanding of God but also our understanding of science and other aspects of the world around us. It is also much more difficult, using the term 'psychological', to demonstrate the life-cycle of myth, how it changes in terms of truth and meaning when subjected to critical reflection, how contemporary myths relate to ancient myths through that life-cycle, and how the process of changing myth relates to Jung's process for the withdrawal of projections.

Advancement of Consciousness

The second concept investigated in this research is the 'advancement of consciousness', which turns out to be interchangeable with the term 'individuation'. The research looks for a meaning of this term that can be used in measurement, and it finds a solution in Jung's *Psychological Types.* During this investigation, a significant difference is discovered between Isabel Briggs Myers' and C.G. Jung's versions of typology – which is in addition to the differences that emerged during the development of the team role questionnaire in the 1990s – the omission of the transcendent function from Myers-Briggs theory. To resolve this omission, there is a revisioning of individuation, based on eight principles, as the ongoing

development of a transcendent function from between opposites and which not only includes typology but also many other forms of opposite. Jung related this process of advancement to the Christian cross, but also believed it could be suppressed by a strong religious conviction (e.g. Jung 1973, p. 268). This establishes a link between the interplay of typological (and other) opposites and certain forms of spiritual development.

When looking to convert this view of advancement into something measurable, time limitations have meant that the study has had to be restricted to typological opposites only. Measuring the degree of transcendence of other forms of opposite is a bigger and more difficult task. This omission has proven to be a significant limitation of this research. Although the transcendence of typological opposites is an important form of advancement in Jung's theories, the transcendence of religious opposites appears to be a discrete form of individual development. For the purposes of the current research, the absence of the transcendent function from Myers-Briggs theory means that existing forms of typological measurement needs to be modified to incorporate reconciliation and transcendence of typological functions. This produces a new scale that is based on an adapted version of the MMDI questionnaire and it provides a measurement between the lack of differentiation and transcendence of typological opposites.

EMPIRICAL STUDY

Following the clarification of the concepts involved, there is then a development and validation stage. Alongside obtaining ethical approval, this involves first of all designing online questionnaires to test for the two main concepts. Due to the nature of the concepts, this is much more complex than simply devising some Likert scale questions.

To measure the advancement of consciousness, a cross response format is designed to elicit both conventional responses on a horizontal axis for typological preferences, and responses

Figure 3 - Transcendence Question Scoring
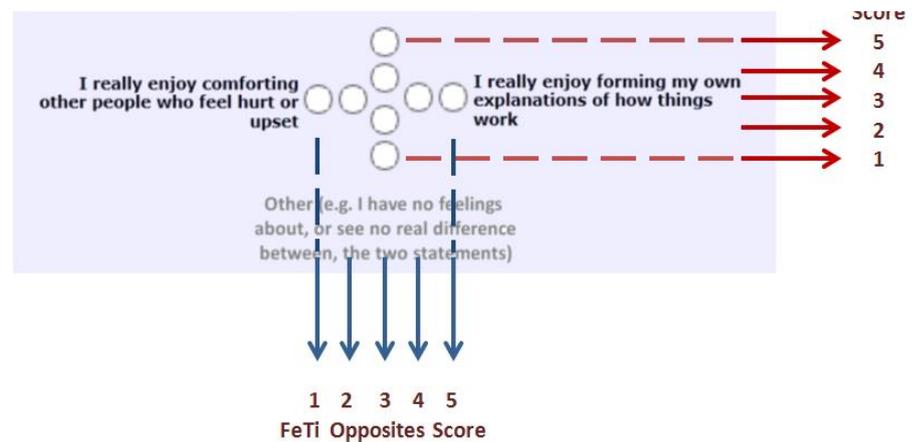
relevant to this research on a vertical axis. This will be discussed in detail later, but it is intended to distinguish between a lack of differentiation between and the transcendence of opposites.

The mythological thinking scale uses a new, curved format – in the shape of a reversed 'C' – and there are two such response curves for each statement in the new online questionnaire. The top and bottom points of the Cs are for responses when the statement is viewed as true or false, or meaningful or insignificant. The mid points, to one side of each 'C', are for when the statement is viewed as being an allegorical truth or having a symbolic meaning/significance. The meaning of

Figure 4 - Mythological Question Scoring

these terms is explained to the respondent in the introduction to the questionnaire.
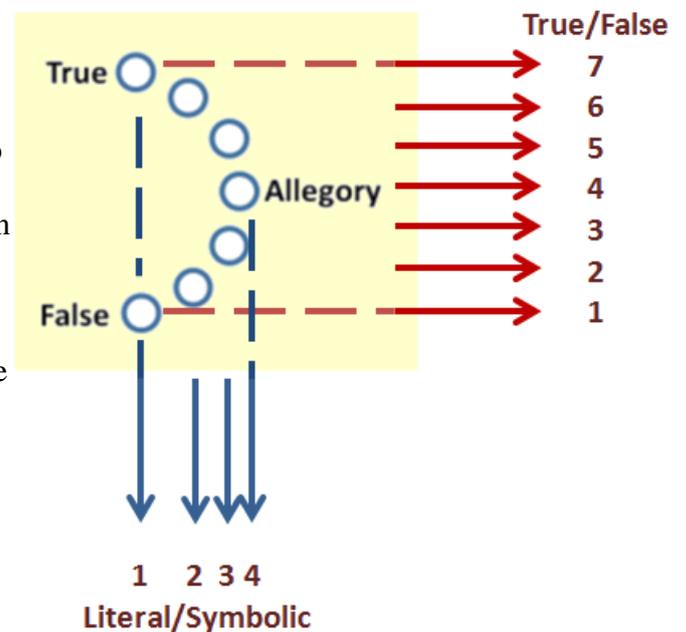
In addition, two other questionnaires are produced, though they have a more conventional structure. The first collects demographic information, including data that might be considered as potentially having an influence on the two main scales. The purpose of the demographic

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information is to ensure that any relationship between mythological thinking and the advancement of consciousness is direct, and not due to any other factors. The second questionnaire is a religious tolerance questionnaire, the purpose of which is to provide some indication of whether the anticipated social benefit of the advancement of consciousness can be realised. A set of questions was devised to elicit attitudes that were held towards people who had different religious views.

The next stage was to develop and implement these questionnaires on the internet. This involved designing a secure database and set of website programmes (at https://research.myers.co) to collect anonymous data, provide commercial reports as an incentive to complete the questionnaires, and to download the data to a PC for analysis. The questionnaire was rolled out in phases, testing it initially on small groups of people, then larger groups, and incorporating feedback into the design of each stage to improve it. Once the questionnaire was in a satisfactory state, it was then made 'live' and promoted at http://www.teamtechnology.co.uk. The initial volumes of data were disappointing, around 100 responses in six weeks, so the first validation exercise acted more as a proof of concept. The questionnaires were then promoted more heavily, until there were around 500 responses in total. This contained approximately 350 usable first-time responses and around 30 usable retests.

The validation, whilst taking account of the theoretical underpinnings of the questionnaires, centred on the statistical techniques of factor analysis, internal reliability, and test-retest reliability. It involved a process of refinement and development in which three measures were produced, based on a relatively small subset of items from the original questionnaires. The advancement of consciousness scale was a combination of items that measured Sensing-Intuition transcendence and Thinking-Feeling transcendence. The mythological thinking scale

contained items on the literal-symbolic scale for religious truth. And the religious tolerance scale was an inverse scale, measuring feelings of religious superiority over others.

Once these scales were developed and shown statistically to be robust, the 500 data records were reused for the full data analysis. The analysis produced some surprising results. There was initially a low but statistically significant correlation (0.14) between mythological thinking and the advancement of consciousness. However, when other demographic variables were controlled for, the significant relationship disappeared; no relationship was found between them. This indicates that the main hypothesis being investigated in the research does not hold – there is no overall significant relationship between mythological thinking and the advancement of consciousness, as suggested by Jung's letter to Pastor Bernet. However, a range of other significant results emerged, suggesting there are other complex relationships between the concepts and some of the demographic variables.

Religion appears to have a significant impact on mythological thinking, a different impact on advancement/transcendence, and a different impact again on their relationship. For example, there is a significant correlation between mythological thinking and advancement of consciousness only for the respondents who were Buddhists and agnostics. This is ironic because these two groups do not adhere to a monotheistic belief system (Jung's proposal was that people think mythologically *about God*). There was also a significant impact of a single demographic item, which asked for the individual's sense of meaning or purpose in life. It correlated positively with advancement/transcendence but also positively with feelings of religious superiority.

One notable and important result was that, for a Christian audience only, there was a significant relationship between mythological thinking and religious tolerance. Christians (and other monotheistic religions, and atheism) reported as more religiously intolerant than

other religious standpoints, but for Christians this intolerance was mitigated by mythological thinking. This suggests that there is a benefit to Jung's original proposal, but not in the way originally envisaged. Rather than religious tolerance resulting from individuation, it results from the adoption of a more symbolic mode of thinking, based on Jung's philosophy of *esse in anima*. The evidence therefore presents a significant challenge to mainstream analytical psychology, in which individuation is generally viewed as the central concept. It might also suggest that individuation – if a valid concept – is not a single overall process of personality development, but a process that is discrete for particular types of opposite.

The rest of this document explains the present research in more detail, including development of the concepts, design of the measures, construction of the questionnaires, validation, and the data analysis. It concludes with a detailed analysis of the results, a discussion of the main issues they raise, and suggestions for further research.

Part II Mythology

2 The Meaning of a Mythologem

THE PROBLEM OF METAPHYSICS

The proposal that Christians regard God as a mythologem is just one aspect of Jung's treatment of Christianity, which has been examined in a book of that name by Stein[37] (1986). He describes the relationship between Jung and Christianity as that of a doctor and his patient in which, from the perspective of analytical psychology, Jung regards Christianity as lacking psychological wholeness. Jung therefore embarks on a therapeutic project to restore this wholeness, motivated by his father complex and his genuine concern for the cultural crisis facing Christianity. Jung's solution lies in the psychological concept of the Self and the need for Christianity to integrate the missing fourth through a series of conjunctions. Stein maps out three main stages, each integrating at increasingly deeper levels. The first establishes a secure ego, which is a stage already reached by Christianity. The second is the integration of wider contents of the unconscious, such as the shadow and anima/us, and a transformational integration of the opposites of spirit and matter (or evil, or the feminine). Examples of this stage include the (historical) Roman Catholic assumption of the Virgin Mary into the godhead, or the (yet to be achieved) reconciliation of Christianity and science. This second conjunction yields a broad representation of wholeness. The final conjunction involves a deeper, mystical union with the universal substratum of the personality.

It is evident from Stein's analysis that, throughout Jung's project, there is a perceptible shift in the language of his argument, from religious to psychological concepts. Stein describes Jung as initially seeking to present a 'proposal for reconstructing the Christian doctrine of

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[37] Murray Stein is a Jungian analyst.

God and Christian theology' (Stein 1986, p. 128). That is, Christians should take a different approach to their myth, to think symbolically, and to reflect upon and modify their mythologems in the light of contemporary knowledge, or dream their own myth onwards (Jung 1940, p.160). However, as Jung's argument progresses, his own psychological concepts and language become increasingly dominant. For example, he portrays Christianity as elaborating 'a symbol that was [only] of partial psychological wholeness… required to be so for developmental reasons' (Stein 1986, p. 132). The 'real' symbol of wholeness is not God but the (psychological) concept of the Self. Although in one sense this is mere semantics – for the Self is equivalent to the god-image – Jung's language implies that Protestant symbols should become more psychological, rather than more reflective of the nature of God. The magnitude of this shift from a theological to a psychological basis can be seen in Stein's conclusion:

> Protestant theologians [are obliged] to re-evaluate their theological methods and commitments… and it is the essence of Protestantism, Jung points out, to react and to change according to the spirit of the age. The Protestant theologian, therefore … 'should bend to the great task of reinterpreting all the Christian tradition' [to be] completely recast in an explicitly symbolic mode… On this method hinges the revolution in Christian theology: It must be symbolical and psychological. Human nature, moreover, must be placed at the center of the theological enterprise. Theology must be grounded in human experience… if the second conjunction is to be realized by Christianity.
>
> (Stein 1986, p. 177)

The Christian audience can view this in two main ways. A positive reception would be to view it as an expression of a modern form of Christianity – for example, as found in the theology of Friedrich Schleiermacher. He sees the centrality of ''Feeling' – namely the feeling that God lives and works in us as finite human beings' (Doniger 2006, p. 977) – and it is

through such feeling that we become conscious of God's being, not through the rational processes of reason (Cross[38] 1911, loc: 3180). From this perspective, Jung is engaged in a dialectic with religion, introducing psychological insights that help not only the development of theological understanding but also the experience of God within the human psyche. This was how White[39] initially responded to Jung – by viewing theology and psychology as being distinct but offering related and complementary perspectives (White 1952). However, a more hostile reaction might be to view Jung as being engaged in psychologism, denying the existence of God whilst advocating a humanist agenda, or as advocating ideas that are not complementary but in opposition to religion. Buber[40] summarises the problem by claiming that God is replaced in Jung's psychology by the wholeness of man (Buber 1952, p. 468). He views Jung as not believing in the existence of God, even though Jung finds such suggestions 'exceedingly odd' (Jung 1973, p. 123). When Jung is incorrectly labelled as an atheist, it suggests that it is not the use of psychological language per se that leads to hostile interpretations of Jung's standpoint, it is the implication of such language for metaphysics – implying that any notions of a God outside the individual mind are false. This is reinforced by Jung's professional stance in which he proscribes any discussion of metaphysics from his theory. He suggests that theology consists only of mythologems (Jung 1954b, p. 682) and implies that anyone who discusses metaphysics seriously is deluding himself:

> Nature has nothing more to fear in the shape of mythological interpretations, but the realm of the spirit certainly has, more particularly that realm which commonly goes by the name of 'metaphysics'. There mythologems claiming to utter the absolute truth still tumble over one another, and anyone who dresses up his mythologem in solemn enough words believes that he has made a valid statement.

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[38] George Cross was a professor of theology whose book presented a summary of Friederich Schleiermacher's work.
[39] The Fr. Victor White was a Roman Catholic priest and for a time became a close correspondent and friend of Jung.
[40] Martin Buber was an influential Jewish philosopher, and a contemporary of Jung's.

However, these comments do not undermine reasonable attempts to understand the metaphysics of spirit. In his reference to nature, Jung is working on the basis that science has withdrawn projections from matter (Jung 1937a, p. 83). This does not mean that science denies that the world has a metaphysical basis, nor that science has abandoned its attempts to understand that basis. In a similar way, when Jung calls theologians to withdraw projections from spirit, he is not asking them to deny God's existence, nor to abandon their attempts to understand the nature of God. He is only calling for the abolition of the participation mystique that turns their metaphysical speculations into metaphysical certainties. The subtleties of this argument are lost, however, when Jung proscribes all metaphysical discussion from his psychology whilst failing to explain how metaphysics can still play a role in theological and lay Christian thinking. This gives the (incorrect) impression that Jung believes there is no metaphysical basis to God, and therefore one has to accept from the outset that religion is only psychological. Jung's stance of 'there is a psychological aspect but I don't want to talk about the metaphysical aspect' is interpreted as 'there is only psychology and no metaphysical reality'.

This misinterpretation is encouraged by his different approaches to mythology and metaphysics. He suggests that theologians and lay people discuss God as a mythologem openly, but he takes an opposite stance in respect of metaphysics – proscribing it from all discussion. This is problematic because both mythology and metaphysics represent fundamental issues that need to be addressed in any religious critical reflection. If they are not addressed, they become elephants in the room that undermine the relevance and validity of Jung's arguments in the eyes of many Christians. In Jung's own mind he has resolved the questions that both mythology and metaphysics raise, and he concludes that there is an extra-psychic aspect to God (Myers 2009a). The intellectual solution Jung has found for himself is

fine, but what he presents to the world is different. Therefore, the criticism being made here is not of the solution he has adopted, it is of his presentation of it.

There are several problems with Jung's presentation of metaphysics. One is that he uses a range of terms and metaphors that have differing degrees of success in communicating his theories and, in some cases, they are highly misleading. One example is his metaphor of the psyche being a telephone system and God being an interlocutor at the other end of the line (Jung 1956, p. 705). As we shall see later, this misrepresents his own epistemology because it places the primary reality of God outside the psyche, and it cuts across his intention behind using the word 'mythologem'. Another problem is that Jung's attitude towards metaphysics is inconsistent. It changes throughout his professional life, and in later years he reverts to a standpoint that he held before embarking on his professional career. In the Zofingia lectures, Jung describes his understanding of the boundaries of knowledge, based on his reading of Kant. At that stage he sees it as valid to draw inferences about the metaphysical realm:

> Can metaphysical reality be attributed to the as yet ideal goal of gratifying the need to think in causal terms?… All philosophy must have an empirical foundation… Our philosophy should consist in drawing inferences about the unknown… on the basis of real experience… not in denying external reality by affirming only the inner world.

> (Jung 1896-9, p. 67-8)

Starting with his dissertation, he begins to shift the emphasis towards an investigation of purely psychological meaning. By the time of his break with Freud, this becomes a proscription of metaphysics from all formal discussion of psychological matters, for 'what God is in himself remains a question outside the competence of all psychology' (Jung 1916/1948, p. 279). This shift in attitude seems to have been influenced by his dissertation supervisor and the culture of the hospital at Burghölzli. Professor Eugen Bleuler was one of the pioneering psychiatrists who sought to understand the meaning of patients' statements

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even when they seemed absurd (Ellenberger[41] 1970, p. 288). Another influence may have

been *From India to the Planet Mars* which Jung drew on in his dissertation (e.g. Jung 1902,

p.55fn). Flournoy provided a psychological explanation for spiritualistic phenomena but

dismissed the involvement of actual spirits (Flournoy[42] 1900, pp. 445-6). A third influence

may have been the first edition of Freud's *The Interpretation of Dreams*, which Jung read

before undertaking his dissertation and is a likely source of cryptomnesic material for him

(Myers 2009b). Jung reviewed (1901) Freud's work and, although his write-up refers only to

the short summary *On Dreams,* it is almost certain that he also read the full book. Near the

end, Freud describes a relationship between the psyche, reality, and philosophy which has

strong echoes of Jung's later epistemology:

> We must always be prepared to drop our provisional assumptions if we think we are in a
>
> position to replace them with something else closer to the unknown reality…
>
> Everything that can become the object of our inner perception is virtual… The
>
> physician and philosopher will only meet when both recognize that 'unconscious
>
> psychical processes' is 'the most appropriate and considered expression for a well-
>
> established fact'… The Unconscious is the true reality of the psyche… what has
>
> psychical reality can have more than one form of existence.

(Freud 1900, p. 403-11, 440)

One of the reasons Jung proscribes discussion of metaphysics is to emphasise the reality of

the psyche (Jung 1952b, pp. 463-64). Whilst that seems a reasonable aim, he does not stick to

the epistemological limit he declares. He admits in his autobiography to 'mythologising'

(Jung 1963, p. 331) and in his formal work gives himself scope to 'go beyond a mere

accumulation and classification of experience' (Jung 1938/1940a, p. 5). This allows him to

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[41] Henri Ellenberger was a psychiatrist and historian.
[42] Theodore Flournoy was a 19th century professor of psychology.

develop his theory of archetypes, synchronicity, the psychoid, etc., and to attribute some psychic images to external objects. For example, he suggests that UFOs are not pure imagination but either the radar echo from psychic projections or real objects that 'occasion' (Jung 1959d, p. 18) mythological projections. He is comfortable asserting that there is something metaphysical underpinning certain concepts in analytical psychology, so his refusal to discuss the metaphysical nature of God can seem (to some readers) to be a tacit denial of God's existence.

Another reason Jung proscribes metaphysical discussion is to promote subjective or hermeneutical interpretation (e.g. Jung 1917/1926/1943, p. 85), but his proscription raises problems that are primarily concerned with epistemology (rather than hermeneutics). Jung recognises the importance of hermeneutics (vs. semiotic understanding) when dealing with symbols (vs. signs). Historically, hermeneutics have been concerned primarily with the interpretation of scripture, but in the last century it has broadened in scope to include the interpretation of all human acts and products, including the human being itself (Inwood[43] 2005, p. 368). This is what much of Jung's psychology does and, when he asserts that God is a mythologem, he is advocating that we approach the concept of God itself, and not only scripture, with a hermeneutical (or interpretative, or psychological) attitude. However, as Jung recognised, one of the 'greatest obstacles to psychological understanding [is] the inquisitive desire to know whether [something] is true or correct' (Jung 1916/1957, p. 91). This highlights one of the main difficulties in promoting mythological thinking about God. The desire to know whether God exists – a question primarily concerned with metaphysics – presents an obstacle to the Christian thinking about God hermeneutically. If God is 'false' and therefore does not exist, then there is nothing from which to draw meaning or to interpret. For

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[43] Michael Inwood is an emeritus fellow specialising in ancient philosophy.

many Christians in the West it is a prerequisite to have a metaphysical belief in order to take a hermeneutical approach to the God concept.

Another inconsistency is that, in contrast with proscribing discussion of metaphysics (e.g. Jung 1973, p. 123), he also suggests that 'metaphysical views are of the utmost importance for the well-being of the psyche' (Jung 1945/1948a, p. 297). He does place some caveats on those views, though. Shortly before the Bernet letter, Jung wrote to another pastor, Jacob Amstutz, contrasting the views of God as being mythological or metaphysical. In the former view, God is a psychic event, best described as an inexplicable, numinous mystery, and the latter view involves a belief in the existence of God. The latter is a legitimate topic for discussion under certain conditions:

> Metaphysical speculations that keep within the bounds of reason (in the wider sense) are therefore quite in place so long as one is aware of their anthropomorphisms and their epistemological limitations.

(Jung 1976, p. 255)

Although Jung's apparent confusion might spark a productive line of thought for some people, for many Christians it is likely to turn the problem of metaphysics into, at best, an unnecessary obstacle and, at worst, prevent them from engaging with Jung's theories altogether. In order to progress to a stage of hermeneutic involvement in the God concept, we first need to examine Jung's phrase 'mythologem' from an epistemological point of view and clarify how one deals with metaphysics when thinking about God in this way. An epistemological focus is necessary because the confusion is a result of Jung's inconsistency in setting and discussing a boundary of knowledge – and epistemology is concerned, amongst other things, with the 'limits of knowledge' (Klein[44] 2005, p. 224). Although Jung is not

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[44] Peter Klein is a professor emeritus from Rutgers University.

reputed for his epistemological contributions, Papadopoulos argues that his psychological theories have an epistemological significance. He defines epistemology as 'the systematic investigation of what makes us accept… that we know something, of what makes us mark a certain territory as observed and comprehended' (Papadopoulos 2006, p. 9). He then proceeds to argue that Jung's epistemology has an archetypal foundation, because archetypes have an 'organising effect… on the knowing process' (p. 32). This suggests that epistemology is relevant to the present research not only because it might help resolve the confusion over metaphysics, but also because myth and epistemology share a common influence – archetypes and archetypal images.

THE WORD 'MYTHOLOGEM'

There are so many meanings to the word 'myth' that any statement associating God and mythology can be interpreted in different ways by different people, and sometimes in multiple ways by the same person. Jung himself used the term in different ways, from referring to ancient stories to describing science, psychology, and religion as all being myth. He also made a variety of claims about God – as being an image, having a dark side, lacking morality, being an anthropomorphism, etc. Many of his concepts are protean in nature, he frequently uses antinomies, and in his writings he has a tendency to circumambulate and make assumptions about the reader's knowledge. This makes him wide open to being misunderstood in many different ways. For example, different commentators have described his philosophical standpoint using a variety of contradictory labels, and in respect of God he has been characterised as being mystical, atheistic, having blind faith, as psychologising God, and many other variations. Therefore, a key aspect of this research is to establish what the

term 'mythologem' means, what Jung meant by applying it to God, and what meaning he intended the average Protestant theologian and lay Christian to take from it.

Although myth is often understood colloquially as falsehood, this is not always the case. For example, one dictionary defines 'mythos' as 'the complex of beliefs, values, attitudes, etc., characteristic of a specific group or society' (Collins[45] 2006, p. 1073). Also, some writers of popular works on mythology draw disciplines such as science and politics into the realm of myth (e.g. Trubshaw[46] 2003, pp. 161-182). The pioneers of the modern understanding of mythology are sometimes cited as having emerged in the 19th and 20th centuries – referring to theorists such as Muller, Lang, Tylor, Frazer, Dumezil, Levi-Strauss, Eliade, Girard, Jung and Campbell. However, these theorists take their place in a line of thought that began with the Greek philosophers and has extended to the present day. Through that development, various meanings of the term myth have emerged. For example, in both folklore (Simpson & Roud[47] 2000, p.254) and religion (Doniger 2006, p. 771), myth is viewed as sacred stories about divine beings that are held to be true. Myth can also be viewed as a story about superhuman beings 'of an earlier age [or] a person or thing whose existence is fictional or unproven' (Collins 2006, pp. 1072) or as a fictitious tale, person or belief (Oxford[48] 1986, p. 1147), or as pre-scientific attempts at explaining phenomena (Hammond, Sculland[49] 1979, p. 718).

Doty[50] describes the term as having been derived from the Greek muthos (μύθος), which in turn may have been derived from an Indo-European root, which means word or story (Doty 1986, pp. 5-7). In the course of linguistic development, the terms mythos and logos took on

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[45] This is a reference to the *Collins English Dictionary, Concise Edition.*
[46] Robert Trubshaw is an industrial designer who developed an interest in local history and folklore. His research is mostly self-published, in books or online materials.
[47] Jacqueline Simpson is a professor of folklore and Stephen Roud a former librarian who researches and writes about folklore.
[48] This is a reference to *The Mini Oxford Encyclopaedic Dictionary.*
[49] Hammond and Scullard are the editors of *The Oxford Classical Dictionary.*
[50] William Doty was a professor of humanities and religious studies.

similar but contrasting meanings. The early Greek poets used the term mythos to describe the arrangement of words in a text. Doty therefore sees mythos as ornamental whereas logos comprises doctrine or theory. The allegorical interpretation of myth – looking for deeper meaning beneath the literal text – began with the growth of philosophy (Doniger 2006, p. 773). Plato used the term muthos (μύθος) in his critique of various philosophical doctrines – to suggest that they are false (Brisson[51] 2000, pp. 128-9). He coined the term *mythologia* to distinguish the imaginative accounts of divine actions from factual descriptions of events, supernatural or otherwise (Cotterell[52] 2006, p. 10). This process of thinking rationally about myth eventually became more scientific in nature, with the emergence of empirical disciplines that could derive conclusions about myth from anthropological observations.

In modern usage, the term myth is sometimes used interchangeably with worldview. For example, Lakoff and Johnson[53] situate their theory of metaphor 'within the experientialist myth' (Lakoff & Johnson 1980, p. 230). This perspective affords myth a very different meaning to that used in, say, folklore because it has nothing to do with divine beings per se and it separates the fact that there is a belief from the subject matter of that belief. That is, the essence of myth is belief, and if someone believes in things that are not supernatural, or have no apparent religious connotations, then it can still count as myth.

Segal has provided an overview of the landscape of theorists of myth, and he positions Jung's primary contribution within it. Segal's own definition of myth is as a story about personalities that accomplishes something significant for, and exercises some grip over, the adherents (Segal 2014, pp. 3-5). He attributes the different meanings of the term to the different types of origin, function, and subject matter. However, he also points out that theorists of myth differ

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[51] Luc Brisson is a French Canadian philosopher who specialises in Plato.
[52] Arthur Cotterell is the former Principal of Kingston College in London. Amongst other works, he has edited *The Encyclopedia of Classic Mythology.*
[53] George Lakoff is a professor of linguistics and Mark Johnson is a professor of philosophy.

not only in the answers to the questions but also in the questions they ask, and even what they mean by the questions. For example, folklorists see myth as being about the creation of the world, and those in religious studies see myth as being about gods or near-gods. The origin of myth can refer to its historical emergence or to the subsequent or contemporary recurrence of myth. Segal also identifies secondary questions such as the degree to which it is interpreted literally, its universality, and its veracity. He differentiates myth from other related concepts, such as story (a presentation of events) or narrative, which is 'the choice of events told, in what order, and from what point of view' (Segal 2004, p. 73). However, such distinctions are not necessarily relevant to the audience Jung had in mind when writing his Bernet letter. For example, the popular definition of narrative – a term that is increasingly being used in politics, the media, etc. – makes it equivalent to 'story' (Chambers 2014, p. 1022). When addressing a non-specialist audience (as Jung's proposal was doing) the word 'mythologem' and similar terms can be interpreted in many different ways.

The many meanings of the term 'myth' were examined in depth in 1984 by Day[54] - whose primary concern was (similar to Segal) the origin, function, and interpretation of myth. He sums up the nature of the problem early in his introduction by noting that 'definers of myth are as varied and irreconcilable as delegates to the United Nations, but all theorisers about myth agree on one point: myth is non-rational' (Day 1984, p. 2). However, he then puts forward an argument that contradicts the latter consensus. He starts by describing two non-rationalist perspectives on myth – one as pre-rational, leading to the emergence of science, but which must now be abandoned; the other as supra-rational, performing functions for mankind that cannot be served by reason. He then describes his own four categories of myth, some of which embrace a degree of rational thought. *Archaic* myth is crude but held to be genuine truth. *Intermediate* myth allows for moulding and interpretation, which produces three main

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[54] Martin Day is a professor of English at the University of Houston

strains: artistic (attractive telling of a sacred or true story), philosophical (to expound ideas), and propaganda (to maintain positions of power). *Derivative* myth is no longer held as being sacred or true and is produced for primarily aesthetic or secular reasons. *Ideological* myth is a modern form of myth that consists of mythical notions and concepts that control life and behaviour. Day then equates myth with Hans Vaihinger's philosophy of *as if*. This neo-Kantian philosophy recognises that we cannot observe the world directly, so we construct representations and then act 'as if' they match the reality. This puts myth at the heart of everyday thinking because the 'broadest possible term for all shaped verbal intuition is the myth-making faculty, mythical thought, or mythical creativity' (Day 1984, p. 9). He cites Cassirer to support the notion that myth structures our language, because language and myth not only have a common source but are also 'subject to constant interplay' (p. 33). This implicates myth not as a category of story or narrative or collection of characters, but as an essential feature of human existence. Myth is an integral part of how we understand and relate to the reality that we experience in both the inner and outer worlds.

This understanding of myth is a long way from the colloquial public understanding, in which myth is generally understood as 'a commonly-held belief that is untrue' (Chambers 2014, p. 1018). Therefore, the different semantic frameworks in use, between author and reader, can lead to misunderstanding. From the perspective of theologians and lay Christians, Jung's use of 'mythologem' in the Bernet letter may seem to be asking them to accept from the outset that God is a falsehood. Yet, when asked if he believed in God during his Face-to-Face interview, Jung asserted 'I don't need to believe, I know' (Jung 1959a, p. 428). He subsequently clarified this statement (Jung 1976, pp. 520-3 & 525-6) but still did not deny the reality of God; rather he portrayed our understanding of God as being shaped by our subjectivity. Along with other writings, such as his rejections of the charge of psychologism, this suggests that he did not intend the public to understand the term 'mythologem' in the

colloquial sense of being a falsehood, nor as something that has no reality. Rather, he was asking them to adopt a more sophisticated attitude towards God.

Many writers have tried to explain, and sometimes develop, Jung's concept of myth and its relevance to God. Walker[55] has documented one of the prevalent interpretations of Jung's theory of myth, as well as post Jungian developments. His book is founded on the fact that 'in Jungian terminology, myths are ultimately expressions of archetypes' (Walker 2002, p. 5). Walker explains the relationship between archetype, archetypal image and myth – archetypal images being conscious representations of the unconscious archetype, and myths being 'narrative elaborations of archetypal images' (p. 18). He examines the compensatory role archetypes play in culture and provides a critique of post-Jungian applications of archetype theory. This includes viewing all aspects of daily life as having an archetypal involvement, and the attempt to remythologise established religion through symbolic thought. However, the terminology of archetypes brings us into difficult territory for the popular audience because this, again, is not generally understood as a real object but as a 'pattern or model' (Chambers 2014, p. 75) which limits how the term would be understood. Segal, like Walker and others, focuses on the psychological aspects of Jung's theory but also acknowledges that, for Jung, 'myth serves many functions, not all of them psychological' (Segal 1998, p. 17).

In an unpublished conference presentation, Main[56] lists nine ways that Jung uses myth. Jung's *scientific* use is for myth to evidence the existence of archetypes. He uses myth *hermeneutically* to interpret the meaning of archetypes. He uses it *therapeutically* to amplify images in dreams. Its cultural use is to recover *religious meaning*, for example by interpreting Christian stories as myths. A political/social use of myth helps *interpret events* as collective expressions of archetypal constellations. A rhetorical use of myth adds *emotional charge* to

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[55] Steven Walker is a professor of comparative literature.
[56] Roderick Main is a professor of analytical psychology.

writing. Jung formed his own *personal myths*, enabling him to reconcile the opposites in his image of God. He also uses myth philosophically, as a *substitute for metaphysics* and as a means of *thinking about psychology* (Main 2013).

Jung may have seen a role for most or all of these when he suggested that God be regarded as a mythologem, but two of them stand out as having particular relevance to the Bernet letter. The first is the recovery of religious meaning, which has an obvious and overt relevance for theologians and lay Christians. The importance of the second may not be immediately obvious – myth being used as a substitute for metaphysics. This addresses directly some of the reasons for the repeated theological rejection of Jung's assertions about God. With a small number of exceptions, when asked whether God exists Jung usually demurred, yet his proposal of treating God as a mythologem raises the problem of metaphysics in the minds of the popular audience that he was indirectly addressing. This question causes a great deal of controversy and presents a significant challenge to the acceptance of his proposal. As he tacitly acknowledged very late in life, it generates a fear that prevents some from being able to think about the psychological implications of God (Jung 1976, p. 629). He was also confronted by Buber with the problems it presents for the average believer:

> If Jung is right, then what is prayer? And to whom does one pray on Shabbat morning or at Sunday mass or congregational services?… Buber's major concern was not questions of creed or belief or metaphysics per se, but what happened to the relationship of faith itself in actual human existence.
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> (Stephens[57] 2001, p. 468-9)

Although the focus of the present research is on these two aspects – meaning and metaphysics – the other aspects are of contemporary relevance, to differing degrees. For example, Jung's

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[57] Barbara Stephens is a clinical psychologist and Jungian analyst.

use of myth as personal story can be seen in *Memories, Dreams, Reflections* – he describes the aim of the book as being 'to tell my personal myth' (Jung 1963, p. 17). This notion has been adapted by McAdams[58] to give personal myths a role in the making of the self. He rejects 'Jung's concept of the archetype… [because it] assumes too much about the human mind… [and what is] biologically transmitted' (McAdams 1993, pp. 133-134). Nevertheless, McAdams' agentic and communal characters are effectively archetypes generated through culture. His approach is to explore personal myth, based on a largely unstructured autobiographical narration of the story/myth of one's own life, and then to live and change that myth. This puts myth at the heart of everyday thinking, albeit in a different manner to Day.

One way to reconcile the colloquial view of myth as falsehood with stricter academic definitions – for example, of myths being sacred stories concerning religions, nations, or peoples – has been suggested by Thury and Devinney[59] (2005). They see the concept of falsehood as originating in the lack of a scientific basis for primitive myths and contemporary urban legends. However, they also see such scientific falsehood as a strength, because their 'literal falseness can also be a reflection of their importance' (p. 3). When a myth is literally false, it becomes easier to recognise the important truths it conveys about the nature of human beings and their role in the world, whether that be psychological, anthropological, sociological, or historical. However, such a standpoint does not assist in clarifying or applying Jung's proposal in the Bernet letter, for various reasons. Firstly, it does not help us get over the problem of metaphysics – the difficult hurdle of seeming to require Christians to accept that God does not exist. On the contrary, because (philosophical) materialism is the dominant notion of existence in Western thinking, their view of myth as falsehood reinforces that

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[58] Dan McAdams is a professor of psychology.
[59] Eva Thury and Margaret Devinney are associate professors of English and German respectively.

hurdle. Secondly, they attribute the origins of the notion of 'myth as falsehood' to relatively recent developments – the emergence of modern scientific theories. This is not necessarily correct, because there is evidence to suggest that the notion of myth-as-falsehood began to emerge thousands of years earlier, through the differentiation of mythos and logos.

MYTHOS AND LOGOS

The history of the term 'myth' – including its relation to philosophy and its differentiation from 'logos' – has been traced by many writers. Two notably different contributions have been made by a couple of philosophical writers who each arrive at different conclusions as regards the nature of myth – Hatab[60] (1990) likens mythological disclosure to Heidegger's unconcealment, and Morgan[61] (2000) regards philosophical myth as the self-conscious use of myth to deal with the problem of the relationship between language and reality. They cover slightly different time spans – Morgan focuses on the development of mythos and logos up to the time of Plato, whereas Hatab goes a little further to include Aristotle. Nevertheless, they both provide a similar critique of the more conventional interpretations that see logos as emerging out of mythos (Buxton[62] 2001, p. 1).

Beneath Morgan's detailed chronology, of how the use of mythos changes during various phases of the emergence of philosophy, there is a recurring theme that the increasing portrayal of mythos as falsehood served the philosophers' own ends. They used it to establish their identity and position within Greek society – it was an integral part of their self-definition and self-presentation (Morgan 2000, p. 30). From a psychoanalytic perspective, what Morgan describes is an emerging split:

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[60] Lawrence Hatab is an associate professor of philosophy.
[61] Kathryn Morgan is a professor of classics.
[62] Richard Buxton is a professor of Greek language and literature.

> From the fifth century on… *mythos* is what you call the work of your rival or
>
> predecessor, while *logos* is what you yourself do… myth is the *other* of philosophy.
>
> (Morgan 2000, pp. 34-5, original emphasis)

From a Jungian point of view, this could be seen as a part of the first movement in a process of cultural or collective individuation – a concept discussed, for example, in Singer & Kimbles[63] 2004, or Stein & Hollwitz 1992. Morgan argues that mythos and logos were both originally forms of narrative and story, mythos being viewed as speech that carries implications of power and efficacy (Morgan 2000, pp. 18-20). Although the exact role of the technology of writing in further developments is disputed, it was a significant factor in the transformation of Greek culture by facilitating a change in its relationship with myth. The objectification of myth (through text) led to greater awareness of the problem of the relationship between words and reality. This provided a platform from which rational thought (which had always been present) could take a much more prominent role. As philosophers used this platform to establish their role in society, they appropriated all the positive characteristics previously associated with both logos and mythos for themselves and for logos. This led to a split between the perception of logos and mythos – seeing them as true/false, rational/irrational, real/fictional, clear/confused, etc. What is lost behind this split is the original essence of the difference – if there is such a difference, and if that difference has any use.

For Morgan, the splitting of truth and falsity, etc., between logos and mythos is inherent in language itself, rather than being inherent in myth. Philosophers tried to deal with the difficulties of the relationship between verbal expression and reality by projecting that difficulty into mythos, and in conveying their philosophical ideas they could not circumvent the problem of language. So, whilst condemning traditional myth as being a falsehood, they

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[63] Thomas Singer is a psychiatrist and Samual Kimbles is a clinical psychologist. Both are Jungian analysts.

simultaneously created a new form of myth in order to convey the truth that they were exploring. An example of this is Plato's cave, which uses a story and image to represent a truth. Also, Socrates acknowledges that he is mythologising when arguing in favour of philosopher kings, and he uses the term *mythos* to refer to philosophical theory (Morgan 2000, p. 249). Therefore, the emergence of philosophy, up to and including Plato, did not result in the relegation or demise of myth but in its transformation: the construction of a new type of myth that was used to convey a new understanding of truth. Morgan describes this as philosophical myth, as the 'methodologically self-conscious use of mythological material to problematize issues of language and communication' (p. 37).

The attitude towards mythos takes a significant turn with the advent of Aristotlean philosophy. Hatab argues that Aristotle was more influenced by medicine than philosophy, being the son of a physician, and the precursors to his scientific approach (and more contemporary approaches to science) can be seen in the work of Hippocrates on which he drew:

> The Greek medical tradition, with its explicit use of observations, hypothesis, and experiment, represents the birth of science far more properly than early philosophical developments… Hippocrates… begins [*On Ancient Medicine*] by criticizing dogmatic (deductive) theories of medicine in favour of an empirical method:… 'If a man pronounces some opinion he has formed, on how these things are, it cannot be clear to himself or to his hearers whether what he says is true or not; for there is no test that can be applied so as to yield certain knowledge.'
>
> (Hatab 1990, p. 264, citing Cornford[64] 1971, p. 32)

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[64] Francis Macdonald Cornford was a professor of ancient philosophy.

Irrespective of the relative degree of influence of these two traditions (philosophy and medicine) on Aristotle, what is most significant in relation to mythos is that he established principles that form the basis on which modern science can determine truth – testable explanation. In this perspective, the view of myth as being false reached its culmination. However, Hatab argues that this split of truth and falsehood is one-sided, for it is based on particular values which define truth in a singular manner. Hatab is not arguing that myth should be accepted as true when it is contradicted by science, but that mythos and logos convey different types of truth, and each type of truth should be treated according to its nature. (Morgan offers a slightly different approach, in that mythos and logos can be viewed as different perspectives on the same truth.)

There are some parallels between Hatab's reframing of mythos and logos, and one of Jung's definitions of myth, which is that myth is the intermediate stage between conscious and unconscious cognition (Jung 1963, p. 343). For Hatab, the essence of myth is *mythical disclosure* of a hidden truth. Hatab traces forerunners of this concept in early Greek philosophy, such as Anaximander's *apeiron* or Heraclitus' use of the term *logos*. For Hatab, a mythical disclosure has existential significance but no objective foundation. He illustrates this with the suggestion that one can find mythical disclosure at the basis of all forms of thought. For example, a scientific view of truth is based on axioms, such as Aristotle's principle of non-contradiction, which do not have an objective foundation (Hatab 1990, pp. 304-5). Aristotle acknowledged that there is no objective foundation for premises (Posterior Analytics, I.3.19-23, cited in Hatab 1990, p. 305) so, Hatab argues, even rational, scientific paradigms eventually run up against a mystery which is taken as a truth because it is a mythical disclosure. Hatab is therefore providing an example of myth being used not as a particular form of story or explanation, but as part of the foundation of the way that we think. Axioms, and rationality itself, are mythical disclosures.

This argument can be applied to Jung's neo-Kantian epistemology, though it might not seem relevant if one uses a popular misunderstanding of Kant. Scruton[65] argues that even scholars make the mistake of seeing a direct, one-to-one correspondence between phenomena and noumena. This is a misunderstanding of Kant because 'the concept of a noumenon [is] employed only negatively, in order to mark out the limits of experience' (Scruton 1982, p. 50). Phenomenon and noumenon are not the *image* of an object and the *reality* of an object. Rather, they are two different domains each with their own content, one containing psychic images and the other containing extra-psychic reality. This is akin to there being objects above the surface of the sea that can be seen and objects below the surface that cannot be seen. By definition we know what lies in the phenomenological domain but we do not know what lies in the noumenal domain. A *negative borderline concept* is an image that lies on the border between the two. Unfortunately, the terms *image* and *object* inherently carry a meaning that reinforces that misunderstanding – they do not seem to describe different domains, they seem to refer to entities that have a one-to-one correspondence. Mythical disclosures are negative borderline concepts, and for Jung 'the borderline concepts in both sciences [physics and psychology] are partly mythological…a common product of the external data and psychological apperception' (Jung 1976, p. 328). In some cases, that external data may indeed be a corresponding object – in a similar manner to radar images telling us that something is on the seabed. However, in many cases, the negative borderline concept might only point to an underlying structuring principle – in a similar manner to waves giving us an indication of currents under the surface.

Whatever the nature of any reality that might lie beyond the perceptible image, the distinction between mythos and logos is that the former is the disclosure of the world beyond our direct

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[65] Roger Scruton is a professor of philosophy, and was knighted in 2016 for services to philosophy, teaching, and public education.

apprehension, the latter is the organisation and development of the images that have already been apprehended, including those that are mythically disclosed. Mythos and logos are both fundamental components of knowledge. They are narratives that guide our determination of what we know, the nature of that knowledge, and how we know it. Logos organises what can be seen or reasoned, whereas myth discloses what is not seen or not based on reason. This means that the differences between logos and mythos are not akin to the differences between science and religion – rather, there is a lot in common between them. Karl Popper makes this suggestion in his philosophy of science, albeit using slightly different terminology, by articulating a particular type of relationship between mythos, logos, science, and religion.

KARL POPPER

The affinities between Popper and Jung in respect of myth may not be immediately apparent, because there are several key differences between them. Popper was a philosopher of science, not a theorist of myth per se, and Jung was a psychologist. Also, Popper is much more epistemologically positive. Jung's epistemological pessimism is demonstrated by his claim to 'start with the confession of not knowing and not being able to know' (Jung 1976, p. 376). Despite his dislike of pragmatism[66] (Jung 1921a, p. 321), Jung is more interested in what works, and what we actually experience, rather than whether it is objectively true (Jung 1976, p. 54). Popper is much more epistemologically optimistic (when compared to Jung) even though he believes that absolute truth cannot be known. In his view, we advance knowledge by producing better approximations to the objective truth, which he terms *verisimilitude*. This is not Popper's primary interest, though. Just as Jung focuses not on truth but on the psyche, so too Popper focuses not on truth but on *problems* (Popper 1963b, pp. 541ff). The difference

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[66] The philosophy for which William James is best known, but which is different from the philosophy he developed late in life – radical empiricism.

between the two men can be illustrated by comparing the way they use Bohr's model of the atom. Popper uses it as an example in the process of solving scientific problems:

> Bohr's theory of the hydrogen atom… was describing a model, and was therefore intuitive and visualizable. Yet it was also very perplexing… [due to] a clash with other theories… But the… understanding of Bohr's theory does not lie in visualizing it intuitively but in gaining familiarity with the problems it tries to solve, and in the appreciation of both the explanatory power of the solution and the fact that the new difficulty that it creates constitutes an entirely new problem of great fertility.
>
> (Popper 1963a, p. 102)

Popper therefore does not look at Bohr's model as an explanation to be 'believed in' (Popper 1963a, p. 103), but as having explanatory power in the progression of science's grappling with problems. Scientific knowledge advances by solving problems and in the process creates new ones – 'science may be regarded as a growing system of problems, rather than as a system of beliefs' (Popper 1963a, p. 105). In contrast, Jung uses Bohr's model to illustrate his epistemological standpoint, based on a difference between image and object (Jung 1976, p. 572). Jung demonstrates his neo-Kantian view of the limits of knowledge by saying that when 'a physicist [uses] his atomic model (for instance Niels Bohr's planetary system) [he] is fully aware that he is handling a variable schema or model which merely points to unknowable facts' (p. 54). Jung describes this as 'scientific gnosis' (ibid.) because, whilst the validity of the model can be established empirically, the metaphysical substrata on which it rests are unknowable. Jung applies these same limits of knowledge to religion and, for example, criticises Gnosticism because by failing to distinguish image and object it commits the error of 'overstepping… epistemological barriers' (ibid.). For both men, therefore, their main focus is on something other than truth – the psyche for Jung and problems for Popper. Both men had to deal with the issue of truth that their philosophy raised, and part of their response to

that challenge was to refer to myth. They both start with observation before engaging in myth-making or speculation. Popper starts by observing problems and Jung starts by observing 'individual psychic facts' (Jung 1947/1954, p. 227).

Another difference is that, whilst both men claim to be scientific, their methods are very different in nature. There is a kernel of agreement between them, because Jung sees a role for critical reflection (e.g. Jung 1938/1940a, p. 5) which is a cornerstone of Popper's philosophy of science. Jung expresses the desire to be scientific, for example quoting from a French psychologist (Guglielmo Ferrero) to suggest 'the man of science [should] submit to criticism in order that science may continue to progress [and not] believe that everything they write is the expression of absolute and eternal truth' (Jung 1911-12/1952, p. 2). However, when he published *The Interpretation of Nature and Psyche* with Wolfgang Pauli, Jung was heavily criticised in a review in the *British Journal for the Philosophy of Science.* The author summarily dismissed Jung's essay, saying that it could not have been written if Jung 'had paid more critical attention to the concept of causation' (Mundle[67] 1957). By contrast, Popper was a highly respected philosopher of science whose approach was to criticise and rigorously test new theories (Popper 1963a, p. 101). This difference is not due to the inherent differences between science and psychology – Popper's stance is that his methodology can 'apply equally to the natural and to the social sciences' (p. 161).

Another difference is their attitude towards the existence of God. Both men resisted making comment on the subject in their formal writings. At one stage, Jung regarded spirits as purely psychological phenomena, but later in life he changed his mind and saw the involvement of some form of extra-psychic reality (Jung 1920/1948, p. 318 & fn). Popper made no formal

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[67] Clement Mundle was a philosopher, with a particular interest in parapsychology.

comment during his lifetime, but in an interview published posthumously he declares himself to be an agnostic (Hacohen[68] 2002, p. 68).

Despite these differences, there are also some significant similarities, particularly in relation to their use of myth, which may be very useful in dealing with the problem of relating Jung's notion of Christian myth to metaphysics. One similarity may appear to be a minor stylistic one, but is of particular importance when comparing how they each see the nature of myth. Both Popper and Jung tend to give broad meanings to words, which is in contrast to the common practice amongst scientists. Precise definitions enable scientific knowledge to advance through the act of clarification itself and because it enables things to be measured and tested. Jung acknowledges this advantage of science, and even argues that 'extremely complicated psychological facts are accessible to quantitative measurement' (Jung 1921a, p. 408). However, he then goes on to say that this poses a danger to a certain type of understanding of psychological concepts, which at one level are variable and ambiguous, but at a more fundamental level can have a core essence. Scientific clarification and measurement can result in the latter being 'thrown overboard' (p. 409). He then describes his view of a number of core concepts, whilst acknowledging that there are many alternative ways of using or defining them. He reiterates this afterwards, noting that 'in the case of psychological theories the necessity of a plurality of explanations is given from the start' (p. 494). Popper's approach is slightly different. He doesn't acknowledge a multiplicity of alternative interpretations, but he does use his terms 'in a very wide sense' (Popper 1963a, p. 157). This can be seen in his use of the words *theory* and *myth* interchangeably, along with other similar words. The commonality of Jung's and Popper's practice is that they both use their the concepts in a rather loose way, as being somewhat amorphous or protean, in order to identify

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[68] Malachi Hacohen is a professor of history.

and discuss the fundamental processes at work, and how those same processes can manifest differently in different contexts or when dealing with different subject matter.

As a result of this loose understanding of concepts, both Jung (1940, pp. 179-80) and Popper see scientific theories as being myth. They are 'in the main, the products of myth-making and of tests [which] challenge us to produce new myths, new theories which may stand up to these observational tests' (Popper 1963b, p. 172). Popper uses the term myth to signify an explanatory story without proscribing the nature of that story, the components of it, or the structure it has. Although he does provide a more detailed or expansive analysis, there are essentially two, sequential and iterative components in the process of improving scientific myths. The first is 'poetic inventiveness, that is, story-telling or myth-making: the invention of stories that explain the world' (Popper 1963a, p. 40). The second is 'critical discussion of the various explanatory myths – with the aim of consciously improving upon them' (ibid.). When a scientific myth is improved in this way it does not change into something else – it does not become a theory. Although scientific progress leads to the improvement of the myth, it still remains myth: a 'theory always remains hypothetical, or conjectural. It always remains guesswork' (p. 157). Popper therefore sees the origin of myth as being the creative imagination, past and present, and its function as being to explain the world. With regards the subject-matter of myth, Popper neither prescribes nor proscribes its content. Rather, he collapses the distinction of science, religion and myth – seeing both science and religion as forms of myth that have their origin in the imagination's attempt to solve experiential problems. What distinguishes science from religion is that the myths of science are refined through criticism whereas those of religion are not:

> According to the view of science which I am trying to defend here… scientists have
> dared… to create myths, or conjectures, or theories.

(Popper 1963b, p. 137)

My thesis is that what we call 'science' is differentiated from the older myths not by

being something distinct from a myth, but by being accompanied by a second-order

tradition – that of critically discussing the myth… In other words, under the pressure of

criticism the myths are forced to adapt themselves to the task of giving us an adequate

and a more detailed picture of the world in which we live. This explains why scientific

myths, under the pressure of criticism, become so different from religious myths. I

think, however, we should be quite clear that in their origin they remain myths or

inventions, just like the others.

(Popper 1963b, p. 170-2)

Conjecture and fantasy

Conjecture and fantasy are key concepts in both Popper's philosophy of science and Jung's

analytical psychology, and they are related through both being processes involving the

creative imagination. At the heart of Popper's process for the advancement of scientific

knowledge is 'man's power to grow, to transcend himself, not only by the imaginative

invention of myths,… but also by the rational criticism of his imaginative inventions' (Popper

1963b, p. 515). In Jung's theory, we inherit a predisposition for fantasy which, he argues,

leads to the re-creation of similar myths in otherwise disparate societies (Jung

1917/1926/1943, pp. 64-65). It is through fantasy that archetypal images become expressed in

myths.

Popper's conjecture and Jung's fantasy are broadly similar. The *Jung Lexicon* defines fantasy

as 'a complex of ideas or imaginative activity expressing the flow of psychic energy' (Sharp[69]

1991, p. 54). The *Critical Dictionary of Jungian Analysis* problematizes Jung's definition as

being contradictory, '(a) as different and separate from external reality, and (b) as linking

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[69] Daryl Sharp is a Jungian analyst, author, and publisher.

inner and outer worlds' (Samuels, Shorter & Plautt 1986, p. 59). Nevertheless, by clarifying what is meant by the inner world, it concludes that 'fantasy and artistic creativity are connected' (ibid.). The potential to extend this connection from art to scientific myth-making is established in Jung's definition of fantasy, by which he understands 'two different things: 1. a *fantasm,* and 2. *imaginative activity*' (Jung 1921a, p. 427, original emphasis). The key aspect of a fantasm is that it has 'no objective referent. Although it may originally be based on memory-images of actual experiences, its content refers to no external reality' (ibid.). This aligns with the *Critical Dictionary's* first definition. Jung spends less time defining the second aspect of fantasy, imaginative activity, but summarises it as a flow of psychic energy rather than being the driver of behaviour that is fantasm (p. 433). This aligns more with Sharp's definition and implicitly with the second definition from the *Critical Dictionary*.

Although in Jung's definition he draws some form of distinction between fantasy and imagination, he occasionally uses the terms interchangeably (e.g. Jung 1931b, pp. 45-46). Also, in his use of creative fantasy he rarely excludes external reality. On the contrary, in his many discussions and examples of alchemy the parallels of the physical and the psychological are key – alchemical procedures and substances are the product of alchemists' fantasies (Jung 1955-56, p. 483). He also suggests that fantasies are indirectly linked to the perception of external objects (Jung 1921a, pp. 442-43). And he makes fantasy directly relevant to modern science – which is concerned primarily with outer objects – by arguing science is an opposite to fantasy and has repressed it. He sees science and fantasy as one of the pairs of opposites that needs to be transcended by a 'higher third' (Jung 1921a, pp. 57-58).

Another similarity between Popper and Jung is that both men also see there being a phylogenetically-inherited layer to imagination, although they lay the stress in different places. If we use the metaphor of Jung's dream of the multi-storeyed house (Jung 1963, pp. 182-83) Jung acknowledges the upper levels, but his main interest lies in the cellars. Popper's

interest lies in the upper levels, but this doesn't mean he ignores the lower ones or takes a view that conflicts with them. Although his theory is focused on scientific problems, he sees them as beginning with and being rooted in the deeper cellars of phylogenetic inheritance in a similar way to Jung:

> You may still think that our problems must have been the result of observation and experiment, since… our mind is a *tabula rasa…* But it is just this venerable idea that I am combating. I assert that every animal is born with many, usually unconscious, expectations [which] create our first problems. And the ensuing growth of knowledge [consists] of corrections and modifications [of] previous expectations or hypotheses… In order to observe, we must have in mind a definite question.'

(Popper 1963a, pp. 96-97).

A potential objection to associating Popper's mythic imagination and Jung's fantasy might be that, although Popper did not comment on Jung's theories, he was very critical of Freud and Adler, viewing their theories as pseudo-scientific. However, 'this does not mean that Freud and Adler were not seeing things correctly' (Popper 1963b, p. 49). Popper's criticism was not directed at the content of their theories but at the failure to make their theories testable. He rejected neither the concept of the unconscious, nor psychoanalysis. On the contrary, he expressed the hope that psychoanalytic ideas might one day form part of a testable psychological theory (ibid.).

There are enough parallels between Popper's creative imagination and Jung's fantasy for them to inform and assist each other. Such assistance is needed because Jung's analysis of the relationship between science and fantasy is ultimately limited by his repeated assertions of the one-sidedness of science. The sharpness with which Mundle (1957) rejected Jung's contribution in his joint publication with Pauli suggests that, at most, he maintained an opposition to science but never found the higher third that he sought – at least, not one that

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was acceptable to a much wider scientific audience. Yet there are other parts of his writing where he brings together the topics of fantasy, myth, and consciousness in a more sophisticated way that could help develop a more acceptable integration of science and fantasy. In particular, Jung's discussion of the psychological and visionary modes of artist creation is free from the theme of one-sidedness that dominated his writings on science. In order to translate his ideas from an artistic context to a scientific one we first need to make a foray into the world of art, examine the interaction of psychological and visionary art that he described, and draw out the implications that it has for the process of creative imagination. Once we have articulated these principles, we will return and apply them to the topic of science and myth.

Psychological and visionary

Jung defines *visionary* art as coming from unconscious sources. It is an act of fantasy which correlates (in Popper's scheme) with the creative imagination. The two are not necessarily equivalent, because Jung adds to his definition of visionary that there should be some form of numinous or primordial image underpinning it. Jung defines *psychological* art as coming from conscious sources, which not only includes external objects but also existing contents of consciousness, such as memories or other forms of knowledge. However, one cannot simply divide works of art into the categories of visionary and psychological – the same image can be psychological or visionary depending on its origin and context (Rowland[70] 2010, pp. 61-64). For example, an image drawn from a visionary source can be copied into a second work. As far as this new piece of work is concerned that image is now psychological because it was drawn from a conscious source (the first image). In the original work the image emerged from the imagination but in the new piece the image was the product of artistic intertextuality.

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[70] Susan Rowland is a professor in the humanities, and was the first chair of the International Association for Jungian Studies.

There are a couple of layers of sophistication that can be added on top of this analysis. In Rowland's work, she redefines the categories of psychological and visionary as modes of *reading* rather than artistic creation. This suggests there are four ways to draw meaning from a work of art, by looking at the psychological and visionary modes of both creation and reading (Myers 2012). In addition, Jung describes the potential confusion that can arise from failing to recognise when the source of an image is psychological. If there is any visionary creativity in the second work of art, it might be overshadowed by the power of the (psychological) image that was borrowed from the first. The old image has the effect of 'disguising the [new] visionary experience in a cloak of historical or mythical events, which are then erroneously taken to be the real subject matter [of the second work]' (Jung 1930, p. 107).

A naïve work of art is often inspired by the world (a psychological source) but draws – to a greater or lesser extent – on the artist's creative imagination (a visionary source). When an artist is trained, techniques are acquired that can be used (psychologically) to improve the quality of the work. However, the artist can still draw on the imagination, on visionary sources, whilst using those acquired techniques. This can be illustrated with the practical example of one of the significant progressions in the development of Western art, the emergence of 'perspective'.

Figure 5 - Perspective Images

The Calling of the Apostles
c.1308-1311 Duccio di Buoninsegna

The Tribute Money
c.1426-27 Masaccio

Source: http://www.op-art.co.uk/history/perspective/

Both these paintings depict scenes described in the bible, so have been influenced by a conscious/psychological source. However, both also draw on the creative imagination, for there are aspects of each image that are not contained in the original text and may not have been included consciously. For example, the size of the people in relation to the boat, or the colour of clothing in relation to the plain building, might reveal something visionary – how the characters were revered by the artists at the time of the paintings. The second painting also makes use of the technique of perspective. Initially, this technique was an innovation – it was the visionary product of an artist's imagination. It grasped and expressed something previously unrecognised but essential about the nature of the world. Once the technique became established, and a standard part of artistic training, it was then a psychological part of an artist's repertoire. However, the creative imagination is still required, even in applying the technique – there is an imaginary point in space behind the picture towards which all the lines of perspective point. Both works of art are the result of the interaction of psychological and visionary thought processes. Throughout the development of both paintings, there has been

significant interaction between pre-existing, conscious factors – perhaps a real event, then a biblical text, then the technique of perspective – as well as the creative imagination in interpreting the text, adding to the image, and applying the established techniques.

Conjecture/refutation

These interactions of psychological and visionary modes of artistic creation or reading have parallels in the interaction of conjecture and refutation in Popper's theory. Conjecture is myth-making; it is founded on the creative imagination. Refutation or reflection corresponds (albeit loosely) to the psychological mode. Each iteration in Popper's process of the development of knowledge starts out with an existing scientific myth that contains some problems, which being wholly within consciousness is therefore psychological material. Attempts are then made to solve those problems by mythologising – that is, by imaginatively coming up with new versions of the myth. The myth is then refined through critical discussion or testing which, as an established scientific technique, counts as psychological material.

This latter category (discussion or reflection or testing) still involves the process of mythologising to some degree. Just as psychological artistic material was once visionary, so too scientific techniques were once the product of the creative imagination. The technique of 'falsification' – which corresponds in the analogy to the technique of perspective – was itself developed through the myth-making or imagination of thinkers from Hippocrates to Popper. It is now an established, and therefore psychological, technique. However, even the use of falsification can still require some degree of imagination – for example, in working out how to test a hypothesis, or anticipating unseen problems that might occur with the new, hypothesised myth. This can be seen in the present research, where much of the creativity involves working out how to measure and falsify the idea being tested. Popper splits his process into conjecture and refutation, into myth-making and critical discussion. When we

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view this process with the insight provided by the analysis of Jung's categories of visionary and psychological, and understand myth-making in a very broad sense as the imaginative activity of the psyche, it suggests that the role of myth-making can extend beyond conjecture – it can have a role in supporting the stage of critical discussion, or critical reflection.

Jung's visionary art and Popper's conjecturing are both forms of myth-making that loosely correspond to mythos narrative or the mythical disclosure of the early philosophers. They draw on the individual imagination and thereby disclose something from within the mythologiser's psyche. They also seek to explain the world in some way, disclosing something from the external world that is beyond direct apprehension. The better and longer-lasting scientific myths occur when what is disclosed from the imagination matches the evidence presented to consciousness from the external world. A similar principle applies to the inner world, which not only furnishes new myths through the imagination but also furnishes emotional experience which counts as another type of evidence with which psychological and religious myths need to be congruent for them to be better or more efficacious.

A final similarity between Popper and Jung is that both men saw Christian resistance to critical reflection on their myth as being based on fear. For example, Popper suggested it was due to the 'fear of being compelled, by criticism, to surrender a view that they dare not give up since they make it (or believe they make it) the basis of their whole life' (Popper 1963a, p. 180). When Jung, in the epistemological pessimism of his psychological theory, eschewed metaphysics, he made it harder to persuade Christians to reflect on their myths. Popper's approach can potentially help overcome this hurdle because he tackles the difficult question of how metaphysics relates not only to science but also to religion and mythology. There have been many attempts to encourage Christians to reflect on the mythic nature of their beliefs (such as the book *Honest to God,* which was discussed in the introductory chapter) but with

relatively limited success. Popper's perspective offers another form of presentation that may be worth trying. That is, it may be possible to find, for the popular or exoteric audience, a way of integrating, and enabling meaningful dialectics between, science, psychology, and religion – because Popper's philosophy may overcome the problem of metaphysics that prevents engagement with Christianity as myth. This is not the main aim of the present research, in which the purpose of incorporating Popper's perspective is to explicate what Jung means by 'mythologem' in a way that can be measured. This point is highlighted as a potential spin-off benefit for possible investigation after the research has been completed.

3 Jung's Epistemology

In the 1920s, Jung termed his epistemology *esse in anima*. It was not a phrase he used often and, from the 1930s on, he reverted to using Freud's phrase *psychic reality*. Although the latter phrase is probably more accurate, I'm going to use his earlier term for the sake of clarity and communication. The phrase *psychic reality*, whilst technically correct, conveys the impression that reality is *only* psychological, and it has probably contributed to the confusion of having many disparate interpretations about the significance of Jung's statements about God – from being an atheist (op. cit.) to having a blind faith (Dawkins[71] 2006, p. 51). In between, there are various views that arise from the notion that the *psyche is existence*, or the juxtaposition of the phrases *archetypal image* and *archetype*.

Giegerich and Main suggest that for Jung the distinction between the god-image and God is moot (Main 2007, p. 35). A similar argument is put forward by de Voogd, who argues that Jung's *esse in anima* implicitly dissolves the Kantian distinction between phenomena and noumena (ibid.). However, others discuss the god-image and God as distinct realities. For example, White interprets Jung as saying the god-image is a psychic representation of a transcendent reality (White 1952, pp. 46-51). Ulanov[72] takes the separation a little further, portraying the god-image within the unconscious as having a mediatory role in which 'god-images… are the pictures through which we glimpse the Almighty… The unconscious is not itself God, but it is a medium through which we sense God speaks' (Ulanov 2008, p.319). Ulanov's position in effect locates the essential reality of God outside the psyche, giving the metaphysical God more substance and import than the god-image. A very different interpretation is offered by Dourley[73] for whom there is a god-image but no God: 'Jung's

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[71] Richard Dawkins is a professor of evolutionary biology and a prominent atheist.
[72] Ann Ulanov is a professor of psychiatry and religion, and a Jungian analyst.
[73] John Dourley is a professor of religion and a Jungian analyst

psychology undermines the ontological reality… of all divinity understood to exist beyond the psyche' (Dourley 2001, p. 2). Yet another is offered by Raff and Vocatura[74] who introduce an additional being beyond the god-image but within the psyche, which they call 'the ally' (Raff & Vocatura 2002, p. xiii). For many psychologists the debate is irrelevant, as the 'psychologist is not explicitly concerned with the possible existence of a transcendent referent in any metaphysical sense. It is enough to recognise that the god-image confronts the ego as something *other*' (Kelly[75] 1993, p. 131, original emphasis).

Jung's philosophy is interpreted by Young-Eisendrath as being radical constructivism – in which his ontology is 'grounded in *Weltanschauung* – in belief, image and interpretation' (Young-Eisendrath & Hall[76] 1991, p. 153). There are different views of what constructivism means, depending on the discipline from which it is viewed, but there are some common elements, which include knowledge being constructed by individuals and social groups under the influence of feedback from the external world. Constructivism does not describe the external world, but creates its own knowledge and experience within external constraints (Downes[77] 2005, p. 147, Arbib & Hesse[78] 1986). Radical constructivism removes any shared or social component of that construction. It puts forward two main claims: that knowledge is not passively received but actively built up by the cognising subject; and that the function of cognition is adaptive, serving to organise experience rather than discover ontological reality (von Glasersfeld[79] 1995, p. 51). In radical constructivism, knowledge cannot be shared or

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[74] Jeffery Raff and Linda Bonnington Vocatura are psychologists and Jungian analysts.
[75] Sean Kelly is a lecturer in religious studies, with a particular interest in analytical psychology.
[76] Polly Young-Eisendrath is a psychologist and Jungian analyst, and James Hall was a Jungian analyst.
[77] Stephen Downes is a professor of philosophy.
[78] Michael Arbib is a professor or neuroscience who researches (amongst other topics) artificial intelligence. Mary Hesse was a philosopher of science. Their work, *The Construction of Reality,* drew on disciplines from philosophy to computer science to argue that humans construct reality through interaction with the social and physical world around them.
[79] Ernst von Glasersfeld was a philosopher and professor of psychology.

transmitted between people, it can only be constructed by the individual in order to organise their own experience.

Nagy suggests that Jung was 'thoroughly idealist' (Nagy 1991, p. 161) – a subjectivist (p. 236) whose theory of archetypes was therefore effectively a theory of God (p. 166). Subjectivism is a much more widely used term than radical constructivism and, though it can again have different meanings in different contexts, is generally taken as an epistemological stance that denies external reality completely. Using her own words, she sums up Jung's alleged argument for subjectivism as being 'we might just as well trust our inner feelings and our inner experience since that is all there is to know' (p. 30). Where this differs significantly from radical constructivism is in the lack of recognition that there is something external, though unknowable, to influence that subjective knowledge. Nagy sees Jung's view as troubling (ibid.) and concludes that he is a 'philosophical amateur' (p. 31). However, this argument seems unfair to Jung because he did not deny the existence of external reality, nor did he argue that metaphysical views should be abandoned.

This claim arises from the confusion about Jung's philosophy – which he recognised – and his less-than-successful attempts to resolve it. For example, at one point, he declared that he adhered to the 'phenomenological standpoint' (Jung 1938/1940a, p.5). This is an even broader term than constructivism and subjectivism, where interpretations of the term can still differ widely (Embree[80] 2005, pp. 790-791). Phenomenologists put assumptions about the world to one side, seeing only an experiencing subject and experienced objects that lie within the phenomenal field, which is the 'identity of the external and the internal and not the projection of the internal in the external' (Merleau-Ponty[81] 1945, p. 70). On this basis, Brooke[82] argues

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[80] Lester Embree was a professor of philosophy.
[81] Maurice Merleau-Ponty was a philosopher.
[82] Roger Brooke is a professor of psychology and practising clinical psychologist.

that Jung does not fully adhere to a phenomenological standpoint, making the 'Cartesian mistake' (Brooke 1991, p. 84) of claiming that we only have access to psychic images which may or may not be accurate representations of the world (p. 106). However, Searle[83] criticises phenomenology for its failure to deal adequately with the type of reality that exists outside the phenomenal field – which he calls the 'phenomenological illusion' (Searle 2004, p. 328). Although Jung's epistemology concentrates on the phenomenal domain (using the terminology of psychic contents) it accepts there is also a metaphysical domain, albeit unknowable, so is not pure phenomenology.

For a contemporary, religiously-minded audience, this confusion is unhelpful because, as Buber points out to Jung in their correspondence, people need to know to whom they pray without getting frustrated by hair-splitting philosophical distinctions (Stephens 2001, pp. 468-9). The best resolution, in my view, has been offered by Kotsch[84] (2000). He sees Jung as having developed 'a mediatory science between the objectivist and relativist accounts of knowledge… not merely a compromise between two established viewpoints [but] a new path' (p. 223). He likens Jung's epistemology to James' late-developed philosophy of radical empiricism, which James regarded as 'more fundamental and more important than pragmatism' (Perry[85] 1912, pp. iii-iv) and which resolved the Cartesian problem:

> The whole philosophy of perception from Democritus' time downwards has just been one long wrangle over the paradox that what is evidently one reality should be in two places at once, both in outer space and in a person's mind… It can, if it be situated on their intersection… The perceptual object is not an idea within me, but… percept and thing, as indistinguishably one, are really experienced *there, outside.*

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[83] John Searle is a professor of philosophy.
[84] William E. Kotsch is a clinical psychologist and Jungian analyst.
[85] Ralph Perry was a philosopher and colleague of William James. He assembled James' essays on radical empiricism into a single book after James' death.

Your objects are over and over again the same as mine… Practically, then, our minds meet in a world of objects which they share in common, which would still be there, if one or several of the minds were destroyed.

The concept of 'intersection' places a phenomenological approach at the heart of radical empiricism but also allows for a metaphysical ontology that lies outside that point of intersection. What this means in practical terms is that the subjective god-image is an integral part of the ontology of God, but there can also be an extra-psychic ontology. This view is implicit in Jung's (later) writings, but it is not clear because of the terminology he uses and his continued attempts to proscribe metaphysics from his psychological theories. One point of significant confusion is the epistemological distinction between belief and knowledge; another is the use of terminology such as image and object.

When Jung is dealing with patients, and in many of his writings, he expresses a viewpoint that seems to collapse the distinction between belief and knowledge. For example, Jung claims that it is irrelevant whether something is called real or imaginary – because every psychic process is both an image and an imagining, and even lies are psychic facts (Jung 1939a, p. 544). Sometimes, he implies there is a difference but he doesn't articulate it – for example, when discussing hallucinations, he writes 'it is *as though* the psychic content had a life of its own' (Jung 1933b, p. 461, emphasis added). The blurring of lines between reality and imagination may be relevant to psychiatry, and it was probably an approach Jung acquired from his supervisor Eugen Bleuler at the Burghölzi mental hospital (Bair 2003, p. 55). However, it creates difficulty in everyday life where most people regard the difference between reality and imagination as important. Jung's position is not helped by his

terminology of image and object, which he used from an early stage and inadvertently reinforces some of the misunderstandings of his epistemology.

Confusion over his epistemology emerged as early as 1925 when Jung gave a seminar that generated 'considerable misunderstanding' (Jung 1925, p. 134) of what he meant by the relation of the subject to the external object (and to the unconscious). He therefore clarifies his epistemology of *esse in anima* – which we shall examine in more detail shortly – but in doing so uses the phrases *image* and *object*. In her chapter on *Answer to Job,* Aniela Jaffé discusses the phrase (Jaffé 1970, p. 101) and refers to the Bernet letter. Yet she uses some other phrases (highlighted below in italics) which demonstrate that even she – 'one of C.G. Jung's closest associates' (Jaffé 1970, back page) whom Jung trusted and respected (Bair 2003, p. 570) – misunderstood, or at least misrepresented, his epistemology and what these two words mean:

> For Jung, abolition of the identity of verbal image and object, *appearance and reality,* is necessary for the advance of human consciousness… 'I have this advance of human consciousness particularly at heart'… As we have seen, the differentiation… of the phenomenon from the noumenon, *the imprint from the imprinter*… lies at the root of his psychology of the unconscious.

> (Jaffé 1970, p. 103, emphasis added)

This shows the problematic associations that are made with the terms *image* and *object.* Jaffé equates the psychic image with *appearance,* and the object with *imprinter.* This gives the strong impression that tangible reality lies primarily outside of the psyche in the external object. Jung encourages this error – inferring that what lies *outside* the psyche is real – in the Bernet letter. He refers to people 'incapable of distinguishing the verbal image *from reality*' (Jung 1976, p. 260, emphasis added). This implies that the verbal image is not real, which contradicts many of his other writings, where he suggests the psyche is the only reality we

know, or that 'the psyche creates reality every day' (Jung 1921a, p. 51). A further point of confusion arises over the term *imprinter,* which Jaffé equates with the object or noumenon. Although Jung used the term *imprinter,* to refer to the archetype of God, he also qualifies it by saying he was referring to something 'in the psyche [for which] we simply do not know the ultimate derivation' (Jung 1944a, p. 14). If the *imprinter* is within the psyche, this suggests it is an image, not an object. Although Jung uses the phrases *image and object* or *image and reality* when trying to clarify his philosophy, their colloquial meaning adds more confusion and undermines the essential message of Jung's philosophy.

This confusion can be resolved in part by viewing Jung's interpretation of Kant as being aligned with Scruton's, recognising his *esse in anima* as being an adaptation of James' radical empiricism, and then seeing his use of the phrase 'image and object' within that context as being amorphous and protean. All reality we experience is created in the psychic space he called *esse in anima.* The term 'anima' could also potentially confuse matters, because in the early years he used it to represent soul (Bishop 2014, p. 142). It is perhaps more helpful to think of it representing the psyche as a whole – that is, all the reality we experience exists within the psyche.

Figure 6 - Flag of Dominica

Jung sometimes illustrated his philosophy using the metaphor of the colour green (e.g. Jung 1943, p.218) which does not exist in the external world but is produced through the interaction of (a) individual perception and (b) a wavelength in the external world.[86] The colour green is therefore a co-construction between mind and wavelength. This example can be developed further by considering the flag of

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[86] Jung's example of the colour green is a metaphor that most people can understand and relate to. However, it isn't strictly correct because – technically speaking – the concept of 'wavelength' is itself a psychic image. It is therefore not in the external world but co-constructed within the psyche. We can never put a label on what is in the external world without that label being a psychic image. Nevertheless, the metaphor illustrates an important aspect of Jung's epistemology – that we only know images, which are co-constructed in the psyche between the individual ego and an unknowable external metaphysic.

Dominica, which is not only green but also contains a black, white, and yellow cross and a multi-coloured emblem. The image is the product of relations between relations – because the various colours are created through the interaction of mind and wavelength, and the flag's image is created by the interaction of the colours. James' philosophy of radical empiricism claims that all these interactions are real – and it would be difficult to deny that the flag of Dominica is real. This argument – of reality being created through interactions – can extend to images and concepts as diverse as financial exchange rates, democratic mandates, career aspirations, a silhouette, or a Van Gogh painting. All are real, even though they are constructed, in some way, with the involvement of human perception.

Figure 7 - Hand Fan Metaphor

Esse in anima is a therefore a matrix of relations, and relations between relations. Jung used the term *matrix* mainly to refer to the unconscious – that is, the unconscious is the matrix out of which consciousness and our future life emerges (Jung 1921a, pp. 445, 521). Sometimes Jung uses the word matrix to refer to the psychological functions of sensation and intuition (p. 454). In the context of his philosophy, it consists of all the relations in the psyche and is akin to the landscape of images that is created when you open up a hand fan. Although the two edges of the fan, representing the perceiving consciousness and extra-psychic reality, do not form part of the picture itself, there is an overall pattern of images, which the network of fibres or fabric creates between them. The nature of external reality is by definition beyond our knowledge, in the region of *esse in re,* so any discussion of metaphysics is always speculation that takes place in the region of *esse in anima.*

When Jung describes the differentiation of verbal image and object in the Bernet letter, he equates it to the abolition of participation mystique – a term he took from Levy-Bruhl to

denote a state where inner and outer are confused (Letters II, p. 264fn). The abolition of participation mystique does not involve adopting a dualistic philosophy in which there are two corresponding entities, image and object. Rather, when participation mystique is abolished, we realise we are describing a co-constructed reality and *not* observing a wholly-independent object. As far as we can tell, some of our co-constructed (psychic) images have a direct correspondence with external objects. The reality of those images lies in *both* the unknown, external ontology and the ontology that is co-constructed within the psyche, between the external object and perceiving consciousness. There are also many images that do not have a direct correspondence with an outer object, but we nevertheless treat as real. They are the products of relations between relations.

There is a further complication in that *esse in anima* is co-constructed not only with the involvement of objects in the external world, but also with objects in the internal world. In Jung's references to inner objects (e.g. Jung 1921a, pp. 398-400, 453, 468) he acknowledges a reality that is external to the personal ego but not in the external, material world. He treats inner objects in a similar manner to external objects – as forms of reality that the individual has to come to terms with, and which need mediation with the individual ego. The collective unconscious is the objective psyche (e.g. Jung 1917/1926/1943, p. 109).

IMAGE AND OBJECT

Having provided an interpretation of Jung's *esse in anima* based on the Scruton interpretation of Kant and the perspective of James' radical empiricism, we can now return to Jung's use of these confusing phrases – verbal image, object, and reality. Confusion about his epistemology stems not only from the terms themselves, but also from Jung's use of the phrases to mean

different things in different contexts. This can be illustrated by returning to the hand fan illustration, and labelling the different regions of the psyche that he variously discussed.
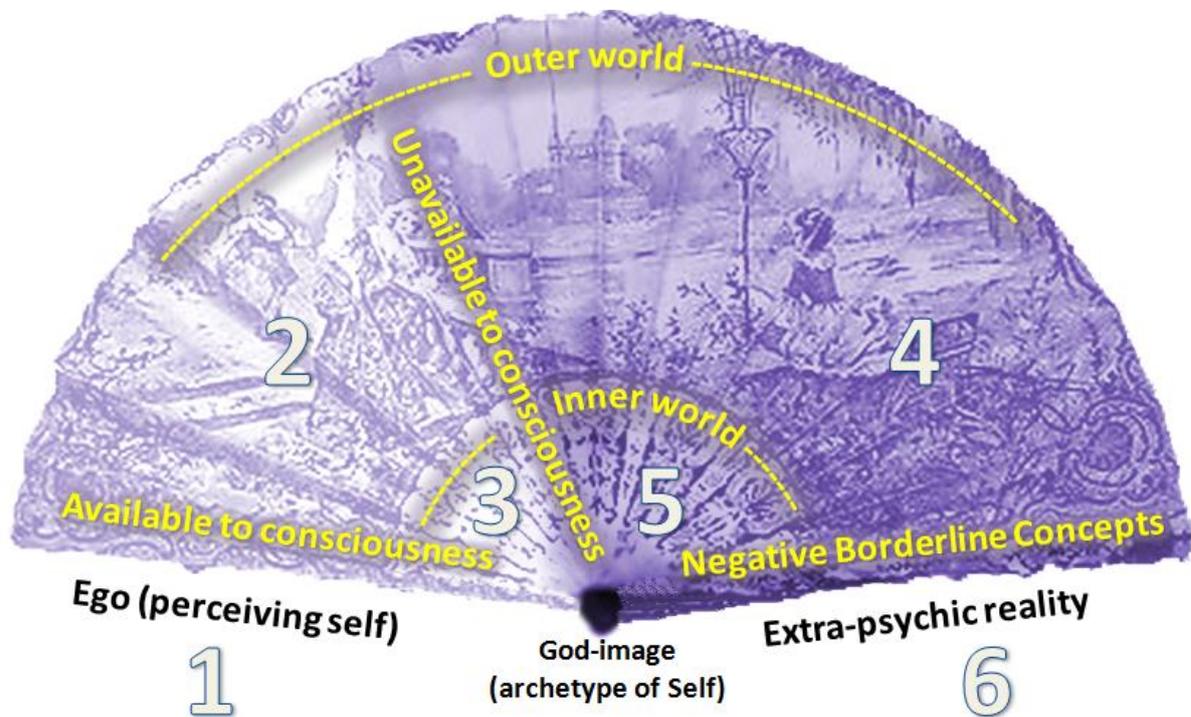
The first region, the left arm of the fan, is labelled as the ego, with the added clarification of it being the *perceiving self* to avoid confusion with the contents of consciousness to which the ego is related. Jung admitted not knowing the ego's full scope (Jung 1935a, p. 8) but it is a word to which Jung attributed different meanings, for example being both the centre of consciousness and consciousness as a whole (e.g. Jung 1951, p. 5). The left part of the fan (2 and 3) represents psychic contents that are conscious – the ego relates directly to them (Jung 1921a, p. 421). The right part of the fan (4 and 5) represents unconscious psychic contents that do not relate directly to the ego (Jung 1921a, p. 483). These contents can only be described using mythology, which mediates between those unconscious contents of the psyche and the ego. The right arm of the fan represents metaphysics, the extra-psychic reality

that is unknown. Towards the edge of the fabric of the fan are negative borderline concepts, which are at the extremes of the region of potentially knowable and beyond which 'nothing can be determined' (Jung 1929, p. 54). The outer part of the main fabric of the fan (2 and 4) relates primarily to the outer world of other people and situations (Jung 1921a, p. 456). The inner part of the fan (3 and 5) relates primarily to the inner world of non-material objects, which are psychic or spiritual in nature.

Confusion over Jung's philosophy arises, in part, due to Jung's use of the phrases *image* and *object* to denote different parts of the fan in different contexts. From the perspective of withdrawal of projections, he suggests we need to have separate knowledge of internal, unconscious contents (5) and external objects (2). From the perspective of his neo-Kantian epistemology, image and object represent the difference between all psychic contents (2, 3, 4 and 5) and extra-psychic reality (6). That is, everything we know is psychic and we cannot know the object – 'the only form of existence of which we have immediate knowledge is psychic… Not only does the psyche exist, it is existence itself' (Jung 1938/1940a, p. 12). From the perspective of psychological type orientation, the terms image and object refer to things on the inside and outside of the fan. Extraversion is defined as being interest in the object (Jung 1921a, p. 427) which corresponds to regions 2 and 4, and introversion as being interested in the inner world (3 and 5) which he refers to as the subject (e.g. Jung 1921a, p. 452). Whether we focus on the internal (image) or the external (object) is a matter of typological difference.

Underlying these various uses of the term *image* and *object* is a common theme – *subjective* and *objective.* What changes in each use is the choice of subject, and the object becomes whatever is not part of the subject. If the subject is the field of human knowledge, then the object is metaphysics. If the subject is 'me' including my inner world, then the object is other people or situations. If the subject is my perceiving ego, then the object is any inner or outer

image that presents itself, whether in waking life or in dreams. Notwithstanding the different

use of the terminology, these various domains are all components of Jung's *esse in anima.*

4 Living Myth

In the context of *esse in anima,* mythology plays a significant role in mediating between these different domains and the ego. Myth is not just a story, nor even just an explanation of what lies beyond the ego's direct apprehension. It is an integral part of co-constructing reality, if it is a *living myth*. Jung applies this term to a diverse range of concepts, such as Christ (Jung 1951, p. 36), the legend of the Holy Grail (Jung 1956, p. 742), and UFOs (Jung 1958, p. 322). He also applies the term to some concepts that many people might not view as myth – psychology and science:

> Psychology, as one of the many expressions of psychic life, operates with ideas which in their turn are derived from archetypal structures and thus generate a somewhat more abstract kind of myth. Psychology therefore translates the archaic speech of myth into a modern mythologem – not yet, of course, recognized as such – which constitutes one element of the myth 'science.' This seemingly hopeless undertaking is a *living and lived myth.*

> (Jung 1940, pp. 179-80, original emphasis)

Jung notes the difficulty of recognising psychology and science as myth. Neumann made a similar point, and expanded on it, in his book on consciousness, to which Jung provided a foreword and endorsed its contents. For Neumann, it is easy to recognise old myths as projections, but it is much harder to recognise myths when they 'approximate to the unconscious conditions of our own time, our own culture, and our own personality' (Neumann 1954, p. 267). Jung felt that some theorists of myth fell into this trap, of failing to recognise modern forms of myth, because of their lack of psychotherapeutic experience: 'an expert in mythology and comparative religion is as a rule no psychiatrist and consequently

does not know that his mythologems are still fresh and living' (Jung 1941, p. 189). Nevertheless, several writers acknowledge the living nature of contemporary myth.

One view of living myth is that it is a timeless story that reflects the human condition. This approach is taken, for example, by J.F. Bierlein[87], for whom 'myths are the record of the human attempt to reconcile the paradox of human existence and living tools of reconciliation' (Bierlein 1999, p. 218). A living myth, therefore, is one that 'speaks to the human experience across time, geography, and culture' (p. 215). Bierlein's view of myth is predicated on the distinction between science and myth as explanations of *how* and *why* the world is as it is. There are some parallels with Jung's epistemology because he loosely associates these two questions with the Kantian categories of phenomenon and noumenon, associating science with the former and myth with the latter whilst acknowledging the boundaries are necessarily blurred. However, for Bierlein myth is a fiction – albeit a useful one because we can recognise aspects of ourselves within it. His approach is representative of many types of interpretation of myth, as a mirror of human existence from which we can derive meaning. For the purposes of the present research, what is missing from this type of analysis is an adequate resolution of the problems of truth and metaphysics. If myths are about establishing our identity within the cosmos, but the cosmology on which the myth is based is deemed to be false, then how can the myth provide a genuine meaning? For a myth to provide that identity and meaning, there has to be a truth on which it is based.

Mircea Eliade offers another view of living myth, based on the distinction between profane and sacred time. The former is the linear time that is associated with the material world; the latter is an eternal time. In a traditional society, a religious person (*homo religiosos*) values the sacred or eternal time and the origins or first appearance of something within profane

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[87] John Francis Bierlein is a classics scholar who has written about myth.

time. A myth that describes the origin or first appearance of the sacred enables *homo religiosos* to participate in the eternal time, which is of value. Such manifestations of the sacred (*hierophanies)* give structure to the world of *homo religiosos* and provide a model that can be imitated, exemplary scenarios that can be repeated, and enable a breakaway from profane time to the eternal time (Eliade 1963, p. 169). For Eliade, living myth has a mediatory role that raises awareness of the higher reality of the *hierophanies* and enables adaptation in both that world and the human one:

> Myths are the most general and effective means of awakening and maintaining consciousness of another world, a beyond, whether it be the divine world or the world of the Ancestors. This 'other world' represents a superhuman 'transcendent' plane, the plane of *absolute realities.*
>
> (Eliade 1963, p. 139, original emphasis)

Eliade's living myth is based on a creation myth or myth of origins, adhered to by a particular group or society, which structures their understanding of reality and guides their actions (Eliade 1963, pp. 140-1). Such 'a *living myth* is always connected with a cult, inspiring and justifying a religious behaviour' (Eliade 1967, p. 171, original emphasis). Traditional societies view the origin myth as an account of actual events – a particular group or society holds it to be a true story, but enlightened thinkers tend to regard it as false (Dadosky[88] 2004, p. 102). Eliade himself recognises that such stories can come to be viewed as false, for example in his assertion that myth 'narrates a sacred history [of] the fabled time of the beginnings' (Eliade 1963, pp. 5-6). For Eliade, the term 'fable' is interchangeable with 'fiction' or 'invention' (e.g., p. 1). However, where myth is a living thing, 'far from indicating

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[88] John Dadosky is a professor of theology whose book examines the work of Mircea Eliade and the Canadian philosopher and theologian Bernard Lonegan.

a *fiction*, [it] is considered to reveal the *truth par excellence*' (Eliade 1967, p. 171, original emphasis).

Eliade allows for two other types of living relationship between people in a more modern society and their myth. The first involves a more allegorical interpretation of myth. This is a philosophical anamnesis, in which people recall the structural principles and transpersonal/eternal truths contained within a myth, rather than actual events. Such 'myths represent paradigmatic models established by Supernatural Beings' (Eliade 1963, p. 125). The second involves the camouflaged expression of mythological behaviour without reference to a supernatural plane. Eliade illustrates his point using various examples, such as novels that enable the individual to escape from time (p. 192), or the fascination with new releases of automobiles. Being present at the launch of a new car is a form of religious ritual that expresses a mythical interest in origins (p. 186). A common feature of all three forms of mythical behaviour is that it is not seen as myth by its adherents but as a form of truth – though that truth may be literal or allegorical.

There are a couple of important points that we can draw from Eliade's analysis. The first is that he articulates a truth that underpins Bierlein's analysis. Living myth is sometimes interpreted allegorically and it points to a psychological truth about the human condition. This can be seen in the work of mythologists who re-animate ancient myths to derive contemporary meaning from the (allegedly) universal psychological principles that they demonstrate. The second key point from Eliade's analysis is that the perceived truth status of a myth can change. A myth that is originally viewed as truth can come to be viewed as fiction. As a result of the myth's separation from truth, it can lose its power as a living force – though knowledge of it can help us 'understand a category of our contemporaries' (Eliade 1963, p. 1). Eliade's analysis implies that there can be different forms of life-cycle to myth. For different

groups, it can remain true, or become false, or reappear as an allegorical truth, or it might be transferred onto a different object (e.g. cars) where its nature is camouflaged.

Another type of relationship between psychology and living myth has been outlined by Lévi-Strauss, based on anthropology and linguistics. He takes a structuralist view of living myth (Lévi-Strauss 1974, p. 202) seeing it as a fundamental part of thinking and culture that is common to all humankind. He draws a parallel between linguistics and mythology, suggesting that a sort of Hegelian synthesis occurs in both. In linguistics, meaning arises from the comparison of two different constructs (phonemes) and in mythology meaning emerges from the dialectic between mythemes (Lévi-Strauss 1988, p. 148). The relevant point of note from Lévi-Strauss is the involvement of fundamental, oppositional, and psychic structures in shaping a living myth.

The theme of structuralism has also been picked up by Spector[89] who defines myth as 'the structuring principle of intentionality' (Spector 2001, p. 19), alluding to the intentional analysis within Husserl's philosophy. This looks at how consciousness establishes relationships with different referents, and the role of myth is to 'provide the requisite forms through which intentional relationships are achieved' (ibid.). Spector elaborates this model using the four levels of consciousness represented in Kabbalism that have four corresponding modes of myth. These are pre-mythic (instinctive), myth as the vehicle for rational thought, analysis of mythic structures themselves, and finally the transcending of myth to establish a relationship with a divine unity. The relevance of Spector to the current research is that she portrays myth as a fundamental component of consciousness, which makes it deeply interconnected with epistemology and language.

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[89] Sheila Spector is a professor of English.

There are some very contrary views on living myth. Giegerich takes the view that myth has been transcended to the point of being dead and no longer of contemporary relevance. His argument is that, although man was initially born into myth where 'naked reality is fundamentally out of reach' (Giegerich 2003, p. 16), in modernity the task of religion has been fulfilled:

> Man has emerged from his containment. He now looks back down upon consciousness at large from outside [and] is for the first time ruthlessly exposed to metaphysical nakedness. Man… now has to exist all for himself.
>
> (Giegerich 2003, p. 19)

Giegerich illustrates his argument with the image of Aquarius rising out of the water, looking down, and recognising the water in which the fish are swimming. Giegerich's metaphor works to the extent that it illustrates a process of advancement of consciousness. Initially, Aquarius could only see other fish and did not recognise the water. Then he rose out of the water, recognised the medium in which he was embedded, and as a result his worldview had advanced. However, Giegerich's interpretation of the metaphor – that it illustrates how mankind has become free of myth – is at odds with the role that Jung and Neumann gave to myth. In fact, it makes the mistake that they pointed out – that living myth is not recognised as such by the person for whom it is living. For Aquarius, the emergence from water is a narrative root metaphor – it shapes his conscious perception of his relation to the world and the meaning of his existence. However, he has not emerged from all myth, as he is unconscious of the fact that he is still embedded within an atmosphere. Aquarius will not appreciate this fact until he escapes the atmosphere and is able to look down on the entire planet. Even then, he will not be free of myth for he will still be embedded within the 'brane' of space and time and, at a future stage of development beyond that, within the 'bulk' of higher-dimensions.

Giegerich's point of view is also taken up by Heller, who divides myth into the categories of archaic and modern, and collective and personal. Using a similar fish-out-of-water analogy to Giegerich (Heller 2006, p. 39), she argues not only that modern man is devoid of myth, but that he is better off without it. This argument is, in part, based on her 'usage of the term *myth* [as referring to] myth in its most original or archaic sense' (p. 1). Her criticism of modern mythologists, in which she refers to James Hillman or Christopher Hauke, is that in order to give myth a modern significance, they try to rescue aspects of archaic myths, such as the importance of paying attention to 'the gods'. It would be better, she argues, to acknowledge the loss of myth and come to terms with it. What replaces myth, in Heller's view, is reflection and psychology. For Heller, a living myth is one that is experienced as a subject – but as soon as one starts to reflect about it as myth, then this is a psychological process that leads to the negation of the myth.

Although Heller does not recognise psychology as myth, she raises an important question: what happens when we reflect on our myths? Heller points out that this can negate the myth. However, her solution, that myth has been supplanted by psychology, is problematic. Quoting Giegerich, she interprets Jung as knowing 'full well that psychology presupposes the obsolescence of mythology' (p. 74) which is not the argument put forward by Jung, nor by Neumann, nor even by Popper. Rather, myth does not die or disappear, it is transformed or replaced. Also, Heller sees psychology as having escaped from myth to achieve an understanding of an unmediated truth: 'reflection as truth or the truth of reflection is naked reflection… freed from the confusion of appearances and the duplicity of the mirror… whereby one can… let the truth be unconcealed' (p. 186). This argument is untenable. It is contrary not just to Jung's theory but also to mainstream psychological principles, such as the psychology of perception. As most basic psychology textbooks state, there is always an active process of interpretation that comes between even the most concrete of realities and the

perceiving ego (e.g. Baron[90] 1989, p. 90). Therefore, to claim that psychology is able to deal with the naked truth is to undermine all of the achievements of psychology since the recognition of the influence of the personal equation. Furthermore, the suggestion that it was Jung's belief that psychology makes mythology obsolete is misplaced, for Jung makes a similar point to the psychology textbook – that in respect of the physical world 'consciousness has no direct relation to any material objects' (Jung 1933c, p. 383). Whilst Heller and Giegerich both raise interesting arguments, they seem irrelevant – and indeed contradictory – to Jung's proposal that we think of God as a mythologem. Also, their stance towards living myth is nihilistic. It is in effect a call to Christians to abandon their faith and take up psychology instead, but without recognising that psychology is itself a form of myth.

A similar problem arises with Campbell's work, because he also fails to recognise psychology as myth. He saw myth as having four roles: to reconcile consciousness with the mystery of the universe; to provide a cosmology; to validate and maintain social order; and to centre/harmonise the individual (Campbell 1968, p. 609-623). Like Bierlein, he sees myth as pointing to the same universals. Campbell therefore falls into the cross point of Heller's criticism, in that he was trying to rescue aspects of archaic myth rather than recognising and coming to terms with its loss. This has contributed to his failure to recognise psychology as myth, which has been pointed out by one of his critics:

> Campbell… does not regard the psychological approach to life and the anthropocentric perspective implicit in it as mythical. His perspective is true, and accurate, and absolute. He sees things as they are, in contrast to the naiveté of people who took their myths seriously. However, this sense of having direct access to reality is precisely what myth

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[90] Robert Baron is a psychologist (now Professor of Management) who has written or contributed to a number of textbooks on psychology or related subjects. This book serves as one example amongst many, to illustrate the ubiquity and widespread acceptance of the main principles of the psychology of perception.

involves… In identifying myth with reflections of psychic impulses, Campbell does not recognize the mythic nature of his own basic perspective.

(Grant 1998, p. 165)

Grant's criticism reveals the degree to which Campbell has separated truth and myth. Campbell suggests that 'living myths… [are] not to be judged as true or false' (Campbell 1969, p. xiv). He regards his psychological theory as true and not as myth, without recognising that truth underpins the living quality of myth. Campbell responds to the type of problem identified by Heller – that reflecting on a myth negates it – by separating truth and myth, rather than reflecting on his 'true' psychology as myth.

Bond[91] has provided yet another view on living myth, one that sees the primary function of myth as being adaptation. Living myth establishes functional relationships between the individual and the environment, and Bond cites the myths of science and magic as two examples. Science is an adaptation to the environment via culture, because the 'empirical reality of science is already a cultural form' (Bond 1993, p. 43). Magic is 'a form of human adaptation to the environment via the unconscious' (ibid.). In this scheme, personal myth can play a role if cultural myth fails to provide adequate social adaptation. Bond describes a life cycle of myth in which, although 'old myths die hard' (p. 45), myth has to change as the environment changes, in order to maintain its function of adaptation:

When the aging myths of former generations pass away, the mythmaking process is constellated in the lives of individuals. For the birth of the personal myth in the imagination of a single individual may become the rebirth of the greater myths in the imagination of the culture… That is the promise of the personal myth. It goes beyond

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[91] D. Stephenson Bond is a Jungian analyst and a former church minister.

the individual. Jung implied that the personal myth must be seen not only in the light of individuation, but also in the light of evolution – cultural evolution.

(Bond 1993, pp. 75-6)

A useful aspect of Bond's analysis is his definition of living myth in terms of its efficacy in sustaining balance (Bond 1993, p. 56). Adaptation in two directions (inner and outer) is at the heart of Jung's purpose for analytical psychology (Jung 1926/1946, p. 92). For Bond, there is a distinction between living myth and efficacious myth. For example, science is a living myth but, in the guise of technology, it is not efficacious because it has (in certain ways) been leading to the destruction of the environment (Bond 1993, p. 53).

Another author who sees living myth in terms of adaptation is Midgley[92] – though she does not take a Jungian perspective. She recognises that Jung was trying to enlarge psychology to incorporate spiritual experience, a move that has been systematically resisted by academic psychologists (Midgley 2004, p. 62). She counters the type of view presented by Giegerich and Heller, that myth dies, by suggesting that myths 'transform themselves gradually into something different, something that is often hard to recognise and understand [like] an ecosystem trying painfully to adapt itself to changes in the world around it' (pp. 6-7). She also addresses objections to the argument that science is myth by suggesting (in a similar manner to Popper) that science is based on imaginative ideas and patterns that are taken for granted. She uses the example of sewage distribution in the sea, which is better informed by knowledge of the currents than the microstructure of water (p. 83).

A final example of a writer on living myth is Dan McAdams. He draws on the hero myth and archetypal characters to portray myth as a means to create personal identity – 'each of us constructs, consciously and unconsciously, a personal myth [which] makes you unique'

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[92] Mary Midgley is a philosopher.

(McAdams 1993, pp. 11-2). This myth provides 'meaning, unity [and] purpose' (p. 265). McAdams also presents a life-cycle for myth, consisting of three phases in the life of the individual. In the pre-mythic period of infancy and childhood we gather material for later use in our stories. The mythic phase covers the construction of our own personal stories to give meaning and purpose to our lives. The post-mythic phase comes in later life, 'when the main perspective on myth changes from making to looking back on the making' (p. 278). McAdams' approach draws attention to the nature of myth as being personal as well as collective, and as having some form of life-cycle.

MYTH AND WELTANSCHAUUNG

For some of the aforementioned theorists, myth has a broad meaning. It not only embraces science, psychology, and religion, but also philosophies of life or what one might call worldviews. This raises the question as to the relationship between myth and *weltanschauung*. For example, did Jung see the word *weltanschauung* as being interchangeable with the word *myth*? Jung gives an answer in an essay that describes *weltanschauung* as being constructed consciously, using materials that are emerging or have previously emerged from the unconscious. *Weltanschauung* is an all-encompassing philosophy that he distinguishes from myth (Jung 1973, p. 554). It embraces a wide range of attitudes to the world, which Jung illustrates using the example of an army general (representing the ego) who deploys different resources and plans (representing attitudes) according to the current status of the battle. Towards the end of the essay, he clarifies the difference between *weltanschauung* and myth. The main purpose of the final section of the essay is to explain the role that analytical psychology has in the development of individual and collective *weltanschauung*. His

portrayal of fantasy images has parallels with Hatab's portrayal of mythos as being mythical disclosure:

> Analytical psychology… calls our attention to the existence of fantasy-images… In their totality, they compose a natural world-image… All mythology… come[s] from this matrix of experience… Nevertheless… fantasy-images of the unconscious [cannot] be used directly… They are only the raw material, which, in order to acquire a meaning, has first to be translated into the language of the present.
>
> (Jung 1928/1931, p. 380)

Myth represents the eruption into consciousness of images from a collective, unconscious worldview. The ego uses these new mythological images in the conscious development of the individual's *weltanschauung* in the here and now. The relationship between myth, which derives originally from unconscious sources, and *weltanschauung,* which is the product of a conscious process, can be compared to lava erupting from a volcano and helping to shape the overall landscape. Everything that is genuinely new – according to Jung in his essay – comes from the unconscious, from the erupting volcano. However, once that lava has emerged, the environment (including weather, animals, and humans) act upon that lava to change it, shape it, and make it an integral part of the landscape. It is through the interaction and co-operation of these two sets of forces – elements from underground and above ground – that the landscape is formed and developed. The molten rock from beneath the surface can take many different paths in its life cycle – emerging as hot lava, solidifying as rock, and then being weathered to form a natural feature, or being removed to provide materials for construction, or being mined for valuable minerals for use in a wide range of applications. Just as the landscape provides a record of how the lava has emerged and been exploited, and continues to be changed by continuing volcanic and tectonic activity, so too a *weltanschauung* is full of myth that is new and old, and has been shaped through interaction with consciousness. This

metaphor – of the interaction of landscape and lava – represents the interaction of consciousness and the unconscious, of psychological and visionary, and of conjecture and refutation. Although these pairs of concepts are not identical, there is an underlying theme of the interaction of logos and mythos, of the conscious integration of mythical disclosures into an overall worldview or *weltanschauung.*

Although many of the writers discussed above make no distinction between myth and *weltanschauung,* one line of argument could legitimise such an approach. What emerges from the unconscious over time can dominate and characterise the landscape. In terms of the landscape metaphor, this can be seen in phrases such as 'the sands of the Sahara', or when describing Hawaii as 'volcanic islands'. If the basic material becomes characteristic of the landscape, there might be some benefits in calling it 'myth'. It might illustrate the extent to which beliefs are dependent upon mythical disclosure. It might counter the tendency to believe that one has hold of an absolute truth. It might also give legitimacy to using the word myth in respect of God, because it no longer carries the assumption of falsehood that seems to require a denial of the metaphysical aspects of God. And it also implies that one's own knowledge and beliefs can change as new things are revealed and appear in the conscious landscape.

However, when using a type of myth to describe a *weltanschauung,* something important is also lost. Lava, and what emerges from it, is a substantial and integral part of the landscape, but it is not the entirety of it. There is more to Hawaii than volcanoes, more to the Sahara than sand, and even the nature of sand has changed since it first emerged as hot, molten rock. Although myth and mythological images make a significant contribution to building up a particular worldview, they are not the only influence. The type of reflection and testing that Popper describes changes and shapes the philosophical landscape in a similar manner to weather and other environmental factors shaping the geographical one. It no longer consists of

raw images but also includes refined ones. Just as Hawaii now contains buildings and roads, and habitats for flora and fauna, so too the *weltanschauung* contains images that are not to be found in that form in the unconscious but constructed by the interaction of consciousness with those mythological (imaginative) materials, refining them once they have emerged. This highlights the shared responsibility that the ego has for *weltanschauung* – which can be overlooked when describing the entire worldview as myth. Mythology is a source of images, but consciousness uses them to build the *weltanschauung*, turning the imaginative mythological image into something that has individual and societal utility.

Colin Grant (already mentioned earlier) is one amongst many who use the term myth as if it is a worldview, but the insight he provides has a particular relevance and value to the present research, even after we differentiate *weltanschauung* and myth. Grant acknowledges that the stories of the gods have been exposed as 'falsehoods' (Grant 1998, p. ix) and he sees living myths as including science, consumerism, ecology, sports, feminism, society and many others. The reason he applies the label myth to this list is that they involve 'commitments that are so basic and assumed that we normally do not notice them, much less reflect on them' (ibid.). Using three high-level categories of myth – journalistic (or colloquial), scholarly, and living – he examines the relationship between myth and reflection:

> The general point is that myth is functioning optimally when we are not aware of it. To identify something as myth is already to have stepped outside of its own perspective… to have broken the spell to some extent… myth is born and dies through exposure. As soon as something is recognized as myth – given life as myth, as it were – it dies.
>
> (Grant 1998, p. 4)

However, Grant does not take the nihilistic standpoint of Giegerich and Heller. Rather, once myth dies, he argues that there remains a truth, which forms the basis of a new myth. Living myth is not a matter of distinguishing truth from falsehood, nor an attempt to make ancient

stories relevant to the present by reviving the gods. Rather, it is the 'perspectives and priorities that… represent the mythic horizons that define reality for us' (Grant 1998, p. 13). His use of the landscape metaphor ('horizons') reinforces the potential for confusion about what myth is, and what *weltanschauung* is. However, behind that confusion are two important questions – whether living myth is concerned with 'truth', and how one incorporates reflection into one's myth when it has the effect of 'breaking' it. If myth dies when we reflect on it as myth, but we also recognise that our worldview is always built on myth, then this creates a dilemma:

> Our dilemma resides in the tension between the self-consciousness of broken myth and the immediacy and totality of living myth. Thus, the issue for us is whether we can live by broken myths… whether we can move in and out of our own myths… whether we can be a witness and an exegete of the same myth… In our era of broken myth, it would seem that we are all some combination of witness and confessor.
>
> (Grant 1998, p. 170)

If a living myth is broken because it is recognised as a myth, one response is to regard it as 'not true'. For example, the recognition of God as myth – when viewed from the perspective of materialism, which Jung regarded as a 'ridiculous mythology' (Jung 1976, p. 501) – could mean the death of God for that individual. D Stephenson Bond offers a way around this problem, through symbolic thinking:

> Symbolic consciousness… participates in the subjective process of fantasy while at the same time maintaining awareness of the process as an objective, autonomous factor. In other words, it lives in a myth while knowing it as a myth; it experiences the fantasy process neither as 'reality' nor 'illusion,' but rather as *meaning*.
>
> (Bond 1993, p.18, original emphasis)

Although this is not a new suggestion – for example, because Jung argued that 'the revolution in Christian theology… must be symbolical' (Stein 1986, p. 177) – it highlights the importance of 'symbolic' thinking. Grant's concept of broken myth presents in a nutshell the problem of Jung's attitude towards metaphysics, proscribing it from discussion despite its importance in helping to sustain the faith of many protestant Christians. To live within a myth and derive meaning from it involves seeing it as both true and real. To reject that myth entirely involves seeing it as false, as an illusion. In some cases, rejecting a mythology as false is justifiable. For example, Jung differentiated between physicists' 'legitimate mythology based on laws of nature' (Jung 1976, p. 448) and what he considered to be ideas that did not have a reasonable metaphysical foundation, which he labelled 'arbitrary universon-fantasy' (ibid.). Bond's solution recognises that truth and falsity are not the only alternatives, because viewing the myth symbolically creates a path between reality and illusion. However, Bond's phraseology does not provide an entirely satisfactory solution because the word 'meaning' – which is the product of Bond's symbolic thinking – does not address the question of metaphysics. It could even make the problem worse, because some may interpret the term as suggesting there is no metaphysical involvement – because meaning is commonly defined as 'that which is in the mind' (Chambers 2014, p. 946). The notion of symbolic consciousness as a middle path needs also to address the question of the truth of metaphysical assertions. Symbolic meaning alone is not enough for an exoteric audience to engage with Jung's proposal.

FOUR MYTHOLOGIES

The analysis so far suggests that, for Jung, the origin, subject matter, and functions of living myth are very broad. The main functions of a living myth are to mediate between

consciousness and the unconscious, to help create reality, and to facilitate adaptation. He describes the main aim of analytical psychology as being adaptation in two directions – 'to external life… and secondly to the vital demands of his own nature' (Jung 1926/1946, p. 92). Myth's role in adaptation is to structure consciousness, and furnish material that is used in the ongoing development of *weltanschauung*. For each individual or culture, there are two sources of living myth. The first is the imaginative activity that draws from the unconscious to create new, visionary myths that facilitate inner and outer adaptation. The second origin is conscious and psychological – myths that have already been created and refined by others, and established as part of an existing culture. Jung's *Answer to Job* provides examples of both. It contains a critique of an existing myth, Christianity. It also expresses Jung's own fantasy images that form a new myth – the coming to consciousness of God through human individuation. Per that myth, the collective unconscious (perhaps underpinned by a spiritual reality) finds a suitable vehicle for expression in the human person of Jesus.

The subject matter of myth is diverse. It encompasses everything involved in inner and outer adaptation. Psychological and spiritual myths facilitate adaptation to the inner world. Scientific, social, and occupational myths facilitate adaptation to the outer world. Some myths project contents from one domain into the other, such as the building up of political leaders to have heroic qualities that far exceed their actual capabilities. Although Jung acknowledges the different subject matter of myth, he sees the difference between them as being uncertain. Labels are ascribed to them based on the nature of our experience:

> Spirit and matter may well be forms of one and the same transcendental being… The sole immediate reality is the psychic reality of conscious contents, which are as it were labelled with a spiritual or material origin as the case may be.
>
> (Jung 1945/1948b, p. 212)

Jung therefore presents matter and spirit as if they had the same type of ontological basis, as if they both exist outside of the psyche but are mediated with consciousness through the psyche. This has significant implications for how we understand his use of the terms matter, spirit, and psyche. The ontological treatment of psyche is different because Jung regards it as the essence of existence (Jung 1938/1940a, p. 12). It is the only reality we can know.

The term 'spirit' has been investigated by Main, who proposes a working definition of it as being 'one of the major differentiable and experienceable aspects of an overall continuum of consciousness and reality, together with, but of greater subtlety than, the physical and the psychic' (Main 2007, p. 27). He also identifies some differentiating aspects of spirit, such as manifestations being generally characterised by feelings of numinosity and unity, having an ability to transgress or restructure the usual limitations of reality, and being autonomous (pp. 29-30). He argues that spirit can be experienced directly, for example as the 'perception of beauty' (p. 31) whilst observing that Jung 'stresses that these are, and must be, psychic phenomena' (p. 32). However, he suggests that Jung is making 'a semantic point only, based on an arbitrary decision to designate as psychic what used to be called spiritual' (Main 2007, p. 36).

Although there is a line of argument that 'psychology and spirituality are synonymous' (Doty 1986, p. 201), it seems to me that Jung is making an important point about the nature of his philosophy, not merely a semantic one. He came to regard 'the unconscious [as] the place where the living Spirit that is *more than man* manifests itself' (Jung 1973, p. 490, emphasis added). He criticised Freud posthumously for reducing spirit to a psychological formula (Jung 1939b, p. 58). Jung initially saw spirit as psychological but came to regard psyche and spirit as ontologically different, affording the latter some extra-psychic reality:

(1919:) I see no proof whatsoever of the existence of real spirits and until such proof is

forthcoming I must regard this whole territory as an appendix of psychology.

(1948 footnote:) I no longer feel as certain as I did in 1919, when I wrote this sentence.

To put it bluntly, I doubt whether an exclusively psychological approach can do justice

to the phenomena in question.

(Jung 1920/1948, p. 318 & fn).

This might imply that Jung adheres to vitalism, a philosophy that has 'fallen out of favour'

(Bechtel & Richardson[93] 2005, p. 1051) in contemporary science, being replaced by views of

consciousness and spirit as emergent properties. However, it is here that Jung's proscription

of metaphysics is very relevant, for he acknowledges that the labels he applies to phenomena

may not be correct and what appear to be different ontologies may be manifestations of the

same underlying form of reality. Whatever their nature, ego consciousness cannot apprehend

them directly and there needs to be a mediatory function for the ego to experience anything.

As the ego is psychic in nature, that mediatory function is always psychic, so all perception –

whether of matter, spirit, or psyche – is always a psychic phenomenon.

If, like Jung, we assume there is something different about the external nature of our

experiences – which we label as matter, spirit, and psyche – then this infers there are four

basic types of mythology, though these are not categories that Jung identified. For the

purposes of illustration, we will treat the involvement of matter, spirit, and psyche as binary

options – but they are, as Main suggests, continua. Psyche has a special status because it is

'not merely an object but at the same time the subject' (Jung 1921a, p. 490). It not only has its

own reality of equal ontological status with matter and spirit, but it is also the medium in

which the ego experiences all reality (which is co-created). In the diagram below, matter is

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[93] William Bechtel and Robert Richardson are professors of philosophy.

represented by a large blue circle, spirit by a large red circle, and psyche by a large yellow circle. The small, white circle represents the scope of ego-consciousness. The overlapping colours represent interactions between them.

Figure 9 - Matter, Spirit, Psyche
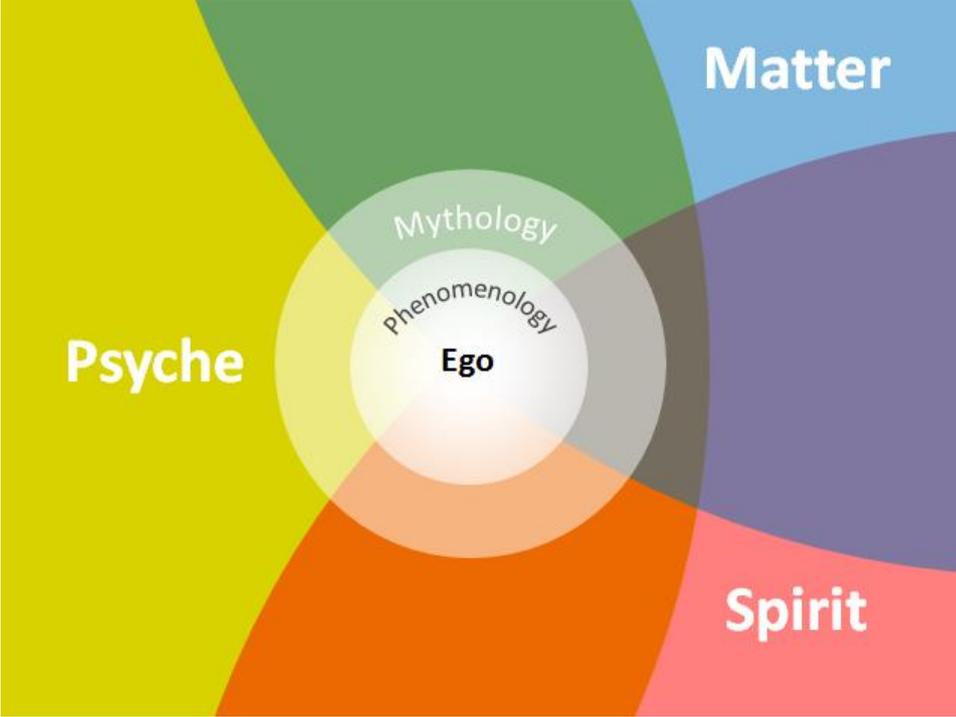
The ego cannot experience matter or spirit directly; it is part of the psyche. However, it can interact with them through the psyche and therefore have experiences that it labels as material, spiritual, both, or neither (the latter category being mainly psychic). Therefore, the white circle is placed on the boundary of spirit, to allow for experiences labelled as 'spirit' and those that do not seem to involve spirit. It is also place on the boundary of matter, to allow for experiences that are labelled as involving matter, or not. As it is impossible for the ego to experience anything outside of the psyche, it is placed wholly within the yellow circle. The whitest part of ego-consciousness represents phenomenological experiences – sensations, emotions, images, etc. The pure blue, yellow, and red represent the unknowable areas of matter, psyche, and spirit. The semi-transparent band around the white circle represents

mythology. Mythologies 'contain a revealed knowledge' (Jung 1934/1954, pp. 6-7) and mediate between consciousness and all these unknowable areas. This leads to four basic types of mythology in this particular worldview – formed by the experience or mythology being labelled as involving matter (e.g. physics), or spirit (e.g. theology), or both (e.g. life sciences), or neither (e.g. the psychology of mind).

Figure 10 - Four Types of Mythology
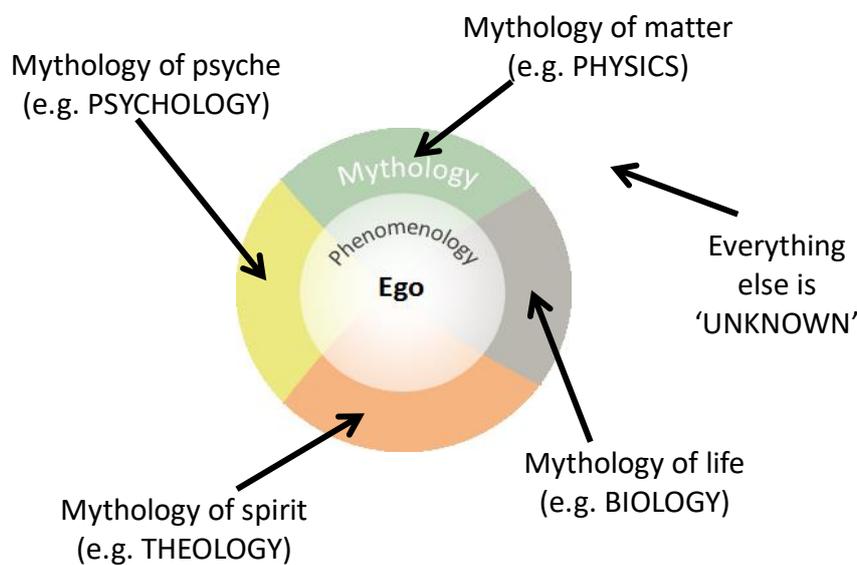
Confusion can easily arise from this because in practice we label some experiences and mythologies as psychic and some as not but, strictly speaking, everything is psychic. The term *psyche* could therefore be used in two senses – one as a super ordinate category that covers all experience, the other as describing that type of mythology which has little or no involvement of matter or spirit. For example, using the term in this second sense, a dream image is labelled as a psychological phenomenon, whereas the greenness of grass is a material one. Both are psychic phenomena – forms of *holographic* psychic image constructed between the ego and something else. Our experience suggests that the image corresponds to an internal or psychic object in one case and to an external or material object in the other. The psyche is *both* a label

we use to apply to an independent, discrete ontology *and* it is the active medium in which all the holograms of psychic reality are created. Matter and spirit are labels we apply to (what appear to be) discrete ontologies, but every image we see 'is a complex structure made up of the most varied material from the most varied sources' (Jung 1921a, pp. 442-43).

GOD AS A MYTHOLOGEM

Jung's epistemology sets a context in which to view his proposal to think of God as a mythologem. This is not a straightforward task because, as the earlier philosophical analysis demonstrates, many readers of Jung have interpreted his epistemology in wildly different ways. For the purposes of this research, which is seeking to identify a means of measurement for thinking of God as a mythologem, there are three main aspects to be taken into account.

The first is the role of mythology in Jung's *weltanschauung,* and the implications this has for the use of the term *mythologem.* Jung uses his terms flexibly – as demonstrated by the discussion of image and object earlier – but, in most cases, his use of *mythologem* refers to the inner objects of the collective unconscious. He often seems to equate the term *mythologem* with *archetype* (e.g. Jung 1945/1948b, p. 251, or Jung 1947/1954, p. 195) or, more specifically, an *archetypal image* (Jung 1947/1954, p.214). However, they are not identical and his focus on the archetypal aspect of mythologems is due to his primary interest in human psychology. He does not proscribe the involvement of other, external factors:

> The special emphasis I lay on archetypal predispositions does not mean that mythologems are of exclusively psychic origin. I am not overlooking the social conditions that are just as necessary for their production.
>
> (Jung 1942/1948, p. 130fn)

This suggests a subtle difference between archetypes and mythologems, because 'archetypes do not represent anything external, non-psychic' (Jung 1946, p. 169) whereas 'mythologems are… portions of the world that belong to the structural elements of the psyche' (Jung 1945, p. 92). The involvement of external spirit in the mythologem of God may be tiny or it may be substantial – we don't know. In Jung's epistemology, we see images and then stick labels on them – matter or spirit – according to our *weltanschauung*. This worldview is constructed between consciousness and the forces of mythological disclosure, which can come from extra-personal domains that are of a material, spiritual, or psychic origin. Jung's proposal in the Bernet letter is a call to think mythologically, which involves recognising the role of our own psyche in co-constructing the reality of God. This involves deconstructing our image of God to own those aspects that belong to our own psyches. He is not demanding that Christians regard God as nothing but psychic.

The second main aspect to be taken into account is that a mythologem is symbolic, representing both truth and meaning. If we interpret a mythologem as representing only meaning then it neglects the issues of truth and metaphysics that – for some people – are prerequisites to the derivation of meaning. Truth plays a significant part in sustaining a living myth, but it is problematic to reduce a myth to a binary truth or falsity. It is also problematic to suggest that a myth is unrelated to truth or falsity because (as Grant suggests of Campbell) it can result in the failure to recognise one's own living myths, which are beliefs that we hold to be unquestionably true. It is also problematic to recognise myth as myth because, as Heller points out, that kills it. These various problems can be resolved by learning to live with broken myth and treating mythologems as symbolic representations of both truth and meaning.

Jung expresses this in simple terms, which seem relevant to an exoteric audience, when he suggests 'it is advisable to assume that [mythologems] mean more than what they appear to

say' (Jung 1945/1954, p. 300). However, he did not always convey that message. For example, in his Face-to-Face interview he declared a simple knowledge of God that seemed to suggest that the meaning of this particular mythologem was clear. The criticism being made here is not of Jung's philosophical standpoint, but of his failure to communicate it consistently and effectively. He later claimed that he immediately regretted his answer (Jung 1959b) which he attributed to a subtle but clever interview technique (Freeman[94] 1989, pp. 12-13). Jung's excuse does not stand scrutiny, however, because the evidence suggests that Freeman's technique worked as intended in revealing an honest answer (Myers 2009a). Jung's response was not an off-the-cuff mistake, it was almost identical to a newspaper interview he had given four years earlier:

> All that I have learned has led me step by step to an unshakable conviction of the existence of God. I only believe in what I know. And that eliminates believing. Therefore I do not take his existence on belief – I know that he exists.
>
> (Sands[95] 1955, p. 6)

Jung said that his BBC statement had been misunderstood because most people thought 'the truth is simple and can be expressed by one short sentence' (Jung 1959c). However, the Sands interview shows this was an issue he had considered prior to the BBC interview. The problem is therefore not the viewers' expectations of simplicity, it is the failure of Jung to find an effective way to communicate the subtleties and complexity of his epistemology to that audience. Even when clarifying his position in letters after the BBC interview, he again resorts to the confusing language of image and object. He writes that 'whatever I perceive from without or within is a representation or image… caused, as I rightly or wrongly assume,

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[94] John Freeman had a varied and distinguished career, including being the presenter of BBC's *Face-to-Face.* He pioneered a modern interviewing technique that uncovered aspects of a celebrity's personality that had previously been hidden from public view.

[95] Frederick Sands was a journalist, working at that time for the *Daily Mail.*

by a corresponding real object' (ibid.). Although he asserts the inadequacy of all images of God, including his own (Jung 1959b), he fails to communicate the relation of psychic and metaphysical realities within his epistemology.

In *esse in anima*, Jung establishes a sophisticated relationship of mythologems to truth and meaning. He conveys the mysterious nature of reality as we experience it. However, in some of his public utterances he uses terms that play into the desire for simplistic answers, of which he is critical. Jung was often critical of Christian theologians for failing to recognise the mysterious nature of God (e.g. Jung 1955) but the present research is critical of him for using language that – inadvertently – undermines that mystery and contradicts his own epistemology. The mystery of God – which happens to be the first tenet of the Orthodox Church (Ware[96] 1979, p. 11) – naturally follows from any view of God that is symbolic. The criticism of Jung being made here is not that his epistemology fails to include truth and metaphysics. Rather, it is that his language and style of communication, and his attempts to proscribe metaphysics from his psychology, results in an over-simplified presentation of his epistemology. He fails to convey how one can address the problems of truth and metaphysics.

The third main aspect being taken into account is that myths can go through a variety of life-cycles, often as a result of reflecting on it as myth. One possible model to describe such a life-cycle might be to compare it to a snake shedding a skin. When the living skin becomes old and no longer of use, the snake sheds it, and replaces it with a new skin. However, this metaphor is not adequate, because it represents the myth moving from being alive to being dead – but we are seeking a way of learning to live with broken myth, which is different. This involves a move from literal to symbol thinking, not a move from being true to false – both of which are literal concepts. Another way to examine the life-cycle of myth is to draw a map

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[96] Kallistos Ware is a bishop in the Orthodox church.

consisting of the three key mythological concepts that were identified earlier – truth, meaning, and (critical) reflection. This can be represented by the following diagram (a myth map) in which the various discrete spaces have been labelled.

Figure 11 - Myth Map
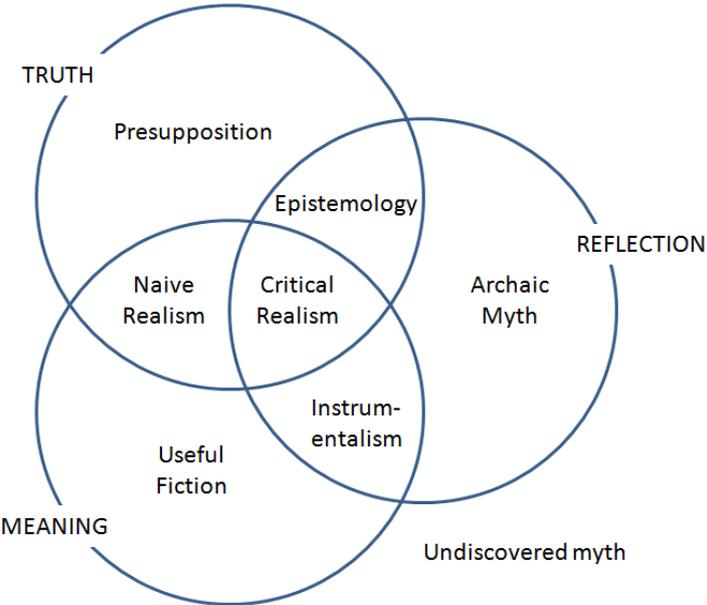
This diagram shows eight types of myth, depending on whether individuals or society regard the myths as being true, whether their myths provide meaning, and whether they have reflected critically upon their myths to assess their truth or meaning. Being outside each circle means either that the myth has no truth (or no meaning, or has not been reflected upon) or that the question of truth is irrelevant.

The four terms in the circle of meaning are adapted from categories created by Ian Barbour[97] in his comparative study of science and religion (Barbour 1974). Aside from borrowing his terms, Barbour's work is not being given much further treatment in this research, despite much of his approach having parallels with Jung and Popper. Barbour sees both science and

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[97] Ian Barbour had degrees in both science and religion, and conducted seminal research in the integration of the two fields.

religion as forms of myth – but there are also some key differences between his approach and Jung's. To examine these thoroughly would take much more time than is available in this research and possibly take it in a direction that is not necessarily helpful in terms of understanding Jung's letter to Pastor Bernet. For example, Barbour draws distinctions between myths, models (the structural elements of myths), and paradigms, and argues that, unlike science, religious models 'express and evoke distinctive attitudes [such as an] allegiance to a way of life and adherence to policies of action' (Barbour 1974, p. 7). This is a distinction that neither Jung nor Popper make. It also seems problematic because, whilst science may not overtly demand a way of life, it often makes an implicit call. This can be illustrated with the comparison of Jung's psychological functions of feeling and thinking. The former, based on subjective values, involves a personal connection between the ego and something. The latter, based more on logic and truth, leads to the ego taking a more objective approach. However, detachment is just as much of an attitude towards something (albeit a negative one) as personal involvement. In a similar way, science can implicitly involve taking a particular approach to life – for example, one that is oriented around evidence.

Barbour shares a similar goal to Jung, of greater religious tolerance. He expresses the hope that 'the recognition that models are not pictures of reality can contribute to tolerance between religious communities' (p. 8). However, Barbour dismisses using the term 'myth [because] it is so generally assumed to mean simply an untrue story that it is probably impossible for most people to take the cognitive functions of myth seriously' (p. 179). Where Barbour tries to sidestep the difficulties of the term, Popper and Jung confront them head on. Popper unashamedly describes science as myth and, in the Bernet letter, Jung argues that theologians should be open about the fact that they are mythologising. Therefore, although a comparison of Barbour and Jung could be worthy of further, substantial investigation, it is being laid aside for the purposes of the present research. His terms are being used in the myth-map because

they do reflect some of the basic similarities and congruences between Barbour's approach and the ideas that have emerged from this research. Beyond that, however, Barbour's ideas start to take a different direction to Jung's, and to the aims of the present research.

Returning to the myth map, we shall examine the outside categories first, and then finish with Barbour's final category in the centre. *Naïve realism* represents the state when a person or society is living within a meaningful myth that is regarded as truth. Members of the society are embedded within that myth to such an extent that they have not reflected on it to challenge it, because its truth and meaning are so patently obvious. It may be possible to recognise when other societies are embedded in a myth but, by definition, it is hard to recognise one's own myth.

A *useful fiction* is recognised as untrue, or its truth is irrelevant, but it is still found to be meaningful. An example of this is a (fictional) film – such as *I, Daniel Blake* – that raises social or personal issues, or invokes an emotional response, through the characters on the screen. If the meaning of the film is challenged through reflection, and still found to hold some meaning, then this falls into the category of *instrumentalism.* An example of this is the film *Gandhi,* which portrays real events but introduces a number of falsehoods that, to some extent, show British history as we would like it to be rather than as it was (Myers 2013b). These falsehoods provide meaningful insight into our perception of contemporary and historical culture.

The category of *archaic myth* represents the type of story that is viewed as neither true nor meaningful. For many people (though not all) the stories of Greek gods might fall into this category. If someone reads these myths critically and finds significant meaning, for example reflecting significant developments or battles within human nature, then they would count as instrumentalism. However, if they discount them as no longer relevant then they are relegated

to the category of archaic myth. This raises an important point about the myth map – different people can put the same myths on different parts of the map, depending on their relationship with that myth.

The category of *epistemology* represents myths that question whether we know something to be true. Although this category includes a diverse range of activities, from simple fact-checking to Popper's falsification, the term *epistemology* is used because those activities are underpinned by the question of what we know and how we know it. Popper's process of the development of science – as conjecture and refutation – is an example of an epistemological myth because it seeks to ascertain how we can test and improve the quality of scientific knowledge. The category of *presupposition* is self-explanatory – it is a presumed truth or premise that goes unchallenged. An example of this is the principle of Aristotlean non-contradiction, which is a myth that is widely accepted as true. However, this is now being challenged by 'paraconsistent logics… which allow solid deductive reasoning under contradictions by offering a mathematical and philosophical support to contradictory yet non-trivial theories' (Béziau, Carnielli, Gabbay[98] 2007, back cover). This moves the principle of non-contradiction into the category of epistemological myth (the same category as paraconsistency). Aristotle's principle is not now regarded as false, but it is no longer a presupposition – it is used alongside paraconsistency to help differentiate what we know from what we believe. The category that surrounds all these – *undiscovered myth* – represents myths or tales for which truth, meaning, and reflection are considered to be irrelevant.

The final category in the middle – labelled with Barbour's term of *critical realism* – is the one that is of most interest when considering Jung's category of mythologem. Four of the categories on the outside – presupposition, naïve realism, useful fiction, and archaic myth –

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[98] Jean-Yves Beziau, Walter Carnielli, and Dov Gabbay are logicians who jointly edited *The Handbook of Paraconsistency.*

are categories that are associated with literal thinking. The category in the middle is the one that is most associated with symbolic thinking – it requires a consciousness that does not force a myth or mythologem into a literal truth/false dichotomy, but can see that it represents multiple truths or meanings. This type of symbolic consciousness reflects on a myth not to put it in one of the literal categories, but to draw out the multiple truths and meanings it might represent.

Depending on their standpoint, individuals or societies may regard only one segment or all segments as representing myth: Heller and Giegerich fall into the former category – they see all myth as archaic. Jung, Neumann, Grant, Midgley and others fall into the latter, seeing that myth can take many forms and one's attitude towards it can depend on the degree of reflection and the degree of symbolic consciousness in that reflection. In theories of myth that see all myth as having a contemporary message, such as Campbell's in which all myth points to the monomyth, then there is no such thing as archaic myth – all myth is brought back into the realm of instrumentalism. The term 'living myth' refers to most categories, with the exceptions of archaic myth and undiscovered myth.

This central area will form the basis of measuring the concept of thinking about God mythologically. The detail of this will be considered later, in the questionnaire design, but the essence of the measure is to distinguish between literal thinking that takes place on the outside of the myth map, and symbolic thinking. The latter recognises the broken nature of myth, that any image can represent multiple things, and it seeks to draw out whatever relevant truth or meaning it can find. This approach is in accord with Jung's view that fixed convictions can inhibit individuation because they are 'no longer based on their inner experience but on unreflecting belief' (Jung 1957a, p. 265). He therefore calls for 'Christian mythology… to be understood symbolically for once' (ibid.).

Part III Consciousness

5 Advancement of Consciousness

Consciousness is a term that can cover a wide range of topics such as its origin or cause, extent, function, composition, transformation, breakdown, and many more. Some of these subjects are easy to study scientifically – such as the reaction to stimuli, focus of attention, or the integration of information – but others are not so easy. The best-known example of the latter is the classic hard problem of consciousness – explaining the nature and origin of subjective experience or the sense of being (Velmans & Schneider[99] 2007, pp. 225-26). However, there are other areas with which a scientific approach also has difficulty. For example, evolutionary theory has difficulty in providing an adequate explanation of the origin of consciousness (Fetzer[100] 2002, p. xiv) and most contemporary philosophers find it hard to accept any teleological explanation. Therefore, consciousness has to be regarded as epiphenomenal, or an 'exaptation' in evolutionary biology terms (Polger & Flanagan[101] 2002, pp. 25-31). The origin and nature of consciousness is a mystery.

Jung claims that he is not particularly concerned with the essential nature of consciousness, regarding it as 'a riddle whose solution I do not know' (Jung 1926, p. 323). His formal definition of consciousness is 'relation of psychic contents to the ego' (Jung 1921a, p. 421). However, the implications of his theories are far more wide-ranging than his simple definition suggests. For example, he portrays consciousness as emerging from the unconscious, and equates an increase in consciousness with the incarnation or coming to consciousness of God (Jung 1963, p. 360). Jung also explores a metaphysical basis for consciousness in his theory

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[99] Max Velmans is a professor of psychology and Susan Schneider is an assistant professor of philosophy. They are co-editors of *The Blackwell Companion to Consciousness.*

[100] James Fetzer is a philosopher of science and the editor of a collection of essays on consciousness – *Consciousness Evolving.*

[101] Tom Polger and Owen Flanagan are professors of philosophy, and contributed to Fetzer's book.

of synchronicity and his concept of the psychoid (e.g. Pauli/Jung 2001, p. 113). Jung's use of the term *consciousness* is very wide-ranging.

The closest expression to Jung's concept that mainstream consciousness researchers use is 'awareness' – a word for which there are no agreed definitions. For example, one writer identifies four main types of awareness – basic objects, being in a psychological state, representations, and qualia (Cole[102] 2002, pp. 41-61). Another writer (Block[103] 1995) also identifies four categories, but they are different – as experience, access consciousness, monitoring consciousness, and being in possession of the concept of the self. Lancaster[104] (2004) sees the normal experience of awareness as involving two factors, the sense of self and the scope of contents that are accessible to the conscious mind. Barušs[105] (1986/97, pp. 67-8) identifies three main clusters of definition: as information-based processes that occur in humanlike organisms; as being aware of something; and as awareness without any content. Using the term 'consciousness' is insufficient of itself to identify what Jung meant by it in the Bernet letter and how it fits in to other theories.

In Neumann's work on myth (discussed in an earlier chapter) he also summarises Jung's writings on consciousness and shows how they relate to myth. The book is not just a summary of Jung's work, it also contains some of Neumann's own contributions to the field – such as the concept of centroversion, which is a development based on Jung's theories (Neumann 1954, p. 154). Neumann argues that, in Jung's early writings, he was still so much under the influence of Freud's father theory that his interpretations have to be corrected and recast in the light of his later discoveries. Although Jung does not adopt Neumann's terminology, he nevertheless expresses approval of his ideas. He provides a glowing foreword for the book,

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[102] David Cole is a professor of philosophy who also contributed to Fetzer's book.
[103] Ned Block is a professor of philosophy who specialises in consciousness.
[104] Brian Lancaster is the chair of the transpersonal section of the British Psychological Society, and co-founder of the Consciousness and Transpersonal Psychology Research Unit at Liverpool John Moores University.
[105] Imants Barušs is a lecturer in psychology who specialises in consciousness.

describes it as assembling his 'disjecta membra' (Jung 1954a, p. xiii) on consciousness, sees it making an important contribution in the field, and as placing the theory 'in the broad perspective of the evolution of human consciousness in general' (Jung 1911-12/1952, p. 6[106]).

Neumann maps out four main stages in the evolution of consciousness, which is reflected in the historical development of myth and the content of the mythic stories themselves. This begins with the initial stage of wholeness or unconsciousness as reflected in uroborus imagery (the tail-eating serpent). When the ego starts to emerge (stage two) there is initially ambivalence to the world and the unconscious (portrayed in terms of the great mother) which still dominates the ego. As the fully-fledged ego forms, there is discrimination of the opposites and the separation of the world parents (heaven and earth, consciousness and the unconscious) between which the ego stands. Neumann argues that myth portrays the emerging consciousness as masculine and more transient than feminine unconsciousness, within which different figures start to take shape (Neumann 1954, p.147). This is the mythological stage of the birth of the hero, which is also associated with the totem or god figure. In stage three, the ego takes on an internal heroic role, descending into the unconscious to overcome both the inner and outer collectives which, through the encounter of opposites, brings a new form of consciousness. This is portrayed in myth as fighting the dragon or killing the parents. In the progression towards final wholeness (stage four), and the return of uroboric symbolism, 'the hero's rescue of the captive corresponds to the discovery of a psychic world' (Neumann 1954, p. 204). The culminating myth is that of transformation rather than the hero. Through the hero killing the dragon and rescuing the captive or treasure,

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[106] There is an obvious inconsistency in dates here, because Jung apparently publishes his comment two years before Neumann publishes his book. Jung's comment appears in the introduction to CW5, *Symbols of Transformation,* which in most editions of the Collected Works is listed with the dates 1911-12/1952. Neumann's book was published in 1954. However, the copyright page in CW5 says 1956. This research uses the standard 1952 date in references to CW5, but this particular comment was almost certainly written for a 1956 publication.

both the matriarchal, eternal unconscious and the patriarchal, old-order state of consciousness are transformed to create a new form of consciousness.

Neumann's four stage process conveys the essence of Jung's advancement of consciousness. Jung also compares this process to Eastern practices, such as yoga, which he mentions in the Bernet letter. However, Jung elsewhere points out that Eastern practices are not the best model for development of the Western mind, because 'a European can only imitate it and what he acquires by this is of no real interest' (Jung 1938/1940b, p. xxx).

Advancement of Consciousness

Jung does not use the term 'advancement' very often, but he does refer to individuation and associates it with advancement. He defines individuation as 'the process by which individual beings are formed and differentiated… the development of the psychological individual as being distinct from the general, collective psychology' (Jung 1921a, p. 448). He drew this term from Nietzsche (p. 507), who in turn quotes Schopenhauer (Nietzsche 1886, p. 17), who in turn uses the prior term *principium individuationis* to denote the background of time and space which enables something to appear as different. Individuation, in Jung's terms, includes the development of an individual's unique conscious standpoint that is different from the general cultural attitude.

Although Jung does not offer a formal definition for the advancement of consciousness, one is implied at the end of his definition of individuation: 'Individuation is practically the same as the development of consciousness out of the original state of *identity* (q.v.). It is an extension of the sphere of consciousness, an enriching of conscious psychological life' (Jung 1921a, pp. 449-50). This suggests that the advancement of consciousness is closely related to individuation, and has three main aspects. The first is development of the unique individual out of the original state of *identity* – identity being defined as psychological conformity (p.

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441). The second aspect is an 'extension' of consciousness, or a *quantitative* increase –
though, an increase is not always advancement because too much one-sidedness can lead to
various problems for the individual (Jung 1921a, pp. 415-16; Jung 1952b, p. 415; Jung 1928b,
p. 175). This establishes the need for the third aspect, which is to 'enrich' conscious
psychological life – that is, to develop *qualitative* aspects of consciousness. Jung states that he
regards individuation and the development (advancement) of consciousness as practically the
same. This equivalence is reflected in many of his other writings so, for the purposes of this
research, we will treat them as effectively the same – though we need to bear in mind we are
discussing three main aspects of development.

Identity – Quantity – Quality

All three aspects of advancement are needed for individuation. The emergence out of the state
of identity involves the abolition of participation mystique, a term Jung adopted from Levy-
Bruhl which means a 'psychological connection with objects [where] the subject cannot
clearly distinguish himself from the object' (Jung 1921a, pp. 456-7). Jung's implication in the
Bernet letter is that within Protestantism there is a problem of participation mystique – the
identification of the individual with a projected god-image. This is not only an obstacle to the
advancement of consciousness but also, ironically, a state of self-alienation:

> Identification is an alienation of the subject from himself for the sake of the object, in
> which he is, so to speak, disguised. For example, identification with the father means, in
> practice, adopting the father's ways of behaving, as though the son were the same as the
> father and not a separate individuality. Identification differs from *imitation* in that it is
> an *unconscious* imitation.
>
> (Jung 1921a, p. 440)

This suggests that the Protestant belief in a metaphysical God combined with the practice of *imitatio dei* can potentially lead to alienation from a real experience of God, depending on how conscious the imitation is. This is due to a conflation of the god-image and God – a failure to recognise that the reality of God is shaped, at least in part, by one's own psyche. Therefore, to emerge out of the state of identity one has to increase self-knowledge – that is, increase the quantity of consciousness. In addition, the increase needs to be associated with a qualitative change. Jung contrasts individuation with individualism, there being a qualitative difference because individuation maintains a respectful relationship with pre-existing collective norms (Jung 1921a, p. 449).

Transformation

Another word that Jung frequently uses – alongside individuation – is the 'transformation' of consciousness. This term is often used in consciousness studies; However, it has a different meaning. None of main topics related to transformation in consciousness studies – altered states of consciousness (ASCs), meditation, and mystical experience (Velmans & Schneider 2007, pp. 141-172) – capture the essence of the change that Jung is seeking with his concept of individuation or advancement. ASCs and mystical experiences generally involve a diminution of the role or significance of the ego (Velmans & Schneide 2007, pp. 168-69). This can be a hindrance in Jung's model of individuation which requires 'a sturdy, responsible and ethical ego' (Edinger 1995, p. 28). The aim of Jung's model of transformation is to increase self-knowledge, to integrate the unconscious into ego-consciousness, and to facilitate a permanent change of attitude as a result. Also, the qualities involved in ASCs, mystical experiences, etc. are often feelings of harmony and unity, but – whilst such feelings may go along with individuation – there are other attributes that Jung assigns to the process, such as the development of the unique individual (Jung 1921a, p. 448). Jung studied and

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wrote about mystical techniques and other forms of spiritual exercise, such as those of Ignatius. He felt they only work up to a point because they impose certain fixed ideas on consciousness (Jung 1936b, p. 127) and therefore need a corrective to enable a genuine transformation of consciousness – though this may be due to Jung's misunderstanding of the exercises (Becker[107] 2001, p. 7).

Ego Development

There is a related form of transformation of consciousness that is studied outside the Jungian field – *ego development* – though this term is more associated with mainstream psychology than consciousness studies. There are several models of ego development, which have been related to psychological type in the form of Myers-Briggs typology as part of Ph.D. research by Angelina Bennet[108] (2010). She notes that the development stages of each model are 'fairly similar in nature; it is mainly the names given to each of the stages and the number of stages in each theory that differ' (p. 61). She sees the need to relate ego development to Myers-Briggs typology due to the latter's lack of 'vertical development [which] is concerned with changing how we see the world' (p. 32). She uses the Loevinger[109] model of ego development for her primary comparison, as this represents one of the earlier and more influential models. Bennet adapts the model to produce seven stages of development that are balanced in their portrayal of different psychological types.

As Bennet's model is focused on typological development, she has omitted discussion of the lowest levels of Loevinger's model, which appear to correspond with the state of initial unconsciousness, as described by Neumann. Bennet's descriptions of the first three levels of

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[107] Kenneth Becker is a Jesuit who has researched Jung's theories with the assistance of Aniela Jaffe and the C.G.Jung Institute in Zurich. His book examines Jung's lectures on the spiritual exercises of Ignatius.
[108] Angelina Bennet is a chartered occupational psychologist and chair of the *British Association of Psychological Type.*
[109] Jane Loevinger is a developmental psychologist.

ego development portray individuals who are one-sided, which therefore seem to correspond with the second of Neumann's four stages. However, they are sequential levels and cannot be skipped (pp. 60, 84) whereas their correspondences in Jung's theory are alternative states of relation to the persona. People at the *power and control* level 'are likely to show a false outward persona to mask their anxiety' (p. 67). People at the *social identification* level 'may suppress various aspects of their personality in order to fit in' (p. 69) which suggests some identification with the persona. At the *personal identity* level, people can operate 'in their comfort zone [but] have difficulty with difference' which implies one-sidedness within the context of a more effective persona. Bennet describes the fourth level, *determined action,* as being more introspective and involves the recognition, appreciation and valuing of difference. She notes that this level is a 'marked difference' (Bennet 2010, p. 73) and contrasts it with the 'one-sidedness of the previous levels' (p. 74). From her descriptions, it seems to correspond to a move from stage 2 to stage 3 in Neumann's summary. There is a more balanced attitude towards the opposites, and both are accessible to consciousness – though in terms of typology the implication is they remain separate psychological functions. The highest levels in Bennet's model, six and seven, correspond to stage four in Neumann's description. By this stage they have integrated parts of the personality that were previously cut-off, and there is 'a developing connection to the Self' (p. 79). The final level, *magician,* is the beginning of the transpersonal realm, and one that 'few people will ever reach' (p. 80).

There are various similarities but also some differences between the two models of advancement, particularly in how psychological type is integrated. For Bennet, one's 'actual psychological type does not change… it merely becomes more balanced' (p. 220) whereas for Jung, type does change (e.g. Jung 1959a, p. 435). Bennet portrays the transcendent function as a transitory function to be 'accessed' (p. 42), or as something that can 'come into play' (p. 80). Jung portrays it as a function that facilitates a permanent change in personality and

replaces a basic typological function as the dominant function of consciousness. At the highest level of the Loevinger/Bennet model, the individual 'may have easier access to and appreciation of the inferior function' (ibid.). In the Neumann/Jung model, the typological inferior function makes an appearance earlier in the process (stages two and three) and in the final stage it is superseded by a transformed consciousness. This raises the question, therefore, as to whether Myers-Briggs typology can help in measuring the advancement of consciousness. To establish an answer, we need to take a more in-depth look at the relationship between contemporary interpretations of typology and Jung's concept of advancement.

THE TYPE PROBLEM

From the mid-1930s onwards, C.G. Jung expressed serious concerns about the popular misinterpretation of his psychological type theory. In 1932, he acknowledged in a letter that *Psychological Types* was a 'difficult book' (Jung 1973, p. 89) and, in another letter three years later, he pointed out the most common misunderstanding to a visiting speaker at the Zurich Psychological Club, who was due to present a paper entitled 'Encounter with Jung':

> Chs. 2 and 5 [contain] the gravamen of the book, though most readers have not noticed this because they are first of all led into the temptation of classifying everything typologically, which in itself is a pretty sterile undertaking.
>
> (Jung 1973, p. 186)

In that letter, he went on to say that the failure to see the main point of the book was the reason for adding a foreword to the Argentine edition. It asked readers to look at chapters II, on Schiller, and chapter V, on Spitteler's *Prometheus and Epimetheus,* rather than chapter X, which contained a description of the types (Jung 1934, pp. xiv-xv). Adding this foreword to

the book did not mitigate Jung's concerns. In 1957, he was asked during a film interview about the 'misconceptions of [his] work among some writers in America' (Jung 1957b, p. 304). Jung's reply was 'God preserve me from my friends' (ibid.). He went on to reiterate a complaint he had made more than 20 years earlier in the Argentine foreword, that 'the classification of individuals means nothing, nothing at all' (p. 305).

At the heart of Jung's concern, and particularly his discussion in chapters II and V of *Psychological Types,* is the 'type problem'. This phrase (or one very similar) appears frequently in his writing, in eight out of the ten chapter headings in *Psychological Types,* and in the exchange of letters with Hans Schmid-Guisan[110] about typology. Jung described it in the 1935 letter to the visiting speaker as the 'problem of opposites' (Jung 1973, p. 186), though it could also be characterised as the problem of one-sidedness.

Jung's view of the type problem emerged from the theoretical conflicts that occurred in psychoanalysis (Shamdasani 2003, p. 57). That is, in the first instance Jung thought of the problem as being *theoretical difference,* which was also related to *interpersonal conflict*. In Jung's first paper on types, he uses the work of several predecessors – James, Ostwald, Worringer, Schiller, Nietzsche, Finck, and Gross – to illustrate the clash between what he calls extraversion and introversion. He concludes by observing that this difference explains the differences between the psychologies of Freud and Adler, and he signals that he is looking to construct a theoretical solution that would transcend these opposite views: 'the difficult task of creating a psychology which will be equally fair to both types must be reserved for the future' (Jung 1913, p. 509). The paper also suggests, even at this early stage of his thinking, that Jung is looking beyond the interpersonal to consider what *intrapersonal* impact typology has. He notes, when discussing Worringer, that 'my own view of the theory of libido… seeks

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[110] Hans Schmid-Guisan was a psychiatrist and Jung's colleague.

to maintain the balance between the two psychological opposites of extraversion and introversion' (p. 505) and he highlights Schiller's turning of the question of types into a discussion of 'psychological mechanisms which might be present in the same individual' (p. 506).

In 1914, Jung gives a lecture that suggests he is also considering the *developmental* aspect of the type problem. He compares Freud's reductive or causal standpoint, which offers explanations, with his own constructive method which is concerned with 'the process of becoming' (Jung 1914, p. 183). He then argues that the constructive method is still reductive to some extent because it still breaks things down into types. This is not merely to explain, it is 'to widen the basis on which the construction is to rest' (p. 187). He signals that he is going to develop a theory to explain how this 'becoming' happens, but he does not yet know what form it will take: 'Not until the constructive method has furnished us with a great many more experiences can we start building up a scientific theory concerning the psychological lines of development' (p. 193).

The Red Book also contains some thoughts about type and development, which Jung links to the *philosophical* aspect of the type problem, the nature of truth or existence: 'What a thinker does not think he believes does not exist, and what one who feels does not feel he believes does not exist' (Jung 2009, p. 248). When writing to Hans Schmid-Guisan, Jung initially couches the type problem in terms of the philosophical issue – the 'existence of two kinds of truth*'* (Jung/Schmid-Guisan 2013, p. 39) – and then discusses the interpersonal impact of their own type differences. Jung concludes the letter by writing 'I am leaving out here something we will have to discuss later' (p. 47). This may have been an indication that he was still thinking about other facets of the problem because Schmid-Guisan replies by pointing out his own developmental perspective: 'I have never viewed the problem of the types as the existence of two truths. . . . I have rather envisaged . . . the existence of two poles between

which psychic development occurs' (p. 48). In their subsequent correspondence, the two men explore different facets of the problem though without categorizing them as such. There are some indications of the intrapersonal solution that Jung is beginning to form, in his suggestion that 'the opposites should be evened out in the individual himself' (p. 78). Jung was also corresponding with Sabina Spielrein at this time, and the significance of this period is summarised by Bair:

> This interchange [with Spielrein] also caused certain refinements of the *Types* but was mostly centered around concepts that led to three essays concerning the individuation process and the transcendent function. The book and the three essays, four works in all, formed the 'core process' . . . that distinguishes his system of analytical psychology.
>
> (Bair 2003, p. 283)

Jung moves beyond the nature of the type problem to describing his constructive solution in these four works, including the essay *The Transcendent Function.* Although this was not published until 1957, it was part of the original and distinctive core of analytical psychology and became 'his root metaphor for psychological growth' (Miller[111] 2004, p. xi). By drawing links between the transcendent function and many other aspects of his theory (including alchemy), Jung gave it an unheralded 'central role . . . in the way he conceptualized the workings of psyche' (p. 76).

This central role for the transcendent function, which is very closely related to the symbol, can be seen in the book *Psychological Types*, and particularly in chapters II and V. He starts the book by observing that type differences create interpersonal conflicts, and in chapter I he also introduces the idea of intrapersonal problems – he notes that having a dominant function is at the expense of its opposite which is displaced or repressed (Jung 1921a, p. 37). He also

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[111] Jeffrey Miller is a psychologist.

flags up the solution he will discuss later by contrasting Faust with the case where 'feeling and thinking are united in a third and higher principle' (p. 58). In chapter II, during his discussion of Schiller, Jung describes another perspective on the type problem – *the differentiation of the individual*:

> Schiller concerns himself at the very outset with the question of the cause and origin of the separation of the two functions. With sure instinct he hits on the differentiation of the individual as the basic motive. 'It was culture itself that inflicted this wound upon modern humanity'. This one sentence shows Schiller's wide grasp of the problem.

(Jung 1921a, pp. 69-70)

This also brings in another facet that Jung goes on to discuss in chapter II: *the relationship between the individual and society*. He argues that type, which he had associated with the persona in one of his other essays (Jung 1916a, p. 297), serves a collective purpose. Societal pressure means that, from the perspective of the individual, having a type is a *bad* thing and there is a need for a solution:

> The . . . superior function is as detrimental to the individual as it is valuable to society. . . . His function is developed at the expense of his individuality. . . . The time will come when the division in the inner man must be abolished.

(Jung 1921a, pp. 72-74)

Jung's circumambulation of the type problem shows its multi-faceted nature. We have identified some that Jung discussed – theoretical, interpersonal, intrapersonal, developmental, philosophical, differentiation of the individual, the relationship between the individual and society – but there are still more that could be explored, such as religion, prejudice, culture, etc. The type problem, or the problem of opposites, is so fundamental to human nature that it has ramifications for every area of human activity.

The ingenuity of *Psychological Types* is that, although the type problem is multi-faceted, Jung resolves all of those perspectives with a single solution, which he summarises in his definition of a symbol (Jung 1921a, pp. 473-81). From the perspective of psychological functions, it is a cyclical process that involves holding the opposites in tension and paying attention to any symbols that appear. This allows the transcendent function to form in the unconscious, for the meaning of the symbol to unfold, and then for the new function to emerge and take over as the dominant function that governs consciousness. Although, from the perspective of analytical psychology, Jung's solution is best summed up using the word 'symbol', from a perspective based on psychological functions the word also creates some difficulties – as we can see by comparing his type theory with its contemporary interpretation.

MYERS-BRIGGS VS. JUNGIAN TYPOLOGY

In the community of users of Myers-Briggs typology, the theory is seen as being based heavily on, and closely faithful to, Jung's typological theory as described in *Psychological Types* (Saunders[112] 1991, p.59; Myers 1980, p.17). Development of the Myers-Briggs Type Indicator (MBTI) originated with Katharine Briggs, the mother of Isabel Briggs Myers, who was developing her own theory of personality in the 1920s until she read Jung's book. She then corresponded with Jung until 1936, primarily about a 'medical case history of a person Katharine knew' (Saunders 1991, p. 59). The mother and daughter both met Jung in 1937 in New York when he was en route home from the Terry lectures. However, when Isabel Briggs Myers adapted Jung's theory into a form that could be measured, she inadvertently took a Freudian approach. In her retrospective description of how the MBTI was developed, she writes that 'to be useful, a personality theory must portray *and explain* people as they are'

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[112] Frances Wright Saunders is a biographer and historian.

(Myers 1980, p. 18, original emphasis). Jung had already considered the role of explanation in the early stages of the development of his theory, where he argued that using type only to explain was characteristic of Freud's reductive approach. His own approach focuses on the constructive process of becoming (Jung 1914, p. 183).

There are various differences that arise because Myers-Briggs theory is based on psychological functions – though the term 'process' is used more often than function (e.g. Myers 1980). If one looks at *Psychological Types* from a functional perspective, which discusses four functions and the symbol, then the symbol can lose its importance. Just as 'what a thinker does not think he believes does not exist', so too the symbol has no meaningful existence or reality in Myers-Briggs theory because it does not appear to be a psychological function. However, this is not correct – because wrapped up in the symbol there is the transcendent function, which is not only a psychological function but one that, in the Jungian process of individuation, can become the dominant function. When Jung defines the transcendent function in *Psychological Types* (Jung 1921a, p. 482), he refers the reader to his definition of the symbol. There, he describes how the symbol can transform consciousness by integrating contents from the unconscious: '[The transcendent function] becomes a new content that governs the whole attitude . . . 'function' being here understood not as a basic function but as a complex function made up of other functions' (p. 480).

Although in the original German Jung uses the same word for both typological functions and the transcendent function ('Funktion', Jung 1921b), they are nevertheless very different in nature. The typological functions are a basic part of everyone's psyche, but the transcendent function emerges only through the dynamic interplay of opposites. Nevertheless, they are all related and play key roles in Jung's process of individuation, because the transcendent function takes the place of a basic typological function as the dominant function.

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Isabel Briggs Myers recognised and highlighted some of her differences with Jung, some of which may seem minor, but most stem from (and reinforce) the omission of the transcendent function. She recognised the one-sidedness of Jung's eight psychological types, and the fact that most people are 'well-balanced' (Myers 1980, p. 17), but she attributed this to 'overlooked implications of Jung's theory' (p. 18). In her view, Jung was 'ignoring the auxiliary' (p. 17), which was the solution to the type problem (of balance). Myers saw Jung as failing to recognise the balancing principle of the auxiliary function, along with 'almost all of his followers except van der Hoop' (Myers 1980, p.19). However, Jung had considered this at a very early stage, noting that Gross' types are dependent upon the strength of the 'secondary function' (Jung 1913, p. 508). By the time he wrote *Psychological Types,* he had come to the conclusion that the type problem could not be solved by other functions providing support to the dominant:

> The one must lend itself as an auxiliary to the other, yet the opposition between them is so great that a bridge is needed. This bridge is already given us in creative fantasy. It is not born of either, for it is the mother of both . . . that final goal which unites the opposites.

(Jung 1921a, p. 59)

For Isabel Briggs Myers, balance can be achieved within the individual by having an auxiliary with 'adequate but by no means equal development' (p. 174). This means that 'the dominant process needs to be supplemented by a second process, the auxiliary, which can deal helpfully with the areas that the dominant process necessarily neglects' (Myers 1980, p. 174)'. She therefore expands Jung's 8 types to 16, by completing the list of dominant functions and typical auxiliary combinations that he began at the end of Chapter X. Jung didn't finish that list because, as is evident from elsewhere in the book, he didn't see it as important – he didn't see it as a solution to the type problem. On the surface, this increase to 16 might seem a minor

change – especially as Jung acknowledged that 'one could increase this number at will . . . which would not be impossible empirically' (Jung 1923, p. 523). However, the focus on 16 types reflects a fundamentally different approach to the type problem. Jung viewed any form of type as a problem because it is one-sided, for example it 'limits a person's judgment' (Jung 1963, p. 233). For Isabel Briggs Myers, a dominant-auxiliary combination is balanced and therefore a virtue.

Isabel Briggs Myers believed she was going 'beyond the point where Jung was content to stop' (Myers 1980, p. 24) but Jung had actually gone much further than she had. Whereas Myers was describing people as they are, and saw no reason to replace the dominant typological function with anything else, Jung used type to show people their one-sidedness (Jung 1973, p. 186) and was focused on what they could become. Whereas Myers viewed development as becoming a better person within one's preferences, with the goal of developing a good hierarchy for the basic four functions, Jung's goal was to develop a new function – the transcendent function – to replace the opposite functions as the dominant: 'in their stead a new function appears' (Jung 1921a, p. 271). Whereas Myers believed that everyone is in one of two groups and stays there because type preferences are inborn (Myers 1980, p.193), for Jung there was also 'a third group . . . the extensive middle group' (Jung 1923, pp. 515-16) and 'the function type is subject to all manner of changes in the course of life' (Jung 1973, p. 230). Myers saw Jung's comment about there being three groups because Jung sent the notes from this seminar to Briggs in 1937 (Saunders 1991, p. 59) and Myers used a quote from them about marriage in a later work (Myers 1980, p. 123). However, she dismissed it as referring to people whose development was 'primitive' (Myers 1977, p.18). For Jung, however, it also included those who were 'very well balanced' (Jung 1957b, pp. 305). These and other differences between the two versions of the theory stem from the failure to understand the multi-faceted nature of the type problem and the functional aspect of

Jung's solution. The bottom line is that Myers viewed exercising preference as a good thing, but Jung advocated *refraining* from exercising preference, in order to overcome the inner division (Jung 1921a, pp. 479-80). Isabel Briggs Myers accused Jung of overlooking an aspect of his own theory – the balancing role of the auxiliary – but it was she who overlooked the more wide-ranging role of the transcendent function. This has been a long-standing criticism of psychological type instruments: they are 'contrary to the basic Jungian idea that opposites can be transcended' (Samuels[113] 1985, p. 85).

The differences between the theories have implications for the concept of advancement or development. In Myers-Briggs typology, the focus is on the four preferences, eight function attitudes, and overall type 'patterns'. For example, the MBTI product range has expanded to include MBTI step II and step III questionnaires, which provide a more detailed explanation of the psychological *traits* associated with the basic four preferences. Exercises have been produced to help people develop skills in the eight function-attitudes, based on the assumption that skill development in typological functions is equated with individuation (Hartzler & Hartzler[114] 1999). And Jung's eight cognitive processes have been integrated with systems theory to help individuals find their 'best-fit' type that lies at the heart of the 'true self' (Berens[115] 1999, pp. 6-9). In Myers-Briggs theory, the goal of development is 'superior skill in one [function], supplemented by a helpful but not competitive skill in the other' (Myers 1980, p.174). Myers briefly acknowledged that it was possible for people to transcend their type (p.168) but in a videotaped discussion she thought it was beyond most people, and didn't believe it should be an aspiration (Myers 1977, pp. 21-22). If we view individuation as consisting of two movements (Stein 2006), then Isabel Briggs Myers sets an anchor for

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[113] Andrew Samuels is a professor of analytical psychology.
[114] Gary and Margaret Hartzler are authors and trainers in the use of the Myers-Briggs Type Indicator.
[115] Linda Berens is a popular author of commercial materials – including books and psychometrics – related to Myers-Briggs typology.

personal development that keeps the individual primarily within the first movement. The dominant function remains the same throughout life, and the other functions are developed in service of that dominant (Bayne[116] 2004, pp. 34, 40).

This restriction on development, or transformation, does not occur in Jungian analysis. For Jungian analysts, individuation is in the background of all analytic work even if it doesn't form an overt part of an individual's particular therapy. The role of typology is optional and its use varies according to individual training or practice. For some analysts, it plays little or no role. For others, it is of relatively minor assistance – used, for example, to help analysts or clients understand their own prejudices or explain relationship difficulties. However, for others typology becomes one of the primary *contents* of the process of individuation. That is, clinical practice involves the differentiation and integration of typological functions in the client's psyche. Even when Myers-Briggs typology is used, the transcendent function is not overlooked because of the role of the symbol. This is a means of transformation that is closely aligned with the transcendent function – by discussing the former one is making use of the latter. Also, there are examples in therapeutic and academic Jungian work where special attention is paid to the transcendent function. There have been conferences run by the IAAP and the Journal of Analytical Psychology specifically on the topic (1992 and 2009, respectively). Also, Miller (2004) has shown that the transcendent function plays a key role is most of Jung's theories.

There have been some attempts to reconcile the theoretical schism between the Jungian and Myers-Briggs developments in typology and/or bring in the transcendent function (e.g.

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[116] Rowan Bayne is professor at the University of East London. He specialises in personality theory and both uses the Myers-Briggs Type Indicator and has written several books evaluating or examining Myers-Briggs typology.

Beebe[117] 2006, Spoto[118] 1995, Johnston[119] 2011, Groesbeck[120] 1978, von Franz 1971/1986, and Meier[121] 1995). There has also been a recent book, based on PhD research, that highlights the overt and covert messages of Jung's *Psychological Types* – describing it as 'a cryptic work hiding some of Jung's most radical ideas' (Crellin[122] 2014, loc: 189). However, the four functions remain the dominant concepts in typology. For example, Beebe's model maps eight archetypes onto the eight function-attitudes, and his 2006 paper mentions the transcendent function only once, as a consequence of making the inferior function unconscious. Spoto's and Johnston's books give a little more prominence to the transcendent function. Johnston begins with a chapter on individuation and concludes with a chapter on becoming whole, both of which include some discussion of the transcendent function. However, in the bulk of the intervening chapters, he describes his own interpretation of typology based on the eight function-attitudes and how they combine. That is, he tacitly adopts Isabel Briggs Myers' use of the auxiliary function as the balancing solution to the type problem. Spoto adheres more closely to a classical version of Jung's theory, putting less emphasis on the dynamics of each type and more on the process of individuation and setting typology in the wider context of Jung's other theories.

There are some Jungian areas of agreement with Isabel Briggs Myers' model of development. For example, as summarised in Meier's chapter on the 'compass' (Meier 1995, p. 57), typological development typically starts with differentiation of the dominant function, goes through two auxiliaries, and ends with the inferior function. As Beebe points out (2006, p. 141), von Franz clarifies the relation of the inferior to Jung's transcendent function:

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[117] John Beebe is a Jungian analyst who has developed a model to integrate typological functions with archetypes.

[118] Angelo Spoto is a psychotherapist with a particular interest in Jungian theory and Myers-Briggs typology.

[119] James Graham Johnston is the author of a commercial alternative to the Myers-Briggs Type Indicator.

[120] Jess Groesbeck was a psychiatrist and Jungian analyst.

[121] Carl Alfred Meier was a psychiatrist and Jungian analyst.

[122] Clare Crellin is a clinical psychologist and psychoanalyst. Her book is based on a PhD completed under the supervision of Andrew Samuels at the University of Essex.

> When the fourth function comes up … the whole [conscious] structure collapses….
> This, then, produces a stage … where everything is neither thinking nor feeling nor
> sensation nor intuition. Something new comes up, namely a completely different and
> new attitude towards life in which one uses all and none of the functions at the same
> time.
>
> (von Franz, 1971/1986, pp. 27-28)

There are also other (non-typological) contents of the unconscious that need to be integrated –
most attention tends to be given to archetypes. Von Franz links the appearance of the inferior
function in dreams to the shadow, anima/us, and the Self, suggesting this gives them 'a certain
characteristic quality' (von Franz 1971/1986, p.73). Meier also suggests that typology has a
role in 'shaping the archetypal figures' (Meier 1995, p. 81). Beebe goes further and has
developed a model in which particular archetypal figures carry each of the eight function-
attitudes in a hierarchy. This combines the process of integrating typological functions with
assimilation of the unconscious because in 'integrating one's typology, the issues associated
with each archetypal complex must be faced, exactly as in classical individuation' (Beebe
2006, p. 144). Having different views on how typological and archetypal contents are related
has implications for the process of individuation: it shapes what the analyst pays attention to.
Individuation forms the foundation not only for analytic work but for how typological theory
is interpreted – as an aid to the process of transformation.

Nevertheless, despite the work of these authors, there has been minimal impact on popular
awareness of the transcendent function. It is typology that provides the foundation of Myers-
Briggs theory (Myers 1980). For its users, individuation is just one application amongst many,
such as improving relationships, conflict resolution, choosing a career, increasing
performance at work, etc. Whereas for Jungian analysts individuation is the foundation and
typology is an optional extra, for Myers-Briggs practitioners typological functions provide the

foundation and individuation is the optional extra. For the most part there is nothing untoward about this state of affairs, but the Myers-Briggs emphasis on functions does lead to an inadvertent reframing of individuation. In Myers-Briggs theory, type development consists mostly of differentiation of the functions, with a limited degree of integration of the unconscious. Initially, the emphasis is placed on skilful and complementary use of two functions. Thereafter, there are some similarities with the sequential process defined by von Franz and others because 'development of the dominant and auxiliary … reaches a kind of ceiling and then more attention is paid to the third and fourth functions' (Bayne 2004, p. 34). However, development stops there (Myers 1980, p. 168) or if further development is possible then there is no need for it (Myers 1977, p. 21). The unconscious and the archetype of the shadow feature in Myers-Briggs theory, but they play mainly a reductive role – explaining the personality but not transforming it. This can be illustrated using the analogy of a building site. Jungian individuation can be compared to excavation of the sewers, to expose potential problems before (or as) the foundations are laid to enable construction of a new building. In the Myers-Briggs version of the encounter with the unconscious, the lid is lifted on the sewer, the immediately visible part of the tunnel inspected, but then the lid is replaced – it is more of a 'peek' at the unconscious than an encounter with it. Although this provides some understanding of what lies beneath, the degree of change that takes place above and below the surface is limited. In one sense that is a good thing, because it limits exposure to the dangers of the unconscious. However, if those limits are too rigid they can restrict rather than encourage the natural process of individuation. For this audience, there needs to be a way of steering between these two extremes: one that involves delving deep into the realms of the unconscious, which requires analytic or psychotherapeutic training; the other that steers people away from transformation, encouraging them to remain relatively one-sided and

unconscious. Also, there is very little work that examines how development progresses once the typological opposites have been transcended.

HOW DID THEY DIVERGE?

So how has a 'slightly modified' (Myers 1980, p. xix) and superficially similar version of Jung's theory become so fundamentally different? There may be several factors, some of which are the responsibility of the readers due to holding the mistaken belief that Jung 'was not particularly interested in the aspects of psychological type displayed by ordinary healthy people' (Myers 1995, p. xii). This view is contradicted by many of Jung's works and his stated interest in normality. Another factor may be that, as Jung has pointed out, in the normal population there is a tendency to focus on conscious opposites rather than the opposition between consciousness and the unconscious (Myers 2013a, p. 653). The four basic functions are concerned primarily with the former, and the transcendent function with the latter. However, some responsibility for the divergence must also fall on Jung and his close associates as a result of – for want of a better expression – the mismanagement of Jung's public relations. Three things in particular stand out that Jung could have done differently and may have addressed the misunderstandings of his type theory that have arisen.

The first is the content of Jung's foundational works and the timing of their publication. When Jung wrote *Psychological Types,* he did so in the context of having worked on three essays that explained what was distinctive about analytical psychology. All three essays discuss the transcendent function but only one was published immediately. The second was published ten years later in the first edition of *Two Essays* and the last, which provides the most extensive definition of the transcendent function, was not published until the late 1950s. Therefore, although at the time of publishing *Psychological Types* Jung had articulated what the

transcendent function was, he had not communicated all that material to the reading public. *Psychological Types* built on the three essays by including additional information but without repeating their content. He did not include an extensive definition of the transcendent function but subsumed it into his definition of the symbol. Jung acknowledged that *Psychological Types* was a hard book, but he did not revise it or produce any material that made it easier for the average reader to understand the gravamen that they had missed.

The second contributing factor is that, for the last 30 years of his life, Jung used language that was easily misconstrued by people who looked at isolated aspects of his theories. For example, although he was greatly concerned by readers overlooking his discussion of the transcendent function in *Psychological Types,* he referred to his psychological type theory as containing four functions, including in published work on types such as *Modern Man in Search of a Soul* (Jung 1933a) and *Man and His Symbols* (Jung 1964). When the discussion of four functions is placed in the context of a particular application – for example, to understand the nature of a differentiated or one-sided patient – then it makes sense. Also, if it is related to the symbol which plays a central role in the process of transformation, then typology will not be mistaken for a fixed part of the individual's identity. However, when type theory is looked at in isolation, out of the context of the remainder of analytical psychology, it is too easy to miss the crucial role of the symbol and transcendent function, and to see it reductively, purely as an explanation, thereby losing the central, constructive message about 'becoming'.

Also, although there are occasions when Jung stresses the mutability of type and its unsuitability for use as classification – such as his letters to Hanhart (Jung 1976, pp. 346-350) or Fange (pp. 550-552) – there are also other occasions when Jung himself uses the word 'classification'. He uses it in a paper he sends to Katharine Briggs in 1937, and in his last work on type in *Man and His Symbols: '*There is nothing dogmatic about [the types], but their basic nature recommends them as suitable criteria for a classification' (Jung 1964, pp. 49-50).

It is possible to put forward an argument that justifies both Jung's use of type to classify and his criticism of readers' use of classification. He probably saw the latter as reductive (using type classification only to explain) whereas his own use of classification was more constructive, laying the foundation of something new (such as a transformation in a relationship). Nevertheless, given that Jung was very concerned by the popular use of typology for classification and that many readers missed his constructive solution to the type problem, it is surprising that he was not more careful with his language. He also had many opportunities to clarify these concerns further in his publications and discussion of types, but he did not.

The third thing that stands out is a small but significant incident in 1950. At the time, Jung had serious reservations about the work of Isabel Briggs Myers and refused a request to meet her. However, he apparently wrote to her expressing a contrary view, supporting her work. This letter was highly misleading and encouraged her down a path of development to which Jung had strong objections.

JUNG'S MISLEADING LETTER

To explore this incident fully, we need to look at the background, which probably begins with the meeting in 1937 between Jung, Katharine Briggs, and Isabel Briggs Myers. It seems that Myers was preoccupied with other things at the time because her recollection of the meeting was 'I didn't listen' (Saunders 1991, p. 100). Following this meeting, Jung sent Katharine Briggs copies of his 1923 seminar notes and there was no further correspondence between them.

In 1950, Myers sent Jung a three-page description of her instrument with a copy of the materials she was developing (later to become the MBTI). She asked to meet Jung during her

visit to Switzerland and, after a short holding letter from his secretary saying he was ill, received the following reply that was typewritten and signed by Jung:

> Thank you very much for kindly sending me your interesting questionnaire and the equally interesting description of your results. As you have given the matter a great deal of thought I think you have done so much in this direction that I'm hardly capable of criticising it or even knowing it better. For quite a long time I haven't done any work along that line at all, because other things have taken the foreground of my interests. However, I should say that for any future development of the Type-Theory your Type-Indicator will prove to be of great help.
>
> I should have liked very much to see you, but I'm only just recovering from a tedious illness and shall leave presently for a long and much-needed holiday from which I shall not return until the fall.
>
> Hoping you have a nice time in Europe, I remain,
>
> yours sincerely,
>
> C.G. Jung
>
> (Saunders 1991, p. 121 & photoplate)

On the face of it, Jung was endorsing Myers' interpretation of psychological type theory and the work she was doing – which contradicts the views he expressed in the years before and after, as discussed above. However, rather than letting Myers know what concerns Jung had, this letter seemed to be an encouragement. It may even have played a role in the subsequent commercial success of the MBTI, which is presented as adhering closely to Jung's theory (Consulting Psychologists Press[123] 2015).

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[123] CPP are the publishers of the Myers-Briggs Type Indicator

The reason for the contradiction is that Marie-Jeanne Schmid wrote the above letter, not Jung. When she received Myers' letter asking to visit Jung, he was ill with gastric flu – so she initially sent a holding reply (Saunders 1991, p. 120). When Jung recovered, Schmid consulted him about Myers' request but he rejected it. She therefore composed a second reply and bent the truth somewhat in order to be diplomatic. Jung signed the letter without giving it any further thought. There are six pieces of evidence to support this view of events.

Firstly, Jung gave Schmid a great deal of autonomy in replying to his correspondence, so that he could concentrate on his writing and research interests. At the time of receiving Myers' letter, Schmid had been Jung's secretary for 18 years (Jung 1973, p. 539n). The nature of their working relationship has been summarised by Deidre Bair in her biography of Jung – 'he signed every letter and approved every typescript without more than a glance' (Bair 2003, p. 410).

Secondly, the style and content of the letter to Isabel Briggs Myers suggests it was composed by Schmid rather than Jung. Jung's writing style was direct – agreeing with the theoretical content of correspondence, criticizing it, or providing advice as he saw fit. This can be seen in a review of his published letters around 1950 (Jung 1973, pp. 542-69). Schmid's style was more diplomatic, with Victor White describing her as 'nobly acting as Dr. Jung's shock-absorber' (Jung/White 2007, p. 77). Also, Schmid would be unable to compose letters engaging in a theoretical debate. The style of the letter to Myers is diplomatic and does not engage with the theoretical content of her materials. This suggests Schmid composed the letter based on a conversation with Jung, rather than taking a dictated reply.

Thirdly, the timings of Jung's recovery and the letters show clearly that there was some bending of the truth taking place. The letter was dated 1 July, and one of the reasons for rejecting Myers' request was that Jung was 'only just recovering' from an illness – but he had

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already recovered. Jung had gastric flu during the week commencing 12 June 1950 and on 20 June he says in a handwritten letter to Wolfgang Pauli that 'I am feeling better now' (Pauli/Jung 2001, p. 45). Schmid also mentions Jung's health in a letter of her own, on 24 June, though is more cautious in saying that Jung had 'almost quite recovered [but] still feels rather tired' (Jung/White 2007, p. 156). On 26 June, Jung sends Pauli another letter in which he refers to having been ill in the past tense (Pauli/Jung 2001, p. 47). On the same day, he sends a detailed reply to another correspondent, Chang Chung-yuan, which makes no mention of his illness (Jung 1973, pp. 559-60). This suggests that Jung had probably recovered by around 20 June, but at the latest by 26 June. The letter to Myers was sent five days after the latter date, on Saturday 1 July, and describes Jung as 'only just recovering'.

Fourthly, Schmid would have known that Jung often used his health as an excuse to avoid meeting new people: 'In the last two decades of his life, . . . using his two infarcts as his excuse, he curtailed public appearances and refused to meet most new people . . . [as] he wanted to free as much time as possible for research and writing' (Bair 2003, p. 528).

Fifthly, there was another bending of the truth in the letter when it used the excuse that Jung was going on a long holiday. This 'holiday' was actually Jung spending much of July and August at Bollingen (20 miles from the family home) where he spent as much time as possible (Bair 2003, p.768, n.36). Although this was Jung's retreat, it was not a holiday that removed him from work. For example, Jung wrote a couple of letters in mid-July 1950 that show he was still reading and thinking about correspondence (Jung 1973, pp. 561-62). Also, being at Bollingen did not prevent him from receiving new visitors. For example, Maud Oakes[124] visited Jung twice at Bollingen, in 1951 and 1957 (Oakes 1987, pp.11-26). Also,

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[124] Maud Oakes was an artist and anthropologist who was introduced to Jung's work through undergoing analysis.

Victor White had no difficulty arranging to visit Jung during this period (Jung/White 2007, p. 156).

Finally, the claim that Jung could not reply because he did not have the requisite knowledge does not ring true. At the same time that Jung received the materials from Isabel Briggs Myers, he also received material on Taoism from Chang Chung-yuan, who was a professor of Chinese Classics in New York. When Jung replied to him on 26 June, he offered a detailed, constructive criticism of his Taoism materials. This shows that, even if we accept that Jung believed Myers now had superior knowledge of typology to his (which is doubtful), the level of his correspondent's knowledge was not an obstacle to Jung expressing his views if he was interested in the topic. And Jung's interest in type theory had not waned because it was a constant starting point in his writing (Bair 2003, p. 376) and he included it as one of the topics in his last work, his chapter in *Man and His Symbols* (Jung 1964, pp. 45-56).

The one part of the letter that does ring true is the suggestion that other things had taken the foreground of Jung's interests. His research and writing would have continued to be a priority. He was in the process of revising some important works and writing others, such as *Aion,* and he was completing the carved stone to celebrate his 75th birthday on 26 July (Oakes 1987, p. 15). Also, it is only with hindsight that we can now see the cultural significance of Myers-Briggs theory, but at the time Jung may have thought it was a misunderstanding that would have had very little impact on or relevance to his work.

Nevertheless, as a result of Schmid's 'diplomacy', the letter is misleading and has contributed to the divergence of Jungian and Myers-Briggs theory. It compounded the failure of Isabel Briggs Myers to recognise the 'gravamen' of Jung's work by hiding his concerns and giving her the impression that he fully endorsed what she was doing. Isabel Briggs Myers could do nothing other than take the 1950 letter in good faith and, although she was disappointed in not

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being able to meet Jung (Saunders 1991, p. 121), the supportive tone encouraged her and her mother to continue along the same lines of development. However, it also denied Myers the opportunity to hear about the importance of the transcendent function, and for Jung to challenge some of the other views that she had formed.

6 Restoring the transcendent function to typology

Development of the transcendent function is not something that is confined to the practice room of the Jungian analyst. Wheelwright[125] once suggested that 'the most important thing about types is detyping' (Wheelwright 1982, p. 54). He was not referring to what happens in Jungian analysis but to 'what one would hesitantly call normality' (p. 55) – the 'individuation [or] growth' (p. 57) that takes place in non-clinical settings. The topic of normality in analytical psychology is a complex one (Myers 2013a), but in relation to typology it raises two key questions. Firstly, to what extent should the process of Jungian individuation be promoted to the wider population in extra-clinical settings? There is a wide spectrum of engagement with the unconscious in society, from Jungian analysis at one end to those who are one-sided and have no interest or awareness of it at the other. In between, there are contexts such as workplace performance appraisals, training courses, or self-development books and websites that all aim to increase self-awareness. They use a wide range of techniques such as feedback from others, psychometrics (including the Myers-Briggs Type Indicator, or MBTI), and concepts such as the Johari Window, which is a simple model to make people think about the hidden aspects of their personality. Many of these are concerned with raising awareness of the personal unconscious – which makes one 'less individually unique, and more collective' (Jung 1928b, p. 148). However, some go deeper and promote awareness of dreams and archetypes. Jung's position towards the end of his life was that the promotion of individuation to these wider audiences was a moral imperative (Jung 1945/1948b, pp. 253-54). He saw the need for contemporary culture to absorb into 'its general philosophy … the fundamental insight that psychic life has two poles' (Jung 1963, p. 193).

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[125] Joseph Wheelwright was a Jungian analyst who played a significant role in establishing a training programme for analysts in the United States.

The second question is whether Myers-Briggs typology can play a role in promoting greater integration of the unconscious or, for the purposes of this research, in measuring it. Intuitively, it ought to – because it already makes a contribution by increasing awareness, of self and others, in a wide range of applications such as career counselling, team building, or developing sales skills. It also provides an introduction to some important Jungian concepts, such as opposites or the shadow. However, it only goes so far – for example, solving the type problem of balance through a well-developed auxiliary rather than the transcendent function. Also, Myers-Briggs theory encourages people to identify with one type throughout life, which encourages a degree of one-sidedness and can create other problems, for example:

> Identifying with the superior function … can be a problem for any of the types … and is awfully easy to do, especially when the function is working well. What happens is that the I, the ego, tends to become synonymous with the superior function, when in fact the superior function should be in the service of the ego.

<div align="right">(Wheelwright 1982, pp. 75-6)</div>

Also, Jung pointed out that identifying with a type can result in 'true individuality fall[ing] into the unconscious', although he also viewed this as a 'necessary transitional stage on the way to individuation' (Jung 1921a, p. 440). In the Myers-Briggs version of typology, identifying with a type is not a transitional stage but part of the destination, and individuation (more commonly referred to as personal or type development) is viewed as taking place within the constraints of one's immutable psychological type. Furthermore, Myers-Briggs theory does not hold the distinction between ego and type described above by Wheelwright, nor is there any mention of 'detyping'. Some Myers-Briggs literature does discuss the ego/Self axis, but it gives typological functions the central role, such that 'our dominant/inferior spine

[is] the core axis of our personality' (Corlett & Millner[126] 1993, p. 235). Yet, Myers-Briggs typology ought to be able to play a much more constructive role in helping people to become who they truly are *as individuals.* Wheelwright suggested that 'Jung's idea of individuation is closely related to types' (Wheelwright 1982, p. 57). This can be seen in the content of the book *Psychological Types* which, for its first English version, had the subtitle 'The Psychology of Individuation' (Jung 1921a, p. v).

Clarifying the definition of individuation is central to any attempt to measure it using typological concepts. When Jung laid down some concise definitions for the ideas he had developed, he acknowledged the tension between the amorphous nature of psychological concepts and the misunderstandings that can arise due to imprecision of definition (Jung 1921a, pp. 408-9). Jungian and post-Jungian descriptions of individuation have often been amorphous, sometimes to the point of appearing contradictory. For example, Jung defined individuation as a process (p. 448) but also treated it as a goal (Jung 1963, p. 222). He defined individuation as differentiation (Jung 1921a, p. 448) but also said differentiation can lead to excessive one-sidedness (p. 207). It can be viewed as an ongoing integration/deintegration that begins in early childhood (Fordham[127] 1985) or as a task primarily of midlife and beyond (Stein 2006). And so on. Jung's preference, even at a late stage in his life, was to avoid closed, rigid definitions because of the 'experimental, empirical, hypothetical nature of his work' (de Angulo[128] 1977, p. 213). Nevertheless, he constructed his set of definitions in order to meet a particular need – so that 'everyone is in a position to see what in fact he means' (Jung 1921a, p. 409). We need to examine it for a different need – whether Myers-Briggs

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[126] Eleanor Corlett and Nancy Millner are trainers and counsellors who use typology in their practice. They produced a popular book interpreting Jung's theory of midlife development in typological terms.

[127] Michael Fordham was a Jungian analyst, one of the editors of Jung's Collected Works, and one of the founders of the Society of Analytical Psychology.

[128] Ximena de Angulo was the daughter of Cary F. Baynes, a friend of Jung. At Baynes' request, she interviewed Jung in 1952 about Ira Progoff's doctoral thesis. She sent the interview to Progoff and a copy was placed in the archives of the Bollingen Foundation.

typology can help us measure the concept being examined in the research. However, that presents a number of significant challenges.

CHALLENGES

One of the recognised dangers of pursuing individuation is the danger of 'bringing unconscious contents to the surface [which] artificially create a condition that bears the closest resemblance to a psychosis' (Jung 1928a, p. 153). However, this concern refers mainly to *forcing* unconscious contents to the surface, not with the natural process of individuation that takes place outside of therapy. The challenge is to shift the emphasis from identifying with a one-sided type, which can be an obstacle to individuation, to gently encouraging the natural process of development that transcends type, integrates the opposites, and results in the emergence of the unique individual.

Another challenge might be a Jungian objection to the use of measurement, statistics and classification – topics that Jung mentioned when he declined to comment on some typological research (Jung 1976, pp. 550-52). However, none of these were showstoppers for him. As has already been mentioned, he took a keen interest in Rhine's experiments and conducted his own. He even produced his own self-report questionnaires, such as his assessment of whether people would consult a doctor or clergy when experiencing spiritual distress (Jung 1932b, pp. 334-35). Jung's concerns were not about measurement, statistics and classification per se but what he viewed as potential misuses that might inhibit the development of the unique individual. Sometimes, statistics could become an obstacle to self-knowledge by removing individual features (Jung 1957a, pp. 249-51). Also, classification was sometimes being used in too simplistic a manner (Jung 1934, p. xiv). However, his main concern was that the transformative aspect of individuation was being overlooked. It was most probably this aspect

that led to his conclusion, date unknown, that typology was a theory that lay people could not use correctly (Shamdasani 2003, p. 87). Although Jung saw a place for individuation outside the therapy room, he focused his attention away from typology because in popular usage it had come to misrepresent the task.

There is also a challenge in making the Jungian concept of individuation relevant for use outside the clinical setting. This is apparent from a memorandum that Jung sent to UNESCO, which was his contribution to what was colloquially known as the *Tensions Project* (UNESCO 1948, p. 6). Jung argues that his psychotherapeutic methodology is also 'a technique for changing the mental attitude' (Jung 1948a, p. 606). He goes on to describe in mostly layman's language how individuation could be promoted in a non-clinical context. Early on, he points out one of the main differences between those undergoing treatment for neurosis/psychosis and other people:

> The mental and moral conflicts of normal people [are of] a somewhat different kind: the conflicting opposites are both conscious…. [However,] no attempt to change mental attitudes can be permanently successful without first establishing a new contact with the unconscious.

(Jung 1948a, pp. 606-7)

The introduction of the concept of conscious opposites adds an extra dimension to the notion of individuation, alongside the opposites of consciousness and the unconscious. Whilst researching the transcendent function, Miller found examples of Jung discussing opposites 'both of which are fully available to the conscious mind' (2004, p. 40). In these cases, Jung was referring not only to an archetype creating a conscious conflict but also to a struggle between moral values. Miller concludes that 'the transcendent function … must include opposites in consciousness as well as those in both consciousness and the unconscious' (p. 41). Also, such conflicts may not always be binary opposites but may reflect a multiplicity, or

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an absence of something (pp. 42ff). Therefore, along the wide spectrum of people where individuation could take place, there may be many different types of 'opposite' involved. At the Jungian analysis end, the focus is on consciousness and the unconscious. At the other end, where there is little or no awareness of the unconscious, the focus of development might be on competing moral values or perhaps the absence of morality. However, as people move along the spectrum towards a greater self-awareness, the level of engagement with the unconscious will naturally increase.

This raises another difficulty, which Jung describes in his UNESCO memorandum: there needs to be a strong motivation. Although mental illness can be one driver of individuation, it is not the only one – it can also be pursued when there is a degree of moral, intellectual, and educational development. In Jung's view, this puts it beyond about 50% of the normal population – though that obviously implies it is within the grasp of the other half. Jung goes on to describe what kind of person could engage in this task and how they can do it (Jung 1948a, pp. 608-9). He focuses primarily on dream analysis but also appends a list of books – the first of which is *Psychological Types* (p. 613). This implies he still saw a potential role for typology in the process of individuation. By this, he would have had in mind the role of the symbol and the emergence of the transcendent function out of the dialectic of opposites, not the classification of individuals.

Jung's memorandum to UNESCO was ignored, the reasons for which again point to a problem in Jung's presentation of his theories. When UNESCO staff prepared a summary of expert contributions, they made no mention of Jung but focused on submissions by various social scientists and Anna Freud. Her proposals were described as 'one of the approaches to psychological methods of attitude change which will most need to be considered' (UNESCO 1948a, p. 6). Yet the report after the conference shows that Jung's theory ought to have been highly relevant, because half of the ten conclusions were focused on intrapersonal and

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interpersonal tensions (UNESCO 1948b). Freud had been successful by describing her experiences with refugee children, explaining them from the perspective of psychoanalysis, and then making practical suggestions that UNESCO could take forward. Jung's presentation was very different because he took a theoretical approach, highlighted all the difficulties from the start, and used pejorative language. He implied schoolteachers were 'patients' who needed the 'treatment' of dream analysis, which they were unlikely to pursue anyway unless they were already 'absolutely convinced that his personal attitude is in need of revision' (Jung 1948, p. 610). Ironically, typological differences in presentation may have contributed to the acceptance of Freud's paper and the rejection of Jung's. However, whatever the reasons, he failed to convince UNESCO staff, even though they had already expressed an interest in analytical psychology and it had direct relevance to their needs. The theory was good but the presentation was poor, or a poor fit for the audience, so it was ignored.

Another challenge in applying individuation to non-therapeutic contexts, if Myers-Briggs typology is to be involved, is that this popular interpretation of Jung's type theory is not universally accepted. Although the MBTI has a very substantial research base, there are some oft-repeated criticisms of it from within mainstream psychology (e.g. Pittenger[129] 1993) and in the mainstream media (e.g. Burnett[130] 2013, Zurcher[131] 2014) which chime with Jung's own views. One criticism is that the types are stereotypes – but the notion of stereotypes is very similar to Jung's description of types as being 'Galtonesque family portraits' (Jung 1921a, p. 405). As discussed earlier, Galton was a statistician and pioneer in psychometrics who invented composite photographs, centred on the eyes, so Jung was alluding to an average picture that is devoid of any individual features. Another criticism of Myers-Briggs theory is

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[129] David Pittenger is a professor of psychology.
[130] Dean Burnett is a neuroscientist who wrote an article criticising the Myers-Briggs Type Indicator that was published in The Guardian newspaper.
[131] Anthony Zurcher is a journalist working as a reporter for the BBC.

the statistical observation that 'there is no evidence of bimodal distributions for the MBTI' (Pittenger 1993), which is contrary to what would be expected when people are classified in two groups. However, again, Jung's stance agrees with the criticism and not the Myers-Briggs interpretation. He argues that there is a third, large group in the middle (Jung 1923, pp. 515-16), which would lead to the normal distribution that is actually found in the MBTI data. Also, Pittenger criticises the reliability of the MBTI because it is not high enough for inborn, life-long traits – but, again, this was not Jung's interpretation. Although extraversion/introversion may have an inborn component (Jung 1921a, p. 333) and there might also be an original disposition for the functions, type can also change (Jung 1959a, p. 435). Pittenger also points out that poor reliability is a consequence of having strict cut-off points between the types. However, Jung used spatial metaphors that involve reference points, not boundaries – such as 'four points of the compass' (Jung 1931a, p. 541) or 'a trigonometric net or … crystallographic axial system' (Jung 1936a, p. 555) or, more simply, 'points for orientation' (Jung 1957b, p. 304). That is, the types are akin to landmarks on a map, reference points that can help determine a person's unique location. They are not akin to geographical areas with clearly defined boundaries. There have been seemingly-robust defences to these criticisms constructed from a Myers-Briggs perspective (e.g. Rutledge[132] 2013), but it is the criticisms not the defence that are often more aligned with Jung's interpretation of typology. If we are going to be able to use Myers-Briggs typology, it needs to be revisioned from a more classical Jungian perspective to reflect his process of advancement. To do that, I propose eight principles that set the context in which Myers-Briggs typology can be used.

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[132] Hile Rutledge is a trainer and consultant, and the president of one of the leading independent companies that promote use of the Myers-Briggs Type Indicator.

REVISIONING INDIVIDUATION – EIGHT PRINCIPLES

The following principles are based not only on Jung's own writings about normal psychology (Myers 2013a) but also on other contributions to extra-clinical applications of analytical psychology and the societal role of the transcendent function, such as Samuels 1993, Mattoon[133] 1993, Stein & Hollwitz 1992, Miller 2004, Singer & Kimbles 2004, and others.

The first principle is that individuation is a natural process of ongoing development of a transcendent function, which can to some extent be helped along or actively encouraged by the individual. The context – whether undergoing analysis or not – makes no difference to the essential nature of the process. Individuation is concerned with transforming the personality, the creation of the individual, the relationship between consciousness and the unconscious, and the development of wholeness. However, there are secondary differences that can significantly change the nature of the task. In a non-therapeutic context, 'individuation and collectivity are… two divergent destinies…' (Jung 1916b, p. 452). This means that, although someone can be made aware of the existence and nature of individuation, he/she needs to be left to decide naturally the extent to which it is pursued. Individuation 'cannot be forced upon him, since it is a good solution only when it is combined with a natural process of development' (Jung 1934/1950, p. 349).

The second principle is that the transcendent function can emerge from between any form of opposites, or otherness, or elements that are missing from one's conscious standpoint or identity. These opposites can include not only the typological functions, or consciousness and the unconscious, but also conscious, moral opposites – particularly ones that are found to be 'distressing' (Miller 2004, p. 41). Dealing with ethical values of this nature is not a purely intellectual exercise; it involves a withdrawal of emotional investment from each side. An

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[133] Mary Ann Mattoon was a Jungian analyst who edited the proceedings for a conference on the transcendent function.

example is the Truth and Reconciliation Commission (TRC) in South Africa, in which victims and perpetrators of abuses on both sides gave their account of events, but without any justice, compensation, or punishment as a consequence. The TRC did not take sides – whether for blacks vs. whites, or for victims vs. perpetrators. The transformation in South Africa was achieved through dispassionately hearing accounts from all sides.

This leads into the third principle, which is that individuation can be applied to, and transform, not only the individual (emerging from an intrapersonal conflict) but also relationships (interpersonal conflict) and culture (collective or societal conflicts). There are several examples of Jungian concepts being applied at a collective level (e.g. Stein & Hollwitz 1992, Corlett & Pearson[134] 2003). A concise and cogent argument as to why this is valid has been laid out by Singer and Kimbles (2004, pp. 1-7). Although that argument has been challenged (Lu[135] 2013) Myers-Briggs typology itself provides an example of how it can work – the theory often acts as a form of transcendent function at a group level. Through learning about individual personality types, a team that suffers from internal conflict is frequently transformed to one that handles internal oppositions in a more constructive manner.

The fourth principle is that the overall process of individuation is represented by the caduceus, an alchemical image that was adopted by Jung: 'the right way to wholeness is … snakelike, a path that unites the opposites in the manner of the guiding caduceus' (Jung 1944a, p. 6). The caduceus is the rod of Hermes, the messenger of the gods, and consists of a staff entwined by two snakes. As Stein (2006) points out, individuation is a mix of gradual development, abrupt spurts and discontinuities that can be illustrated using two metaphors – a journey, which is linear, and circularity or circumambulation. The process is cyclical because

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[134] John Corlett and Carol Pearson are consultants and authors who apply Jungian concepts to organisational systems.
[135] Kevin Lu is the director of the MA in Jungian and post-Jungian Studies at the University of Essex.

"the constant flow of life again and again demands fresh adaptation" (Jung 1916/1957, p. 73).

The combination of the journey and circle metaphors is expressed by the caduceus, in which

the cycles of individuation are not simply repeating the same old

Figure 12 - Caduceus

ground but making some form of progress in terms of consciousness.

Each circular area, between where the snakes cross, represents one

cycle – the transcendence of one set of opposites – though they tend to

'ease off only gradually' (Jung 1946, p. 200). Typology might

represent some of these cycles, but there are many other opposites they

can represent – such as democracy/autocracy, competing religions,

different cultures, political ideologies, social justice vs. economic

competence, etc. Progress up the caduceus can be made even if the typological functions are

not transcended, but a failure to transcend type differences does mean that 'the process of

[typological] division will be repeated later on a higher plane' (Jung 1921a, p. 480). That is,

the typological division continues even though one might become more mature in other ways.

Each cycle can also be viewed using the symbol of the cross (connecting 1, 2, 3, and 4 in the

first cycle). Jung repeatedly associates the symbol of the cross with the union of opposites

(e.g. 1942/1948, p.179; 1942/1954, p. 286; 1951, p. 70; 1956, p. 735; 1958, p. 402). These

frequent associations suggest that Jung saw a strong link between the type of mythological

thinking he was advocating in the Bernet letter and the advancement of consciousness that is

based on the transcendence of opposites.

The fifth principle is that each individual cycle consists of two movements. Stein (2006) has

described them for analysis but they apply just as well to other contexts. The first movement

involves the differentiation of some element of consciousness from its opposite. It is

represented on the caduceus by an upwards and *outwards* move. This development of one-

sidedness is 'unavoidable and necessary [and both] an advantage and a drawback at the same

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time' (Jung 1916/1957, p. 71), because it increases consciousness whilst also creating a division in the psyche. The second movement, integration of the opposite, involves a differentiation of the Self from the opposites. This is represented by an upwards and *inwards* move on the caduceus. This results in a further increase in consciousness whilst healing some of the divisions in the psyche.

In this view, individuation can be a continual process, as per Fordham, but it might also involve a major change during midlife, as per Stein. That is, in the first half of life the individual encounters many opposites, some of which are integrated, but in most cases a one-sided attitude is differentiated (more out than up on the caduceus). At midlife and beyond, the individual may come to recognise the value of conflict and paradox, and therefore tend to seek out a more balanced perspective (more inward and up). A key task of the second movement is 'the withdrawal of all the projections we can lay our hands on' (Jung 1938/1940a, p. 85). This involves, Stein suggests, being curious, listening to small clues, paying attention to the numinous, seeking to expand knowledge, etc. – or change might be enforced through the experience of a catastrophe.

The sixth principle is that each individual cycle passes through four states of consciousness (corresponding to Neumann's four stages) which Jung represents using the axiom of Maria – 'One becomes two, two becomes three, and out of the third comes the One as the fourth' (Jung 1951, p. 153). There is no definitive interpretation of this axiom. As Jung acknowledged, this is a 'cryptic observation' (Jung 1952a, p. 513), and even 'the alchemists flounder[ed] about in … attempts to interpret the axiom of Maria' (Jung 1955-56, p. 67). Jung liked to play with the meaning of numbers, and he interpreted the axiom differently in different contexts. Sometimes the axiom is the sequence 1-2-3-4 described above, sometimes it is the reverse 4-3-2-1 (Jung 1946, p. 207), and sometimes it is all the numbers simultaneously (Jung 1958, p. 405). He sometimes associated the axiom of Maria with the

interplay of opposites, but sometimes with the order of differentiation of typological functions (Jung 1942/1948, p. 122) or the Godhead (p. 196). He also expressed wholeness or the unifying principle using different numbers – the fourth (in the axiom of Maria), the third (Jung 1921a, p. 58), the fifth (Jung 1951, p. 225), the ninth (Jung 1942, p. 151), etc. A contemporary interpretation of the axiom of Maria has been described by Schwartz-Salant[136] (1998, p. 84) and Sharp. Both convey the same essence, with the latter summarising it as:

> *One* stands for the original, paradisiacal state of unconscious wholeness…. *two* signifies … a conflict between opposites (e.g. persona and shadow); *three* points to a potential resolution; *the third* is the transcendent function; and *the one as the fourth* is psychologically equivalent to a transformed state of conscious wholeness.
>
> (Sharp 2001, p. 63)

I propose a slightly different interpretation, one that relates directly to positions on the caduceus (shown in the image above) and communicates more clearly and practically the stages of individuation to a more general audience, including users of Myers-Briggs typology. It begins in the same way as Sharp's – *one* being the state of unconscious wholeness. This is represented on the caduceus by the point where the snakes cross at the bottom of the cycle. To use the example of racial opposites in South Africa, this would correspond to a pre-apartheid period. State *two* is the result of conscious differentiation, where one of the opposites is in consciousness and the other remains in the unconscious, being projected onto others. This is similar to Sharp's wording in that there are opposites, but adds the clarification of one-sidedness. This second stage is represented on the caduceus by one of the snakes moving up to one side. This corresponds to the introduction of apartheid in which white interests dominate and those of blacks and other ethnic groups are devalued or repressed. State *three* arises as a result of the withdrawal of projections, so the previously repressed opposite is

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[136] Nathan Schwartz-Salant is a Jungian Analyst.

owned and recognised as also being good and equally valid. That uncomfortable contradiction is then patiently held. This corresponds, in the example, to the recognition of black rights in South Africa and the release of Nelson Mandela. Although at this stage there may be the *potential* for reconciliation of the opposites, I don't associate it with the transcendent function. In one of Jung's discussions of the axiom of Maria he says: 'Three … is logically correlated with the wicked hunter…. whereas fourness is a symbol of wholeness, threeness is not. The latter … denotes polarity' (Jung 1945/1948b, p. 234). It is represented by the other snake moving up to the side opposite to the first snake.

It is by holding the tension of state *three* that the unconscious then does its most important work. The unifying transcendent function forms in the unconscious (it is like state *one*) and then it emerges into consciousness, initially as a numinous symbol but then as a dominant conscious idea (it becomes the *fourth* when it becomes conscious). Hence, the phrase *out of the third comes the one as the fourth* has a practical interpretation. Out of holding the tension with the opposite (*three*) comes the initially unconscious function (*one*) that results in a conscious unity (*four*). This new conscious standpoint is 'a new structure of identity' (Stein 2006, p. 79), or a 'change of personality… the transcendent function' (Jung 1928b, p. 219). In the example, this corresponds to the actions of Nelson Mandela and the Government of National Unity, who held the tension of opposites between blacks and whites, and from which emerged uniting functions such as the Truth and Reconciliation Commission. This is represented on the caduceus by the snakes moving back together at the top of the cycle. The emergence of the uniting function from the unconscious to become a new conscious dominant is represented by the line of the staff that goes from the bottom of the cycle to the top. This new conscious standpoint transcends only one pair of opposites (or one aspect of the paradox), so is only one move up the caduceus. It does not represent complete wholeness, as the personality is still one-sided and unconscious in many other respects. Therefore, this new

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function needs to be differentiated further and its opposite needs to be integrated. What remains as unconscious forms the basis of the next cycle.

The seventh principle is that the new structure of consciousness provides flexibility of perspective. That is, the individual is able to observe things from any of the four states described in the axiom of Maria. This is derived from von Franz's suggestion that the individual is able to use all or none of the functions simultaneously (through the transcendent function). In state *one*, everything is viewed as the same and projected externally. In state *two*, there is now an observation of difference, but one is seen positively and associated with the ego whilst its opposite remains projected. In state *three*, the individual can see the good and bad on both sides and is able to resist exercising a preference. State *four* adds a transcendent perspective, whilst retaining the ability to see the perspectives of the other three – how everything is the same (*one*), how from opposite perspectives one side can be seen as better than the other (*two* and *three*), and how the opposites can be transcended or reconciled (perspective *four*). Conversely, it is also possible to get stuck at any of the first three stages – to remain unconscious, or one-sided, or to have split or polarised opinions that are never reconciled.

After transcending a particular set of opposites, the individual does not necessarily take perspective four in every context. For example, in a relationship with a one-sided person, an individual might play devil's advocate and take the opposite position in order to assist that person's development or spiritual growth. Another example is a manager of a business team who, recognising a collective one-sidedness, might take an alternative position to compensate for the group's deficiency. This ability to *consciously* take a one-sided approach is a 'sign of the highest culture' (Jung 1921a, p. 207).

The seven principles discussed so far have concentrated on the progress of individuation through the withdrawal of projections, interplay of opposites, emergence of the symbol, and the ongoing reinvention of the transcendent function as the dominant function of consciousness. It has not included archetypes, dreams, active imagination, myths, etc. The eighth and final principle is that these latter aspects of analytic psychology remain relevant but are secondary and optional (for the wider, non-therapeutic audience being considered). Dreams, etc., continue to play a constructive role even when they are not understood but, because of the inherent dangers of the unconscious (Jung 1916/1957, p. 68), their conscious use is best left either to the individual having a natural interest in them or to analysis:

> It is often objected that the compensation [provided by dreams] must be ineffective unless the dream is understood. This is not so certain, however, for many things can be effective without being understood. However, there is no doubt that we can enhance its effect considerably by understanding the dream, and this is often necessary because the voice of the unconscious so easily goes unheard. 'What nature leaves imperfect is perfected by the art' says an alchemical dictum.

> (Jung 1945/1948a, p. 294).

This final principle is only partly aligned to Jung's view. In his letter to UNESCO, when he outlined a procedure to change attitudes that are conducive to world peace, he identified the opposites as a key part of the problem, but then put dream analysis at the centre of his solution. Other techniques were, by implication, secondary and optional. The principles above put the interplay of opposites at the centre of the process, making dream analysis and other techniques secondary and optional. Although this may be different from the classical emphasis in clinical work, it establishes a practical link between Myers-Briggs typology and Jungian individuation that can be used in range of non-clinical applications.

Theoretical Links between Advancement and Mythology

The suggestion in the Bernet letter, that thinking of God as a mythologem will advance consciousness, is not an isolated argument. This theme is explicitly present in many of Jung's writings, such as those on the withdrawal of projections. This is a key aspect of the above process of advancement, when moving from stage 2 to stage 3 in the axiom of Maria, and Jung outlines five stages in the withdrawal of projections which he explains in religious terms (Jung 1943/1948, pp. 199-201). The first stage is an extreme form of *participation mystique,* a complete identity of object and projection where, for example, a tree is indistinguishable from a spirit. In the second stage, the idea of the object is separated from the idea of spirit – there may still be a spirit in the tree, but the spirit and tree are now regarded as different entities. The third stage involves a moral evaluation, seeing the spirit as good or evil. This equates to the stage of believing there is a good God. The fourth stage is that of denial of the existence of a spirit, writing it off as an illusion.

This raises the problem of metaphysics, which can prevent some people from progressing from stage three to stage four, though it need not be an obstacle if we fully understand the nature of projection. Recognising one's own unconscious contents – whether personal or part of the collective unconscious – starts with observing someone or something else, because 'as a rule the unconscious first appears in projected form' (Jung 1946, p. 188). At first, the projection and the object are 'indistinguishable' (Jung 1942-54, p. 259) and the projection is seen as belonging to the external object (Jung 1936/1954, p. 60). Projections can be carried by people or objects, or they can be carried by God. The withdrawal of projections involves recognising that 'in the darkness of anything external to me [there is] an interior or psychic life that is my own' (Jung 1937b, p. 245). If we withdraw projections from other people, their independent existence is never doubted. However, if we withdraw projections from God, this

raises the question as to whether there is anything left. Is God purely projection, or is there an extra (metaphysical) existence outside of one's own psyche? The danger is that one concludes God is nothing but a psychological projection. Although Jung saw projecting God into the material world as a mistake, he also saw that there was a 'second unavoidable error [of] psychologism: if God is anything, he must be an illusion…' (Jung 1938/1940a, p. 85).

The final stage is 'only to come full circle' (Jung 1943/1948, p. 200) by recognising a different type of reality. There is a psychic reality to spirit, but it has a greater ontological status than that of a mere projection. Von Franz provides a succinct summary of this stage, albeit without differentiating matter and spirit from psyche to the extent that Jung had differentiated them:

> At the next or fifth stage, one would have to reflect on how such an overpowering, extremely real and awesome experience could suddenly become nothing but self-deception… [T]his perception of a spirit must… have been a phenomenon pushing upward out of his unconscious, whose psychic existence cannot be denied unless one denies the reality of the psyche altogether. If we do not do this, today we would describe the spirit in the tree as a projection, which does not, however, imply an illusion but rather a psychic reality of the highest order.
>
> (Von Franz 1980, p. 10)

The first two stages are not directly relevant to the current research, for they relate to states of projection which mostly precede that found in Western civilisation. It is the latter three stages that are of contemporary relevance and significance and which will be the subject of further examination: moving from a belief in a good God (the 'Christian' view), to dismissing the notion of God as an illusion (the 'enlightened' view), and finally to a new understanding of the reality of God. These stages of withdrawal of projections from the god-image can be viewed at the level of civilisation. Historically, Christianity and the formation of the person of Christ

have played an important role in the first three stages of the advancement of consciousness, that of projection from the collective unconscious (Jung 1938/1940a, p. 154). From this Jung develops his own personal myth, his version of the Christian myth: that a material human being was born (Jesus); he fitted the expectations of the collective unconscious (which has its own objective existence outside the individual); therefore he was a suitable person into whom the god-image (part psyche, part spirit) could be projected. This person of Jesus, who took on the role through projective identification, was therefore fully human, whilst the projection he carried was fully divine. This divine archetype, which as part of the collective unconscious was present in the human psyche long before Jesus was born and continues long after his death, therefore became incarnated in the person of Jesus. Jung does not present this myth as being something that he expects all other Christians to adopt, but it does serve as an example of the relationship he saw between psyche, spirit, and matter, and of the type of symbolic or psychic reality that he envisaged forming part of the fifth stage of the withdrawal of projections.

The Enlightenment has advanced consciousness by providing knowledge that contributes to a withdrawal of projections in God as a concrete, material being. This cultural shift is still taking place because, although there are people who can currently be found at all three of the latter stages of development, the number of those who believe in a material God, whilst declining, still represents the largest group in Western Protestant countries such as the United States (Gallup[137] 2008). Jung's theory suggests that, if consciousness continues to advance, the ultimate outcome of this trend would not be the predominance of atheism, though that might be a transitional stage. One possibility is that the projections 'lapse into unconsciousness again and hence are unconsciously projected upon more or less suitable human personalities' (Jung 1941, p. 200). These projections appear 'in individual dreams or

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[137] This refers to the Gallup polling organisation.

in fantasy-like projections upon living people' (Jung 1938/1940a, pp. 155-6). Therefore, the withdrawal of projections does not inevitably lead to the advancement of consciousness, it might lead instead to the reinvestment of projections elsewhere. For a more genuine advancement, the withdrawal of projections needs to be allied with the investment in a new, symbolic form of thinking that comes to terms with the involvement of the psyche in creating reality. This would ultimately lead to a society that develops new forms of myth that grapple with a non-material spiritual or transcendent reality.

Stage 5 and Mythologems

This process of withdrawal of projections establishes a theoretical link between the term 'mythologem' and the advancement of consciousness because, at the final stage, we think mythologically about God as a new form of reality. The fact that Jung calls this a 'psychic' reality contributes to the misunderstanding that Jung is psychologising God. This is not the case because, from his epistemological standpoint, everything is a psychic reality, including the physical world. Yet this is what commentators read into Jung's exchanges with Buber:

> [Jung] falls into psychologism in the most exact sense of the term. 'The goal of psychic development is the self,' writes Jung in *Memories, Dreams, Reflections*. One might as easily say, 'The goal of the self is psychic development,' since he has defined the self in just this way… Jung's psychologism lies in the fact that there is no reference beyond the psyche itself… Although Jung does not claim that a God that cannot be known in the psyche does not exist, he says that for all practical purposes such a God does not exist since we can only know the existence of what is psychic.
>
> (Friedman[138] 1966, pp. 99,100)

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[138] Maurice Friedman was a professor of religion and a philosopher who wrote a number of books and essays about Martin Buber.

Although Friedman acknowledges that Jung does not actually make such a claim, he infers that Jung was suggesting that God does not exist. What Friedman misses in his analysis is the fact that Jung does not apply the term *psychic reality* only to God – he applies it to everything and everyone else as well: 'Just as we tend to assume that the world is as we see it, we naïvely suppose that people are as we imagine them to be. [However,] everyone creates for himself a series of more or less imaginary relationships based essentially on projection' (Jung 1916/1948, p. 264). Von Franz recognises the potential for misinterpretation of Jung in this way, and attributes it to a fear that by withdrawing projections the living religious symbol would be destroyed. Her solution was the 'the realization that religious symbols do not refer to material and concrete facts but to a collective-psyche unconscious *reality*' (Von Franz 1980, p. 83-4, original emphasis). That is, the understanding and adoption of Jung's epistemology has a crucial role to play in enabling Christians to advance through stage four of the withdrawal of projections, in which God's existence might be doubted, and to reach stage five, in which God is thought of mythologically as a new form of reality. Von Franz stresses that this is not a linear process but a never-ending one, with several cycles or layers, 'like that of peeling an onion [but never reaching] the core itself' (p. 13). There can be value in stage four – doubting that God exists – if it involves a disillusionment that encourages progress towards stage five.

It is likely that Jung viewed many of the theologians with whom he corresponded as being stuck at the third stage in his sequence of five, because they believed that their projections were identical with God. One feature of projection is seeking to impose one's views on others, which causes conflict between religious leaders. He criticised Buber for thinking 'he can override all other ideas of God by assuming that his god-image is *the* god-image' (Jung 1976, p. 371). However, he also made the same criticism of other theologians 'of every

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variety who… prescribe… what [God] has to be like [and which] leads to no understanding between men, of which we stand in such dire need today' (p. 368).

Other theoretical links

Jung makes several other connections between the advancement of consciousness and thinking mythologically (symbolically) about God. In the process of advancement, the individual pays attention to the symbol – 'not… semiotically, … but symbolically in the true sense [as] the best possible expression for a complex fact not yet clearly apprehended by consciousness' (Jung 1916/1957, p. 75). He also refers to the process of holding the opposites in tension, as 'the way of the cross' (Jung 1942/1948, p.179) – an association that he made many times (e.g. Jung 1958, p. 402, Jung 1942-54, p. 286, Jung 1956, p. 735, Jung 1951a, p. 70). He viewed Roman Catholicism as resolving the tension between opposites using existing symbols, but 'the Protestant… is left to his tensions, which… spurs you on to discover things that were unconscious before' (Jung 1938/1940a, p. 49).

The parallels between mythology and individuation have also been highlighted by writers such as Edinger, who argues that 'the underlying meaning of Christianity is the quest for individuation' (Edinger 1972, p. 131). He summarises the symbolic equivalence of the two processes by saying 'a conscious encounter with the autonomous archetypal psyche is equivalent to the discovery of God… He is released from the tendency to… live out the conflict of opposites in the outer world' (pp. 103-4). The connection Edinger makes – between the discovery of God, the advancement of consciousness, and the transcendence of opposites – is one that Jung makes several times. For example, he draws the parallel between repentance and withdrawing projections – repentance being one of the necessary psychological conditions for transformation (Jung 1942-54, p. 295) and the 'sin to be repented, of course, is… unconsciousness' (Jung 1951a, p. 192).

There is also a parallel between holding the opposites in tension and Christian sacrifice, which Jung discusses in *Psychological Types* when considering Tertullian and Origen. Each sacrifices the dominance of their own (typological) standpoint in order to experience the opposite; that is, 'the compensation can be obtained only by means of an amputation (sacrifice) of the hitherto one-sided attitude' (Jung 1921a, p. 19). Jung draws a parallel between Christian redemption and the transcendent function as early as the Red Book: 'salvation is the resolution of the task' (Jung 2009, p. 311). He modifies the Christian understanding of redemption by describing it as a transformation that emerges from a new relationship between good and evil rather than good triumphing over evil. This is discussed in *Psychological Types* when Jung compares the position of typological functions in Christianity with Schiller's type theory (Jung 1921a, pp. 77, 89). He not only reframes repentance, sacrifice and redemption in psychological terms, but also argues that transformation depends on coming to terms with evil rather than defeating it. This may be another stumbling block for the modern Protestant, as well as other types of Christian, and was a significant factor in the breakdown of his relationship with Fr. Victor White. Just as Jung's use of the term Self in place of God led to charges of psychologism, the notion that evil be integrated into the understanding of God led to Jung facing charges of blasphemy (Jung 1954b, p. 684).

Jung's writings suggest not only is typology closely related to the advancement of consciousness, but there are also strong theoretical links that can be made with religious concepts. In theory, therefore, measures of advancement or individuation using typological concepts should correlate with a religious advancement that thinks of God as a mythologem.

IS ADVANCEMENT DESIRABLE?

One final question to consider – before examining how the principle concepts can be measured – is whether withdrawing projections to advance consciousness is a desirable thing. Normal relationships involve finding willing carriers for projections. Becoming conscious of those projections can sometimes become an impediment to our relations with others. The maintenance of psychic equilibrium requires that negative projections settle outside our circle of intimate relationships, a principle that applies at all levels, even to international relations (Jung 1916/1948, p. 272). When psychic contents are excluded from consciousness they 'sink into the unconscious, where they form a counter-weight to the conscious orientation' (Jung 1921a, p. 419). This is akin to the balancing effect of the keel of a boat, and there can often be benign channels for compensation, such as dreams that play a compensatory role for normal people even when they are not understood (Jung 1945/1948a, pp. 294-6). The benign process of compensation can be interrupted in several ways, not only through neurotic disturbance (Samuels, Shorter, Plaut 1986, p.33) but also through normal consciousness becoming overly one-sided (Jung 1921a, p. 419). When this is expressed collectively, it can lead to entrenched, perhaps even dangerous, political or religious conflict. Normal projections can be 'dangerously illusory. War psychology has made this abundantly clear' (Jung 1916/1948, p. 271).

Jung is somewhat ambivalent as to whether the withdrawal of projections should be pursued actively because it is both difficult and dangerous. Jung compares it to 'expecting the average respectable citizen to recognize himself as a criminal… and [it] is usually paid for in advance with a neurosis' (Jung 1951a, pp. 19-20). In essence, the problem is that, although there are significant advantages to the withdrawal of projections, 'every increase in consciousness harbours the danger of inflation' (Jung 1944a, p. 479) leading to 'a profound doubt' (Jung

1951a, p. 17) as to whether it should be pursued at all. The ego is not capable of incorporating all the projections withdrawn from the world (Jung 1938/1940a, p. 88). Even in therapy it is 'not uncommon where there is no need to breathe a word about the unconscious' (Jung 1928b, p. 161).

Despite the risks, and the desirability of individuation taking place under the direction of a therapist who is aware of the dangers, when we look at Jung's opus it is clear that he did not limit the advancement of consciousness to the therapy room. This is evident from diverse discussions such as the relationship of the Self to space-time (Pauli & Jung 2001, p. 16), ways of promoting world peace (Jung 1948a), interpretation of artistic works such as Joyce's Ulysses (Jung 1932a), and his support for research in the social sciences (de Angulo 1977, p. 205) or humanities (Jung 1948b, p. 476). For Jung, analytical psychology is highly relevant to normal psychology (Myers 2013a) and it contains a cultural imperative that centres on the withdrawal of projections and advancement of consciousness:

> Man's worst sin is unconsciousness… and in all seriousness [we need to] seek ways and means to exorcize him, to rescue him from possession and unconsciousness, and make this the most vital task of civilisation.
>
> (Jung 1945/1948b, pp. 253-54)

This problem occurs, in part, because of the delusion that consciousness is more important in decision making than the unconscious, and that consciousness has the ability to control the unconscious. Jung's reversal of this principle, viewing the unconscious as a much more powerful force than consciousness, has been supported by various neurological research projects in recent decades that suggest 'subjectively 'free' decisions are determined by brain activity ahead of time' (Soon, Brass, Heinze & Haynes[139] 2008). That is, when a decision

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[139] Chun Siong Soon, Marcel Brass, Hans-Jochen Heinze, and John-Dylan Haynes are collaborators in neuroscience research from the Max Planck Institute for Human Cognitive and Brain Sciences, and universities of Berlin, Ghent, and Magdeburg.

enters consciousness, the ego thinks that it has made the decision. If, as part of the withdrawal of projections, we realise that many decisions are given to the ego from the unconscious, it could have a destabilising effect on the individual:

> The withdrawal of metaphysical projections leaves us almost defenceless in the face of this happening, for we immediately identify with every impulse instead of giving it the name of the 'other,' which would at least hold it at arm's length and prevent it from storming the citadel of the ego.

<div align="right">(Jung 1938/1940a, p. 87).</div>

The withdrawal of projections is dangerous because it removes a means of defence against the unconscious, but the advancement of consciousness is desirable for other reasons. Jung's suggestion that we treat God as a mythologem might provide a solution. As has been discussed in a previous section, mythology provides a means of relating to, as well as being a defence from, the unconscious. By recognising the psychic nature of all reality, and treating God as one of the mythologems amongst many others, one does not withdraw projections to leave 'nothing' and render the individual defenceless. Rather, one replaces the withdrawn projections with a symbolic and psychological understanding of both matter and spirit. This has to be pursued through a *natural* process of transformation within the individual (Jung 1934/1950, p. 349). That is, the conditions have to be set where individuals can voluntarily withdraw projections, rather than it being forced upon them. The 'urge to a higher and more comprehensive consciousness fosters civilization and culture, but must fall short of the goal unless man *voluntarily* places himself in its service' (Jung 1946, p. 263, emphasis added). To encourage that type of engagement, the reality of God should not be undermined – which invokes defences – but replaced with a revised mythology that acknowledges the role of one's own psyche in the perception of both matter and spirit:

Our task is not… to deny the archetype, but to dissolve the projections, in order to

restore their contents to the individual who has involuntarily lost them by projecting

them outside himself.

<div align="right">(Jung 1938/1954b, p. 84)</div>

The present research is relatively limited in its ambition – it seeks only to measure the relation

between two concepts and is not, at this stage, seeking to promote advancement within the

target audience. Nevertheless, the types of problem just discussed are issues to be borne in

mind in any follow up research after this dissertation is complete.

Part IV Empirical Study

7 Measurement

INTRODUCTION

The first two parts of the research have examined the two main concepts underlying Jung's proposal in his letter to Pastor Bernet – God as a mythologem and the advancement of consciousness. In both cases, the research suggests that those concepts represent something different to some of the more common understandings with which Jung had to contend. For example, thinking of God as a mythologem is not a psychologism nor does it deny God's existence. Rather, it points to a philosophical standpoint that Jung adopted towards all forms of reality – science, psychology, and religion are modern forms of living myth that play a significant role in the co-construction of reality and mediation of knowledge of those things we cannot apprehend directly. Jung's proposal therefore involves developing a mythological attitude not only towards God but also towards psyche, matter, spirit, and life. However, it also involves more than just having a mythological attitude, for Jung's stance is similar to Popper's who points out that myth needs to be accompanied by critical reflection in order to progress. When we combine the truth and meaning aspects of mythology with the process of reflection, it creates a problem in recognising our own myth as myth, which can only be solved by learning to live with broken myth. Also, although the advancement of consciousness is virtually the same as individuation, the research has shown that the existing measures that have been to date been established – such as the Myers-Briggs Type Indicator and similar alternative questionnaires – are measuring the wrong things. In terms of the axiom of Maria, such questionnaires measure the horizontal aspect – the balance between typological opposites. However, individuation involves a vertical move that builds on the differentiation of opposites by reconciling and transcending them. Therefore, in order to measure the two

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main concepts at the heart of this research, new measures need to be designed for the mythological and reflective mode of thought that involves coming to terms with broken myth, and the attitude towards opposites that both discriminates between and transcends them at the same time.

In the original research proposal there were two hypotheses, one testing the relationship between thinking mythologically about God and the advancement of consciousness, the other testing how that relationship could be developed – i.e. testing alternative ways in which Christians could develop their personal myth. The research proposal identified over-ambition as a potential problem and suggested that the second hypothesis might have to be dropped. This has proven to be the case, so only the first hypothesis is tested. Also, again as stated in the original proposal, this research combines several components each of which could justify an entire PhD in its own right, so the depth to which each area has been investigated is necessarily limited. For example, Popper's use of myth in his philosophy of science has not been reviewed in the light of alternative philosophies, such as those of Kuhn, Lakatos, or Feyeraband. The latter, in particular, wrote about the distinctions between science and myth in a way that has some similarities with Popper. A detailed comparison of the two perspectives could prove very useful for the understanding of the relation of science, religion, and myth. However, for the purposes of the present research, Feyeraband's starting point is too remote from Jung's to be useful in making sense of the term 'mythologem'. Feyeraband defines myth as 'a system of thought, possibly false, perhaps very unsatisfactory from an intellectual point of view, which is imposed and preserved by indoctrination, fear, prejudice, deceit' (Feyerabend 1999, p. 64). The tendentiousness of this definition creates a range of new and unnecessary problems that would need to be overcome. For example, it could be regarded as the type of philosophical practice, discussed earlier and described by Morgan, in which myth is portrayed as the 'other' of philosophy. Popper's view of myth aligns much more with

Jung's, and he affords myth and religion much more respect, as does Jung. Therefore, given the particular objectives of this research – to test the relation of two concepts – and the time constraints, only Popper's philosophy has been considered.

In practical terms, the measures for each of the main concepts in this research are designed using internet-based questionnaires, which are linked from my commercial internet website – http://www.teamtechnology.co.uk. This website has thousands of visitors each week, many of whom wish to complete a personality questionnaire and some of whom purchase commercial reports. This environment lends itself to the gathering of large amounts of data. The suite of online research questionnaires are located at https://research.myers.co and their content is reproduced in detail in Appendix C. Participation was encouraged by offering free copies of the commercial reports (on personality, careers, and leadership) to those who completed the research questionnaires.

MYTHOLOGICAL THINKING

The main problem in constructing a questionnaire to measure mythological thinking is how to convert the earlier theoretical discussion into a simple scale. For the purposes of validation and statistical analysis, what is required is a Likert scale – which is typically a simple score between one and five. To achieve this, most questionnaires have the format of a series of statements, each with a five-point response scale ranging from 'strongly disagree' to 'strongly agree'. However, neither the advancement of consciousness nor the mythological thinking concepts lend themselves to such a simple scale. With regards the mythological thinking scale, the problem can described by referring back to the myth map, which was created using truth, meaning, and critical reflection. This model yields eight types of mythology, according to the individual's degree of critical reflection on the truth and/or meaning of the myth. The

myth itself can be any kind of story, explanation, or theory relating to that which we cannot apprehend directly. As a myth undergoes a transformation, or pursues its life-cycle, it can change its position on the myth map. A story can be constructed as a fictional story but became adopted as truth, or scientific theories might be regarded as true but then superseded to become regarded as false, or as part-truth, part-falsity. The test of mythological thinking needs to take this possibility of various life cycles of myth into account, and measure the degree to which the individual's attitude towards myth is represented by a central position on the myth map. That is, one recognises the mythological underpinning of all perceptions and explanations. Just as all theory is data laden (Barbour 1974, p. 9) so too this research has led to the conclusion that all truth and meaning is myth laden. The measure seeks to establish the extent to which the respondent recognises that the truth or meaning of something is myth-laden.

This is achieved by recognising that measurement needs to take place on a combination of two different scales and two different dimensions. The two scales are truth and meaning, represented by the thin, red lines in the diagram. The scalar scores along these lines represent the degree of truth (vs. falsity) and meaning (vs. meaningless) that is represented by a

Figure 13 - Myth Map Scales

myth (or assertion, or image, or story, or description, or theory, or explanation, etc.). For example, when something is accepted unquestionably as true, this is a presupposition. If it is reflected upon and shown to be false, then it becomes archaic. This scale is a literal one. If epistemological reflection is approached literally then its task is to determine whether something is true or false, or to differentiate the true and false aspects of the assertion or image, or to establish the basis of certain knowledge. The second dimension – represented by

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a thick, blue line – takes a different approach to epistemological reflection. Rather than establishing a firm foundation for knowledge, the myth is viewed as symbolically representing various realities or truths or types of knowledge, which are themselves dependent on the myth. What the concept of broken myth suggests is that we recognise all knowledge as mythic and as co-constructed by the psyche.

On this basis, a new format of question has been constructed, which for each statement presents a true/false option and a meaningful/insignificant option, with the ability to opt out of a literal response and indicate that the statement is viewed as having an allegorical or symbolic meaning. This involves a new curved response format as shown in the following examples:

Figure 14 - Example Myth Statements

1 + 1 = 2
True ○○   Meaningful ○○
○ Allegorical   ○ Symbolic
False ○   Insignificant ○

Our lives are directed/shaped by God
True ○○   Meaningful ○○
○ Allegorical   ○ Symbolic
False ○   Insignificant ○

The earth is (approximately) 4½ billion years old
True ○○   Meaningful ○○
○ Allegorical   ○ Symbolic
False ○   Insignificant ○
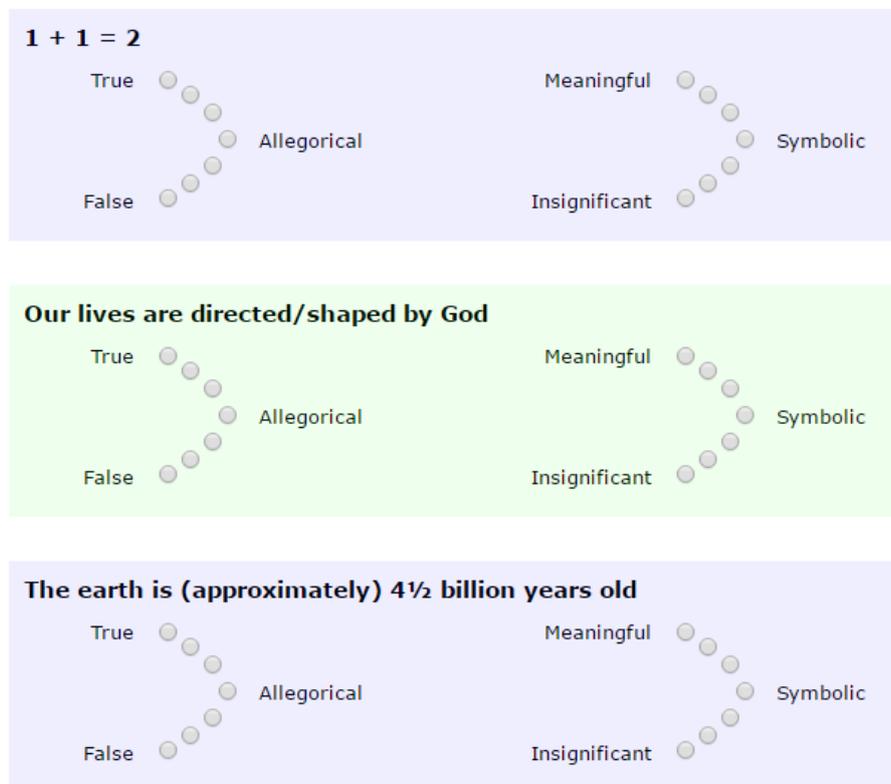
Although each radio button in the questionnaire can be identified uniquely, it is still not quite in the Likert format required for statistical analysis. Any true, false, meaningful or insignificant responses on the left indicate a literal response, whereas the allegorical and symbolic responses on the right indicate a mythological or symbolic response. Therefore, the radio buttons were converted to a Likert scale, of between one and four, according to the horizontal position:

Figure 15 - Myth Symbolic Scale

The two scores are collected as separate numbers and subject to factor analysis as independent items. It should be noted that this is a new design of questionnaire and response format, having two numbers for each statement and the curved format, and this may raise various statistical issues. However, these issues are beyond the scope of the present research as they would require substantial investigation of statistical techniques. This research makes the assumption that this is a valid technique, and leaves it to future research by a statistician for any further investigation.

The word 'allegorical' is used in relation to truth despite Jung having differentiated allegory from genuine mythology (Jung 1973, p. 554). Jung had in mind a very particular purpose for making this distinction – to distinguish signs from symbols. However, in the context of a truth/falsity question, and given the colloquial understanding of allegory as 'a narrative…

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intended to be understood symbolically' (Chambers[140] 2014, p. 38), the word is expected to attract responses from those who think symbolically about truth. The literal/symbolic score is taken from the horizontal position of the response button.

The exact wording used on these scales has been refined in three ways. The questions were devised to reflect a variety of mythologems, including religious, scientific, psychological, and mathematical statements. This is consistent with Jung's intention because, for example, he regarded the number one as a mythologem (e.g. Pauli & Jung 2001, p. 127). The words on the curve were designed to attract different responses from those who thought literally and symbolically. The first refinement was in a small-scale trial with the two supervisors for this stage of research – Roderick Main and Jochem Willemson – who completed the questionnaire and provided feedback on the wording. After changes were made, a small scale pilot involved getting direct feedback from a group of friends and associates drawn from a wide range of backgrounds. This resulted in further refinement to the wordings. The final refinement took place during the validation stage. This did not involve any changes to wordings, but in the selection of a subset of questions that demonstrated good statistical properties. The details of this stage are discussed later, in the chapter on validation.

ADVANCEMENT OF CONSCIOUSNESS

Measuring the advancement of consciousness is as difficult as measuring the degree of mythological thinking, if not more so. There is already an instrument for assessing ego development – the *Loevinger Sentence Completion Test* (Hy[141] & Loevinger 1996) – but its suitability would take a major study to evaluate, and it might prove unsuitable. Administration

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[140] This is a reference to *The Chambers Dictionary*.
[141] Le Xuan Hy is an associate professor of psychology.

of the test is labour intensive, requiring matching the interpretations of different assessors, and there is no validation to show that it measures Jung's concept of advancement. Therefore, the focus on this research is in developing an instrument that directly addresses the nature of Jung's concept of advancement, as discussed earlier.

Again, the main aim is to produce a simple Likert scale that reflects the degree of individuation, can be used in statistical validation and analysis, to compare with the score for mythological thinking. In order to overcome the limitations of existing typological tests – measuring horizontal differentiation rather than vertical development – consideration was given to devising some form of projective test, based on an adaptation of Kelly's repertory grid (Kelly[142] 1963). This is theoretically more aligned to Jung's process of individuation because it is based on opposites. The grid is produced by listing people known to the respondent, and identifying pairs of opposite characteristics (personal constructs) that differentiate one individual from two other individuals. This would have involved a dynamically-generated online questionnaire that is tailored for each individual. The respondent would be asked (automatically, anonymously, and online) to identify a small number of individuals or groups whom they admire, love, or respect most, and another group they dislike, fear, or despise most (prompted with some generic examples). These could have been people known to them personally or public figures, and the system would have taken the user through a comparison process, similar to Kelly's repertory grid, that identified the primary traits of each individual/group that made them admirable or dislikeable. From this information, a series of questions would have been constructed (again, automatically online) in which the respondent is asked to indicate the degree to which everyone exhibits each of those traits. A means would then be devised for converting these scores into an advancement

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[142] George Kelly was a psychologist who devised Personal Construct Psychology, which involves using pairs of opposites to make sense of the world.

of consciousness score, depending on the degree of split between the two groups (a stark split corresponding to a low advancement score). To address ethical and privacy concerns, the data would have been held securely in an encrypted form, though this is not robust – the system cannot prevent colleagues, family members or friends who are being thought about from seeing the data. For example, the user might be overlooked when logging on, or he/she might be careless with a printout. Also, any individual who suspected they may have been the subject of this process could possibly have submitted a data subject request relating to the research system, which raises further ethical and legal issues. The idea was therefore rejected because there were too many problems to investigate and resolve in the time available. However, it remains a possibility for post-doctoral research.

Therefore, the research focused on using typological opposites as the basis for measurement, as such questionnaires do not suffer from most of the problems discussed above, and their use as online questionnaires for private use have been long established. The lack of inclusion of other types of opposites in the measurement was accepted as a limitation of this research. That is, there is a caveat with any conclusions that the form of individuation being measured is limited to typology. Nevertheless, typology represents some of the more significant opposites to be transcended, so it is likely that any advancement of consciousness would be reflected in some degree of typological advancement. This leaves to be solved the problem of measuring vertical progression, which requires a redesign of the way typological opposites are measured.

Review of existing data

Before embarking on a redesign, the existing available data was reviewed to ascertain as far as is possible that the transcendence of typological opposites does reflect Jung's process of the advancement of consciousness. There are some characteristics about individuation that should be reflected in typological data, even though it is based on horizontal rather than

vertical measurement. For example, individuation tends to progress with age, which suggests that – on average in the Western mind – the horizontal scores (between differentiated opposites) would increase up to early adulthood, but then decline during midlife and beyond. Jung argued that there is less differentiation in the Eastern mind (Jung 1939/1954), so progression would be expected to take a slightly different path with less of a difference between opposites, at least in the early adult years.

One source of data is the MBTI, which uses a forced-choice format – the respondent makes a simple choice between two opposite statements. The prediction that scores should moderate during midlife is found to be invalid in the MBTI manual, because the data shows that 'with maturity people report their preferences with greater consistency' (Myers & McCaulley 1985, p. 239). However, not all the trends follow this pattern. The MBTI data includes tables showing average preference scores compared to age for two versions of the MBTI, Form F and Form G (pp. 240-41). The present discussion will focus on Form F data, as similar trends appear in both sets of tables. For the Sensing function, the data shows preferences clearly strengthening with age – from an average score of 20.7 at age 15-17, to an average of 30.9 at age 60 plus. However, intuition and thinking show more modest increases that peak in the 40-49 age bracket and then drop back slightly, which is in keeping with the predictions of moderation in midlife. In the case of Intuition, the average scores go from 20.6 to 24.6, and drop back to 22.7, and in the case of Thinking, they go from 18.1 to 24.4 and then drop back to 20.2. The Feeling function exhibits a different trend, and one that is much flatter – starting at 17.3, dropping to 16.9 in the 25-29 age range, and then increasing gradually to 18.6 at age 60 plus. This data suggests that extraversion and perception reduce throughout life, introversion and feeling stay more or less the same, sensing and judgment increase dramatically, and intuition and thinking rise to a peak in the 40-49 age range, and then drop

back in later life. The publicly-available data is not sophisticated enough to identify any reasons for these differences.

Another source of data is my own MMDI (Mental Muscle Diagram Indicator) which was developed and validated in the late 1990s (Myers 2015). Although it produces the same type of four letter personality code as the MBTI, it is constructed using slightly different principles. Drawing on aspects of *Psychological Types* that are not included in Myers-Briggs theory*,* it takes into account the active/passive difference in functions, and breaks a connection made in contemporary interpretations of typology between the concrete/abstract and sensation/intuition dichotomies. The *MMDI* scales are also based more directly on the four pairs of opposites that Jung discusses in Chapter X: introverted sensation vs. extraverted intuition (on a scale called NeSi), extraverted sensation vs. introverted intuition (called NiSe), extraverted feeling vs. introverted thinking (FeTi) and introverted feeling vs. extraverted thinking (FiTe). There are nine questions for each scale, which have six points between them (they are not binary choices, as in the *MBTI*). The following two examples pit Fe against Ti, and Te against Fi. The circles in the centre are the radio buttons that respondents click to show which statement they agree with most. Clicking a button assigns a score between 1 and 6.

Figure 16 - MMDI Example Original Statements

This format, like the MBTI, only measures horizontal aspects of the axiom of Maria. A score in the middle could be associated with stage one, a lack of differentiation, or stage four, when

the opposites have been transcended. However, the six-point scale does lend itself to a comparison with demographic information to establish whether there is evidence to support the trends Jung identified. That is, distance from the middle should increase up to early adulthood, and then decline at midlife and beyond. Also, there should be a difference between Eastern and Western cultures, with the latter being much more differentiated at an earlier stage in life.

This can be examined using the demographics that are collected with the questionnaire – age, sex, and country. These demographics may not be of the highest quality, because age and sex are declared by the individual and have not been verified, and country is calculated from the user's IP address. This means that the 'country' is a record of the location at the time of completing the questionnaire, which in some cases may be different to cultural origin. Other factors that undermine the quality of the analysis are the questionnaire only being available on the internet, in English only, and found by people with a specific interest – the majority having submitted internet searches relating to careers, leadership, and personality. Nevertheless, despite these limitations, the data can offer some inter-country comparisons.

The initial sample of data contained 55,821 submissions from the questionnaire. The data was cleaned, removing duplicate and incomplete records, thereby reducing the sample to 47,385. This contained data from 134 countries. In order to undertake a meaningful analysis of culture, all records from countries with less than 100 submissions were removed. This reduced the sample to 45,300 (see appendix B for country details) including 28063 females and 17237 males with a good representation from all ages, though with younger adults than any other category. When the (raw) responses are consolidated for each scale, they show near-normal distributions:

Figure 17 – MMDI Distributions
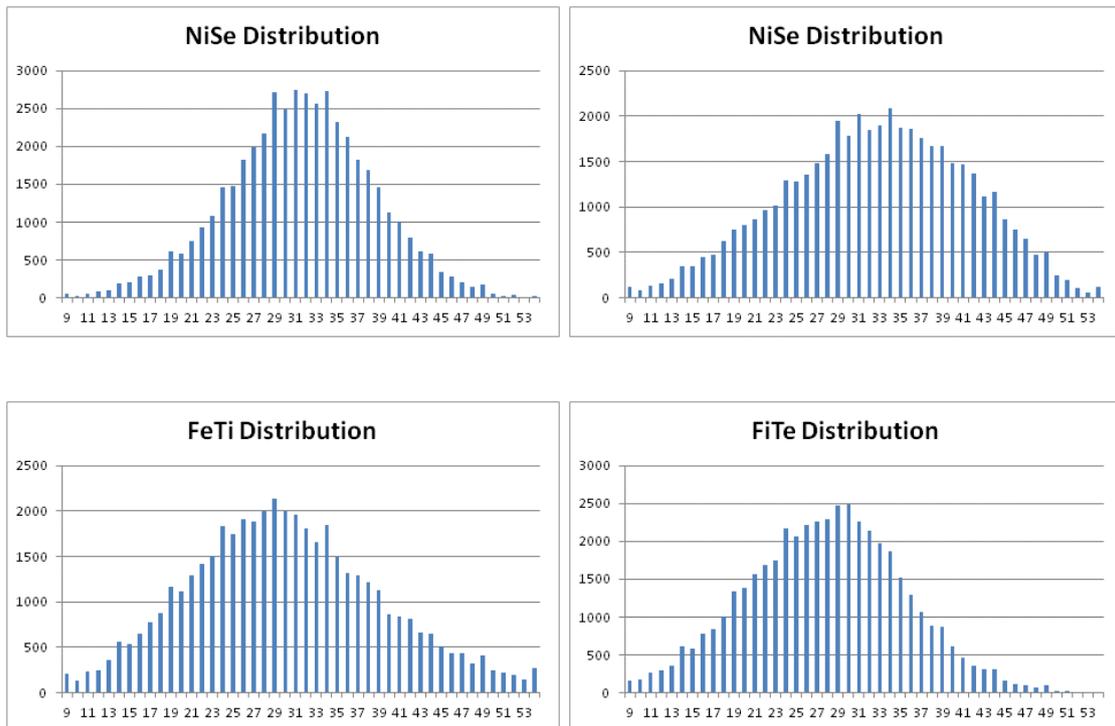
When tested for normality using Kolmogorov–Smirnov based on a random selection of 2,000 records (a restriction imposed by the software used, *Winstat for Excel*), the distributions were non-normal. A normal distribution is indicated by a *non-significant* result (p>.05) and the results for the four scales were as follows. NeSi: D = 0.039, p<.005. NiSe: D = 0.048, p<.001. FeTi: D = 0.058, p<.001. FiTe: D = 0.212, p<.001. Although it would likely be possible to normalise this data, the skews are probably due to the bias in this population. For example, women tend to reporting higher on Feeling functions (Fe, Fi) and men on Thinking (Ti, Te). Also, the skews are unimportant for the present analysis.

Differentiation vs. age

Each individual was assigned a score (referred to henceforth as '*diff'*) to indicate the overall degree to which they had differentiated a typological function at the expense of the opposite

function. This was calculated by summing the absolute differences between the individual score and the mean score for each scale. This was done in Microsoft Excel using the formula:

$diff$ = abs(NiSe-NiSe*mean*)+abs(NeSi-NeSi*mean*)+abs(FeTi-FeTi*mean*)+abs(FiTe-FiTe*mean*)

The *diff* score was then correlated with age, and the result supported the observation made by Isabel Briggs Myers and Mary McCaulley in the MBTI manual – as age increases, the strength of preference increases. This is shown in the graph below:

Figure 18 - Average Diff Scores by Age

Age ranges: 1 = Under 16, 2 = 16-19, 3 = 20-24, 4 = 25-29, 5 = 30-39, 6 = 40-49, 7 = 50-59, 8 = 60+

At this point, there does not seem to be any empirical support for any aspects of Jung's theory of the advancement of consciousness. However, it doesn't necessarily negate it quite yet. This graph shows averages for the whole population, but only a minority of people might manage to transcend the opposites. This was one of Jung's criticisms of Western consciousness – that it remains one-sided and inhibits the process of integration (e.g. Miller 2004, pp. 21-22). There are a couple of ways of testing to see if the pattern observed by Jung appears in the data

– to compare results in the East and West, and to examine the standard deviation of results by age range.

To compare the East/West results, the *diff* score was then averaged by country. This was to see if there is any support for Jung's assertion that Western consciousness is more one-sided than the East – i.e. 'the Eastern mind… looks at an ensemble [whereas] the Western mind divides… into entities' (Jung 1935b, p. 69). Each of the countries was allocated to East and West (see appendix B).

Figure 19 - Average Diff Scores (East)

Average *diff* score - east
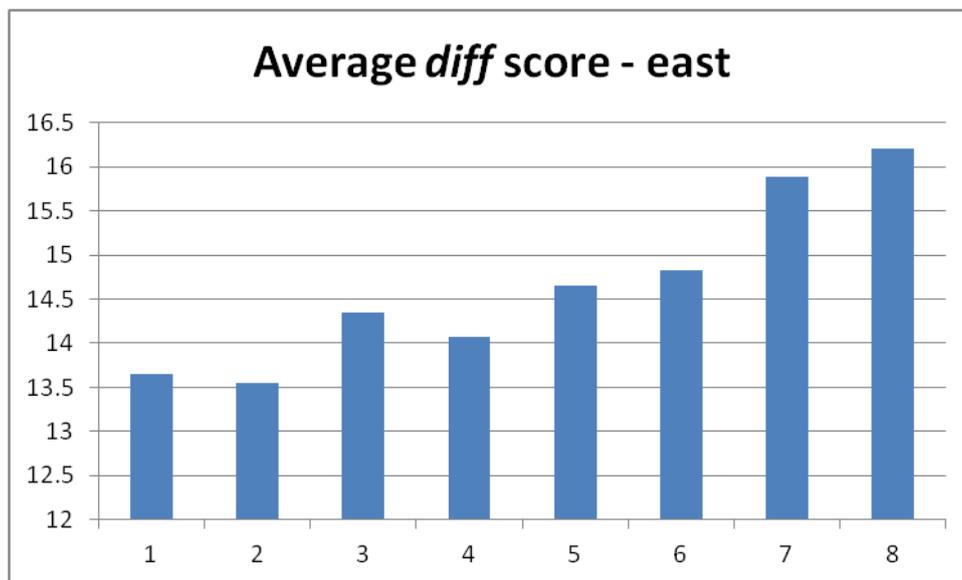
Figure 20 - Figure 19 - Average Diff Scores (West)
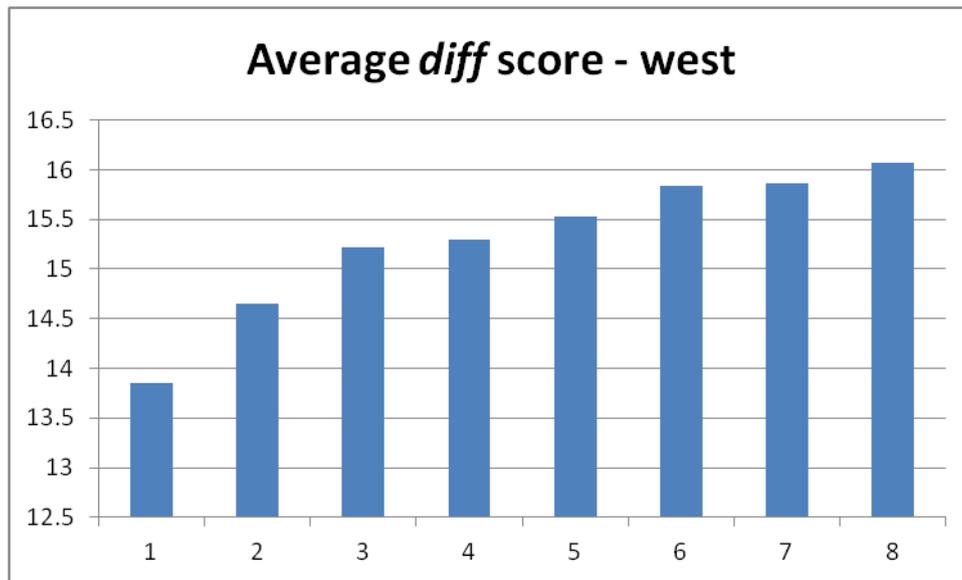
These graphs suggest two very different paths for the progression of consciousness in Eastern and Western culture – though it should be noted that the Western graph is dominated by the United States, which represents more than 50% of the total dataset. In Western consciousness, there is a rapid differentiation into early adulthood, and then a gradual increase through and beyond midlife. By contrast, the degree of differentiation in the East remains fairly low until after midlife, when it increases. The Western degree of differentiation in the mid-20s corresponds to the Eastern degree of differentiation in the mid-50s. For another perspective, the *diff* score was then calculated by country, for all ages in that country, and the results are shown in the graph below. Dark blue indicates a higher differentiation, lighter blue a lower differentiation, and grey indicates no data.

Figure 21 - Worldwide Diff Scores
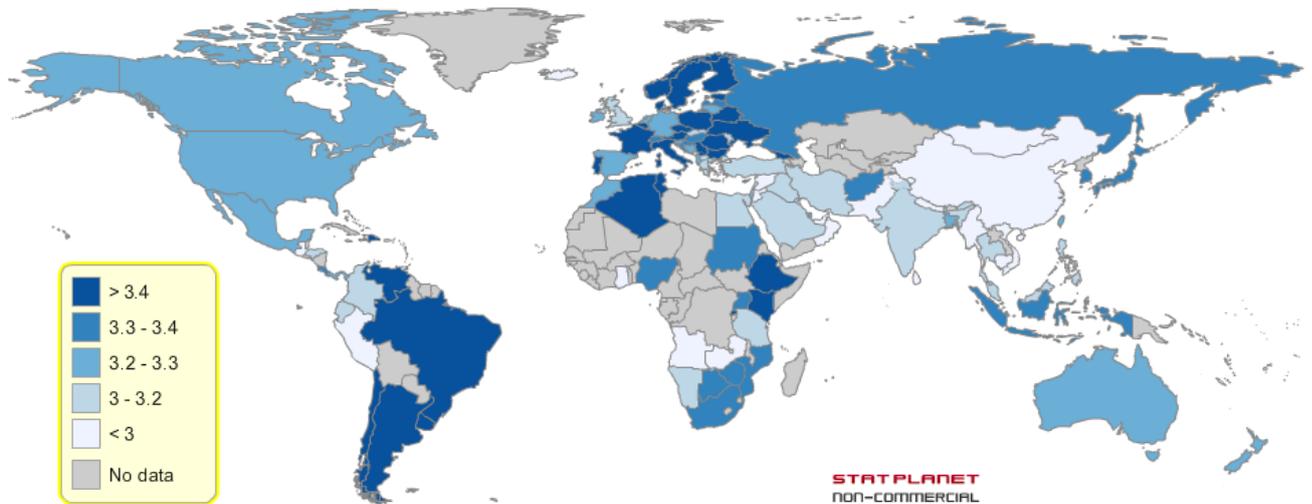
This suggests that mainland Europe and South America demonstrate the greatest degree of differentiation, whereas the US, Germany, Spain, Canada, and Australia are average. The UK and much of the Middle East is below average, with China and some nearby countries being amongst the least differentiated.

There may be other factors at play that are confounding the results, such as language issues. There is an implicit pre-selection that only people who can speak English will complete the questionnaire. Nevertheless, there are significant differences between countries that have English as a second language. This provides some support for Jung's notion that there is a difference in the degree of differentiation between East and West, and for the MMDI's potential to provide relevant information about the differentiation of functions that can be used in the present research.

Another test that can be applied, to assess the relevance of the MMDI to Jung's theories, is suggested by Jung's essay on *The Stages of Life*. He skips any description of development in the first half of life and suggests that development 'begins between the thirty-fifth and fortieth year' (Jung 1930/1931, p. 392). Thereafter, Jung proceeds to describe two divergent paths at

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midlife and beyond, because the 'wine of youth does not always clear with advancing years; sometimes it grows turbid' (Jung 1930-1931, p. 396). This suggests that there may be some people in later life for whom the degree of differentiation remains the same or increases, and others for whom it moderates. The advancement of consciousness does not universally advance for all in the second half of life, rather there is a spectrum between (broadly speaking) two groups. One proceeds towards individuation, but the other proceeds by 'reinforcing their narrow range of consciousness' (p. 393) to become 'dry and cramped in a narrow mould' (p. 394). The divergence of development paths after midlife can be assessed by calculating the standard deviation for each age group. This can only be a rough guide, for the distribution of *diff* scores is not normal but skewed:

Figure 22 - Distribution of Diff Scores
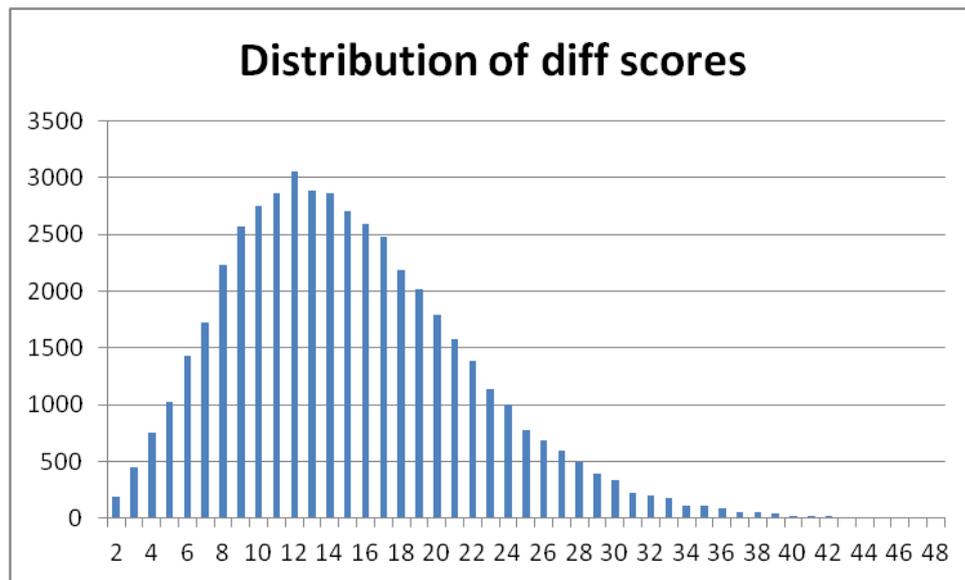
Nevertheless, if there is the divergence in later life that Jung proposes, then the standard deviation will also increase, to reflect the greater breadth of scores. The data suggests that this is the case for those in Western cultures (age band 5 is the 30s):

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Figure 23 - Standard Deviation of Diff Scores (West)
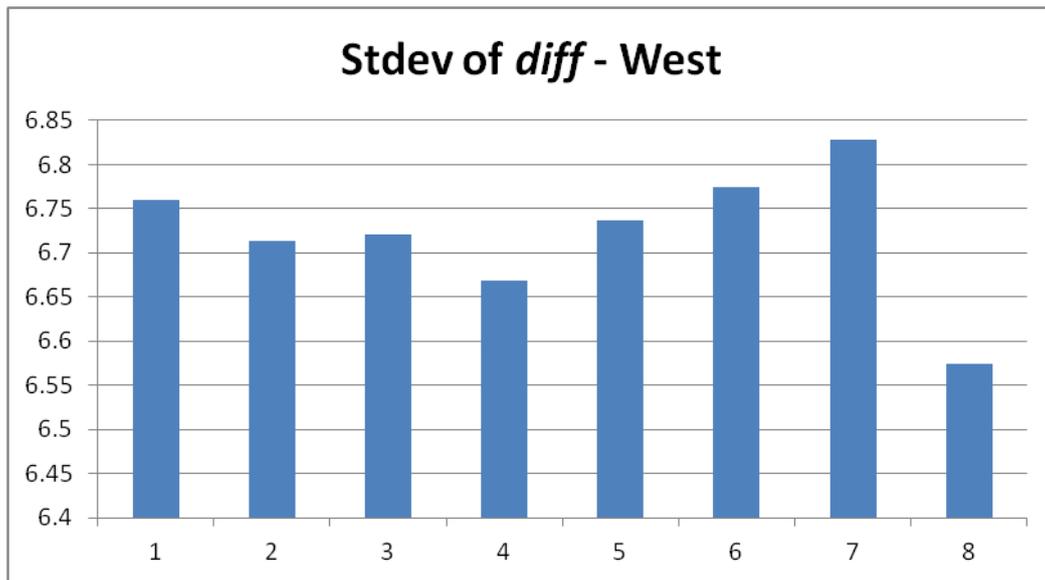
n=43,126

There is an anomalous result for the final age range, over 60s, which has a smaller standard deviation of all ages. The over 60s form the smallest but still sizeable group, with n=714. An earlier graph shows no substantial change in differentiation score, only this standard deviation score reduces. This suggests that there is probably something happening after retirement that is not immediately evident from the data. Given that the questionnaire tends to attract people interested in personality, careers, or leadership, this may be related to self-selection of the population, or a post-retirement change in attitudes, or the impact of later-life morbidity and mortality, or something else. Although such questions are intriguing, they are not directly relevant to the subject of the research so will not be investigated further here. However, the increase in standard deviation from the 30s onwards does lend some support to Jung's suggestion about the pattern of development at midlife and beyond in a Western consciousness. That is, development broadly follows two diverging paths. The comparative Eastern data is almost a mirror image, suggesting a different pattern of development that, again, changes from the mid-30s onwards:

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Figure 24 - Standard Deviation of Diff Scores (East)

Stdev of *diff* - East

A bar chart showing values for categories 1 through 8 on the x-axis with y-axis ranging from 5.8 to 7. Bars: 1 ≈ 6.40, 2 ≈ 6.30, 3 ≈ 6.38, 4 ≈ 6.60, 5 ≈ 6.94, 6 ≈ 6.85, 7 ≈ 6.71, 8 ≈ 6.63.
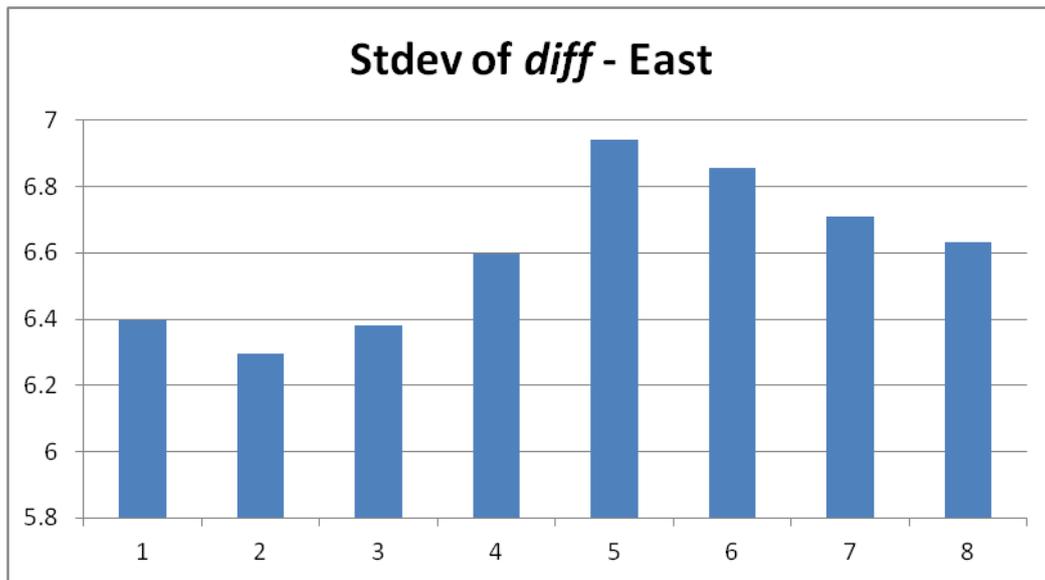
n=4,668

These graphs do not provide concrete evidence for Jung's hypotheses, they are at best post facto analysis that happens to be congruent with his analysis. Nevertheless, for the purposes of this research, it provides further support for the use of the MMDI questionnaire in measuring the advancement of consciousness, as defined by Jung, because there are patterns in the data that broadly follow his observations and predictions.

For the purpose of this research, however, there remains a significant problem with the interpretation of the *diff* score. When considered against the framework of the axiom of Maria, the meaning of a high *diff* score is clear – it reflects a highly-differentiated or one-sided approach that corresponds to stage two of the axiom. In contrast, a low *diff* score could have two, very different meanings. It could reflect a lack of differentiation, corresponding to stage one in the axiom, or it could reflect the transcendence of opposites, corresponding to stage four. The *diff* score does not provide any indication as to whether a low score is due to

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advancement, i.e. whether it reflects a lack of differentiation or the transcendence of opposites.

Measuring transcendence

The challenge of this aspect of the research is to modify the statements in the MMDI questionnaire so that the response can provide a simple number that reflects a vertical degree of advancement. The number needs to reflect progress in the four stages of the axiom of Maria: (1) unconsciousness; (2) differentiation of a typological function; (3) valuing both typological opposites; and (4) transcending both opposites. The problem in deriving this scale from the existing questionnaire lies primarily in the interpretation of middle scores – do they represent a lack of differentiation or transcendence? The solution is to introduce a second dimension to the existing statements that enables the respondent to indicate the reason for assigning a middle score:

<p align="center">**Figure 25 - New Transcendence Statement (example)**</p>
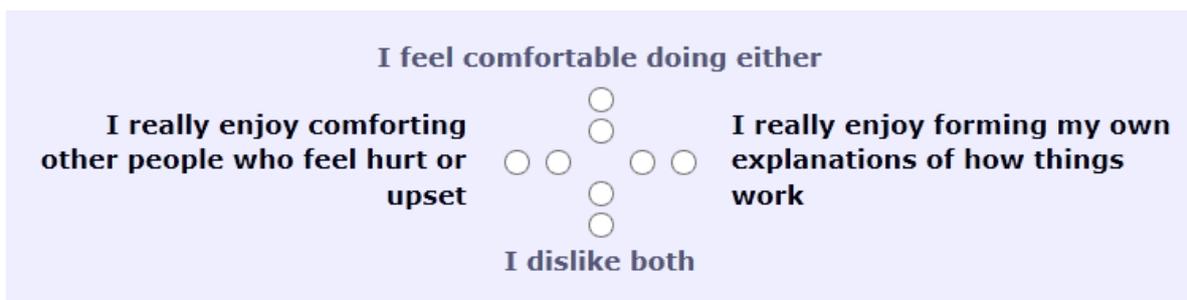
The horizontal left/right choice is exactly the same as the original MMDI, pitting two oppositional function-attitudes against each other. The vertical choice allows the respondent to assign different types of middle score. The statement at the top is intended to attract people who have transcended the opposites, whilst the statement at the bottom is intended to attract those for whom the functions are undifferentiated. The wordings are randomly reversed for

different statements, to avoid a top-bottom bias in responses. Scores are assigned according to the vertical position of the radio button chosen by the respondent:

Figure 26 - Transcendence Scoring
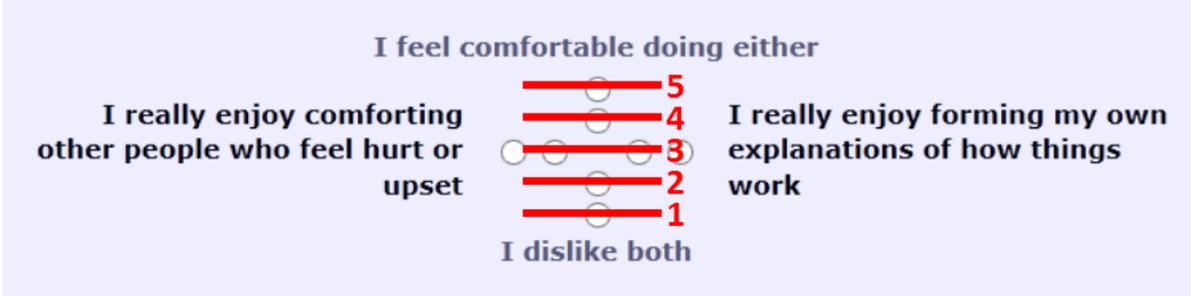
There are a variety of statements designed to attract undifferentiated functions, including 'I am annoyed by both', 'I dislike both', 'Both are unimportant', and 'Neither satisfy me'. Statements to attract responses where the opposites have been transcended include 'Neither of them annoy me', 'I like both', 'I feel comfortable doing either', 'Both are equally important', 'I am satisfied by both'.

During the pilot study, the feedback from some respondents suggested that the response could depend on the context or circumstances. This change was not adopted in the final version because the questionnaire was already introducing a greater level of complexity for the respondent, and adding in consideration of context might make the questions too complex. The phraseology was deemed good-enough to attract responses from those who have transcended the opposites. That is, such an individual is likely to express comfort in using both and is not likely to be swayed in the response by the fact they might use different behaviours in different contexts. Someone who has differentiated just one function would have different feelings for each side. One would be seen as more valuable and more comfortable, the opposite would be given less attention, and their use of it might be less mature or cause tiredness. An individual who has differentiated neither function would find it

difficult to distinguish between the two – perhaps to the extent of conflating them. In any future research, developing a context-dependent wording might be an avenue for further investigation. There are other forms of wording that could also be considered – such as making the wording on the vertical axis more directly relevant to the opposite function-attitudes, or introducing a projective element. However, these are again introducing extra levels of complexity, and the respondent is already weighing up four statements involving around 30 words or more. The decision was taken to keep it simple at this stage and use the results of the statistical validation – whether good or bad – to determine whether further development of the wording would be beneficial in post-doctoral research.

Consideration was also given to having a middle radio button, which could have some meaning for the respondent and potentially provide a little more (statistical) independence of the different scales being measured (but this would only be a little). For the purposes of statistical analysis, there is no need for an exact mid-point. The scales need to be linear (e.g. 1,2,3,4,5) with no gaps, but this linear scale is achieved in the current design without a centre button. Having four statements and no middle button forces some degree of self-reflection. For questions where the choice isn't immediately clear, there is a risk that a middle button would become a lazy way out. If the respondent cannot choose between the functions (left or right), then the purpose of the vertical axis is to elicit a reason why – and a middle button would not express any reason. Also, there is an implicit middle option, because respondents are told in the instructions that they can skip any question that they are unable to answer.

OTHER QUESTIONNAIRE SECTIONS

The two questionnaires discussed so far – aiming to measure mythological thinking and the advancement of consciousness – are at the heart of this research. However, there are four other components to the online questionnaire.

Participation information and consent

The online system starts with a participant information/consent form. Because of the reflective nature of the subject, the questionnaires would not be open to people currently experience a life trauma, mental illness, or undergoing psychotherapeutic treatment, nor to children. British Psychological Society ethical guidelines warn that respondents tend not to read the detailed information but skip to the 'submit' button. Therefore, questions were asked at the bottom of the form to ensure that the respondent had read the page, understood it, and fell into a suitable category to continue. If the questions are not answered correctly, the user is directed back to the commercial website. The participant consent form can be found in Appendix C.

Demographics

There is a questionnaire that collects a range of basic demographics (one question on the screen at a time). The items were chosen on the basis that they might potentially have an impact on the relationship between mythological thinking and individuation, and in order to check that there were no inadvertent biases (e.g. racial or gender) built into the questionnaires. Again, details can be found in Appendix C.

Religious tolerance questionnaire

Although this research is mainly concerned with examining the relationship between mythological awareness and the advancement of consciousness, the anticipated social benefit is greater religious tolerance. This refers to the attitude one takes towards a different belief system or faith and to its adherents. Some definitions of religious tolerance stipulate that, for it to count as tolerance, one must find the alternative beliefs objectionable and there must be good reasons to exercise restraint towards what is objectionable (Horton[143] 1998, p. 32). Although Jung does not discuss this explicitly in his letter, his standpoint appears to be based on a much wider assumption – that recognition of one's own view of God as myth removes the motivation to find another myth objectionable. Also, the idea of 'tolerance of the objectionable' corresponds with stage three of the axiom of Maria, not stage four. The above definition of religious tolerance, involving restraint, represents a stage in the development – the holding of the tension of opposites. It does not represent the final goal towards which Jung was working, which is the transcendence of the opposites. Therefore, the religious tolerance questionnaire in this research makes no assumptions about the nature of tolerance, but tests the attitudes that the respondent has towards people who have different religious beliefs or a different identity.

This questionnaire is included in the research as an informal demonstration of the potential social benefit that arises from Jung's proposal. This questionnaire is also new, but much less challenging and ambitious than the two main questionnaires. It uses a more conventional questionnaire design, using a series of statements about attitudes towards others' religious beliefs, alongside a Likert response scale (strongly disagree to strongly agree). The question statements seek to sidestep self-image where possible, i.e. they do not ask whether the person

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[143] John Horton is a professor of political philosophy.

considers themselves to be tolerant of other religions. Rather, they seek agreement or disagreement with statements that potentially reflect the respondent's own attitudes and beliefs about people who have a different religious outlook. This questionnaire does not affect the central hypothesis of the research but acts as a superficial reality check. It provides some indication as to whether advancing consciousness using the model described above leads to greater religious tolerance, which is the social benefit that Jung implies in his letter to Pastor Bernet.

Debrief/feedback

Finally, the system provides a debrief to the respondent, in the form of an automatically-produced report on an html webpage, in a PDF document, or in an e-book. The debrief provides a tentative description and interpretation of the individual results of the questionnaire. This is a much simplified version of some of the anticipated findings of the research. A copy of the debrief is included in Appendix C. Most of the wording is self-explanatory, but there is a categorisation of four types of myth which may need a little clarification. When thinking, in practical terms, what it means for someone to think mythologically, or to think of God (and other things) as a mythologem, there seem to be two key issues, which could be summarised in two questions. Are we aware that our thoughts and perceptions of truth and meaning are structured by underlying myths or stories (i.e. are we aware that our myth is broken)? And do we recognise that symbolic thinking can lead to multiple interpretations of truth and meaning, depending on the myth used to interpret it? This table shows how these two questions are related to the four states of mythological thinking that are discussed in the debrief:

Table 1 - Myth Categories (pedagogical)

		Aware that symbolic thinking leads to multiple interpretations?	
		No	*Yes*
Aware that own thoughts are	*No*	Literal	Metaphoric
structured by underlying myths?	*Yes*	Reflexive	Symbolic

These categories are not tested for specifically by the questionnaire, they were introduced for pedagogical reasons – to illustrate practically what mythological thinking might involve. The debrief page also provides a link to the commercial reports that were offered as an incentive to complete the questionnaires.

System design

Ethical approval was sought and granted for the proposed online questionnaire system. An online system was then produced as part of the research, to administer the participant consent form, present questionnaires, collect data, and provide the debrief materials. This did involve extensive system design, programming, and testing, but the detail of this is not central to the main research report. What the respondent saw on-screen is included in Appendix C. A summary of the components of the computer system is included in Appendix D. The detail of the underlying database design and the programs themselves are not included.

8 Validation/Reliability

INTRODUCTION

The main aim of the validation stage is to identify measures for three key constructs that are based on statistical evidence. The first is mythological thinking – which is the degree to which the individual thinks symbolically, in terms of knowledge representing multiple material, spiritual, and/or psychic realities rather than thinking literally in terms of true/false or meaningful/meaningless. The second is the advancement of consciousness (or individuation) – which is the transcendence of opposites (for this research, this is limited to typological opposites). The third is religious tolerance – a concept that has not been investigated in detail in this research but which is an anticipated benefit.

Data Collection

Data was collected online from mid October 2015 to the start of December. During this period there were a total of 100 responses recorded on the database, including incomplete entries, retests, and duplicates as well as valid records. A validation report was produced which only acted as proof-of-concept for the study because it did not contain enough data for meaningful factor analyses, nor for there to be a sufficient representation from all of the major demographic groups. The data collection period was therefore extended, with more active promotion of the research questionnaire to a wider audience, until 12th February 2016, at which point there were 499 responses recorded on the database.

Data preparation

The records were downloaded from the server MySQL database and imported into a local PC Microsoft Excel spreadsheet. Most of the validation analysis was undertaken using *Winstat for Excel,* apart from factor calculations which were done in PHP on the server and the calculated results downloaded afresh into Excel. After download of the data, it was cleaned, which involved removing unnecessary information such as the data used by the online system to administer progress through the online questionnaires. Also, responses where more than 10% of the questions were not answered were removed. For the remaining records with missing answers, the factor analysis software would automatically exclude records if necessary. There was no need to remove duplicate entries from the same person as the design of the online system and download program had avoided the creation of duplicate records. This left 382 records – 340 original responses and 42 retests – which were stored in a second copy of the spreadsheet. All subsequent changes were saved in different copies of the spreadsheet so that changes to the data could be tracked and reviewed.

Where possible, the radio button responses were then converted to Likert scales using Excel lookup tables. For the redesigned personality questionnaire, two scores were produced for each item. The first was a *transcendence* score, converted from the vertical axis – which is the main score being examined by this research. The second was an *opposites* score, which was in the original (pre research) form of the questionnaire. It assesses the extent to which one function attitude has been differentiated in comparison with its opposite function attitude. The following example is for an item that pits *extraverted Feeling (Fe)* against *introverted Thinking (Ti).*

Figure 27 - Consciousness Scoring
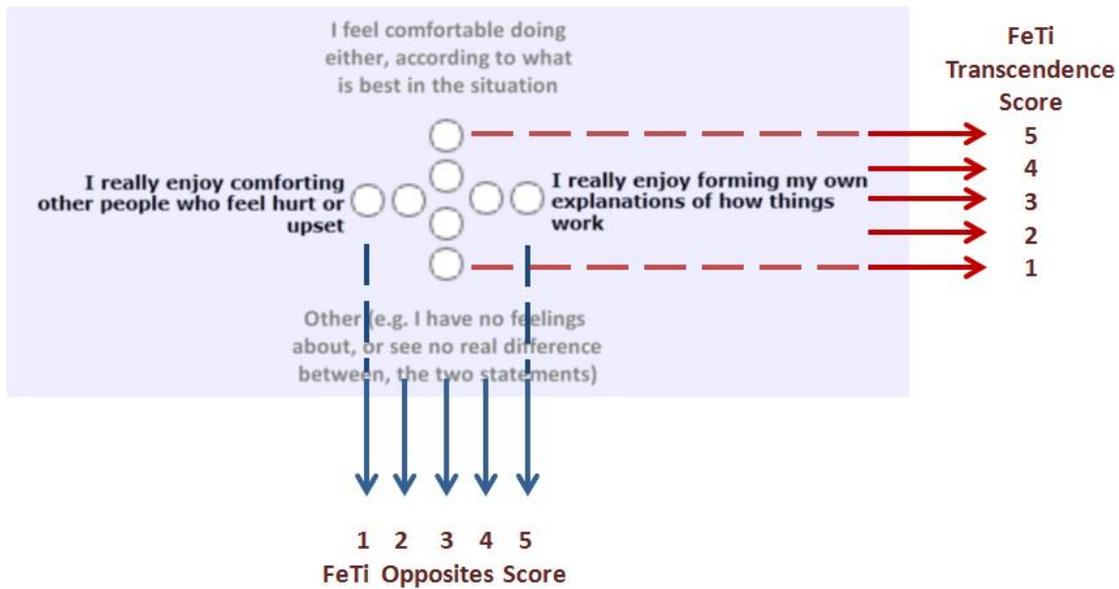
On the participant's screen, these statements were sometimes reversed, left to right and/or top to bottom. The online system had a record of the orientation for each question and so provided the downloaded results in a consistent format. For example, for the FeTi scale, 'Ti' statements always attracted high scores and 'Fe' low ones, whether they were on the left or right. Also, transcendent scores were always high and undifferentiated scores always low, whether top or bottom.

For each item in the new mythological style questionnaire, there were two sets of radio buttons from which four scores were derived: the *truth* of a statement (vs. falsehood); whether it is personally *meaningful* (vs. insignificant); and the degree to which each of truth and meaning were being regarded as *allegorical/symbolic* (vs. literal). The diagram, right, shows how the *truth* and *truth symbolism* scores were derived. The *symbolic* scores are the main focus of this research.

Figure 28 - Mythological Scoring
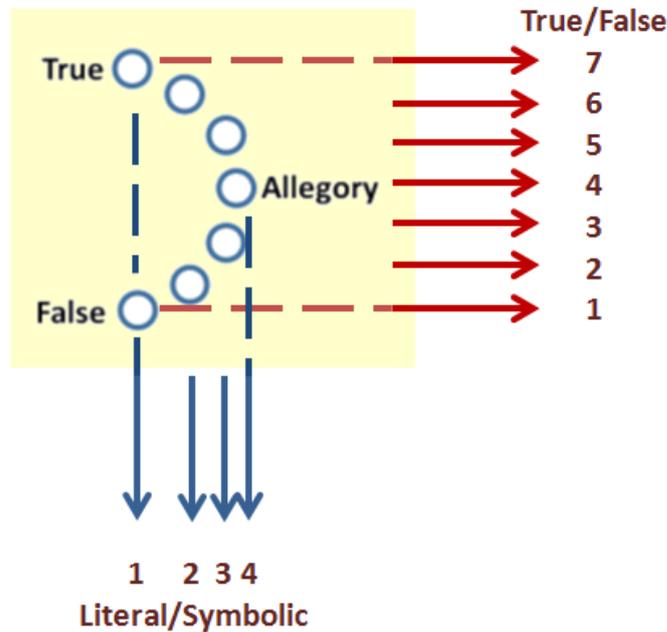
For most of the demographic information, the responses were categorical. There were some quantitative responses, which were assigned scores as per the following tables:

Table 2 - Demographic Scales (a)

Score	Age	Contentment	Education	Meaning
1	18-19	I am very unhappy	Little or no education	My life is devoid of any purpose or meaning
2	20-24	I am quite unhappy	School age 16 (e.g. UK GCSEs)	I feel there is something missing
3	25-29	I am in the middle	School age 18 (e.g. UK A Levels)	I am in the middle
4	30-39	I am quite content	University degree	It is somewhat meaningful
5	40-49	I am very content	Post-grad (e.g. MA, MSc, or PhD)	I have a strong sense of purpose/meaning
6	50-59			
7	60 or over			

Table 3 - Demographic Scales (b)

Score	Training	Workfeelings	Workrelations
1	None	I hate it	I am unemployed
2	Less than 50 days of training	I dislike it	I work independently
3	Between 50 and 300 days of training	I could take it or leave it	I work for a boss
4	1-2 years	I like it	I supervise or manage other people
5	3-4 years	I love it	I manage people who are managers
6	5 years or more		

DEMOGRAPHIC ANALYSIS

The demographics reveal some biases in the population, which may be due to the career focus of the website (teamtechnology.co.uk) from which most participants came and the fact that volunteers were incentivised by the provision of commercial personality, career and leadership reports. Not all the following numbers add up to 340 (the number of completed submissions) because in some cases the respondent did not answer all the demographic questions.

There was a fairly broad age distribution, slightly skewed with the largest number of respondents (138) in their 20s. There were substantially more women (202) than men (134), with two people declaring themselves as transgender. Marital status varied with nearly half never having married (160), and another sizeable group being currently married (93). Some were living with a partner (35), divorced (19), or remarried (19). There was a small group (9) for the remaining categories of civil partnership, widowed, and currently separated. Most respondents had no children (220). Of the remainder, most had their own children (98) with a small number having adopted or stepchildren (16).

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Respondents were predominantly white (239) with various other skin colours also being declared, including light brown (42), yellow (29), dark brown (9), black (6), and others (11). Most were heterosexual (291) with a substantial minority declaring themselves to be bisexual (34) and some as lesbian/gay (10).

The vast majority were from the United States (136) and the United Kingdom (61). There was a sizeable representation from three other English-speaking countries – Australia (17), India (12), and Canada (10). 38 other countries were also represented. Only 248 participants declared their first language to be English. There were high numbers of Spanish (11), French (7), and Chinese (6 each of Cantonese and Mandarin). Overall, there were 23 different first languages.

There was a high number of students (53) and unemployed (19). For the remainder, there were 139 different occupations represented. The average educational level was high – 91 post-graduates (or equivalent), 127 educated to degree level, 96 to A-level, and 17 to GCSE, with 9 either not responding or declaring they had 'little or no education'.

Most were brought up as Christian (225) though only half of those now counted themselves as such (116). The majority had moved to one of three belief systems – agnosticism, atheism or the category of 'spiritual but not religious'. There was also representation from other mainstream religions including Buddhism (7 brought up, 10 currently practicing), Hinduism (12 and 7), Islam (13 and 12), Judaism (10 and 8) and other religions (11 and 14).

MYTHOLOGICAL THINKING

This questionnaire seeks to indicate the degree of mythological (symbolic) thinking, as opposed to using literal categories. The former interprets phenomena as representing multiple

truths of different forms (material, spiritual, psychological, metaphorical, etc.). The latter sees things as either being true or false, or meaningful or insignificant.

Distribution of Responses

The mythological style scales are scored horizontally. Marking a statement as true/false or meaningful/insignificant is a literal response, whereas allegorical/symbolic is a symbolic response.

Figure 29- Myth Response Distributions
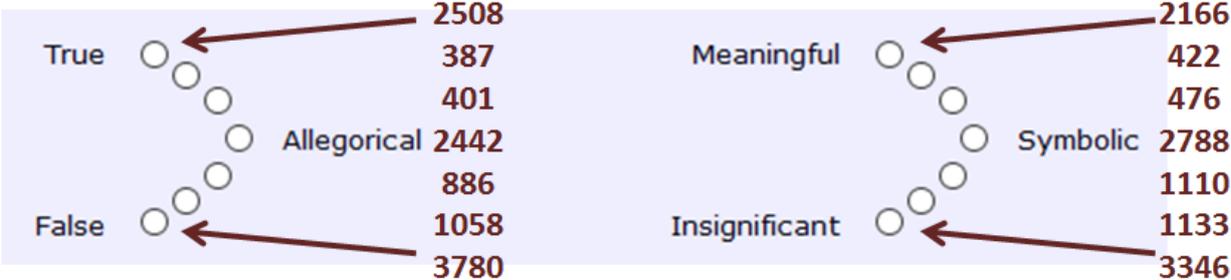
The distribution of responses is significant (Chi Square, p<.001) and on the literal-symbolic scale is non-normal (Kolmogorov-Smirnov, p<.01). This suggests that Spearman Rank needs to be used in all calculations of correlation because the main alternative method (Pearson) requires normal distributions. The raw results shown above suggest that the respondents tend to think differently about the two topics of truth and meaning. There are slightly more literal responses on the truth scale – 6288 true/false responses versus 5174 partly or wholly allegorical (Chi Square, p<.001). On the other scale, this is reversed – the meaningful/insignificant responses (5512) are slightly fewer than those partly/wholly symbolic (5929), though again statistically significant (Chi Square, p<.001). This might suggest it is easier to tell whether something is true or not, whilst the question of meaning is less clear cut.

There is also a difference between items in the top half and those in the bottom. For truth, 75% of the top half results are marked as wholly true, with only 25% between truth and allegory. In the bottom half, 66% are marked as wholly false. This is a statistically significant difference (Chi Square, $p<.001$) that might suggest it is harder to think allegorically about something that is also viewed as true. For meaning, there is a similar result. 70% of responses in the top half are flagged as meaningful, but only 59% of those in the bottom half (Chi Square, $p<.001$). Again, this might suggest it is harder to think symbolically about something that holds significant personal meaning. These results might also support Thury & Devinney's assertion that it is easier to recognise the deeper significance of a myth when it is literally false. However, it is also possible that the curved response format may have influenced the response patterns, the investigation of which is a matter of statistical theory and beyond the scope of the present research.

The table, below, shows the distribution of literal responses – a few people gave mostly literal responses, a few gave hardly any, but most people gave a mixture of literal and allegoric/symbolic responses.

Figure 30 - Distribution of Literal Responses
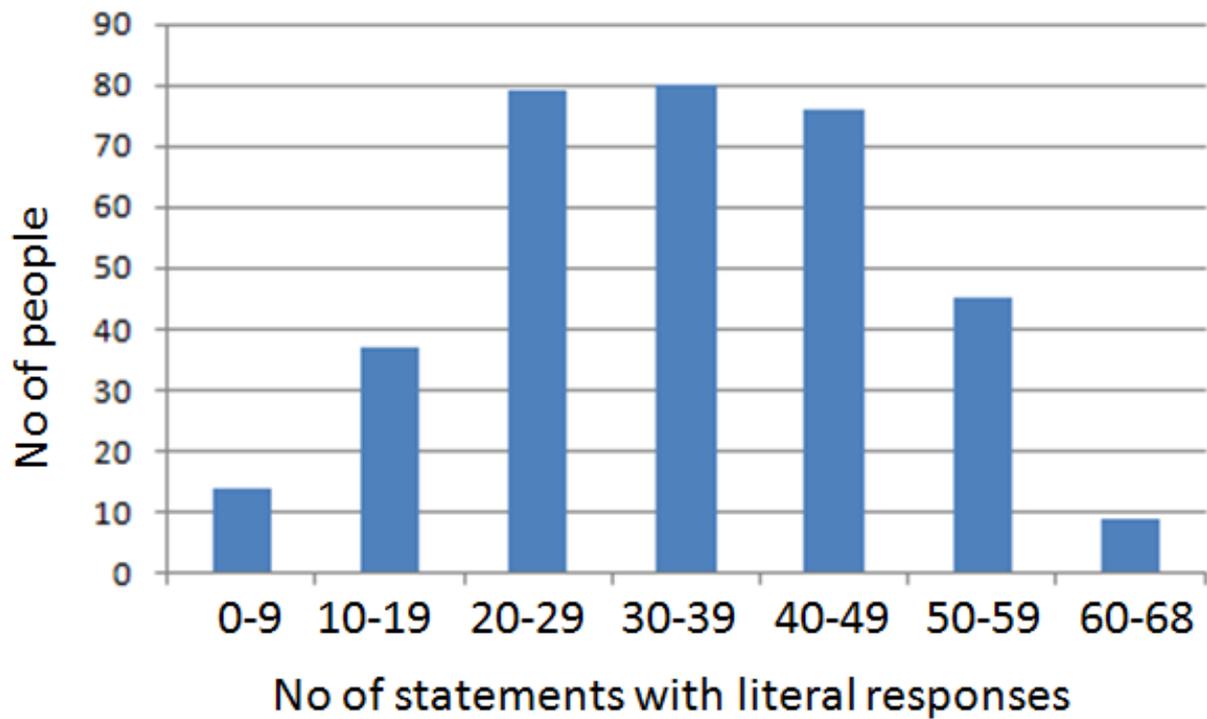
Factor Analysis

For the factor analysis of myth statements, there were 259 valid cases – suggesting a sizeable minority of respondents were unable to answer a number of the questions. The first factor analysis produced 9 factors.

- **Factor 1** was loaded on by 14 items relating to the literal vs. allegoric *truth* of *religious* statements. There were two other items loading on the factor, relating to a scientific truth and a psychological truth – though both statements had a religious element in adding a rider that they were not due to divine causes. The CA reliability was 0.92 and retest reliability was 0.79 (p<.01).

- **Factor 2** was loaded on by 12 items relating to the literal vs. symbolic view of the *meaning* of *religious* statements. There were no other items loading on it. The CA reliability was 0.9 but retest reliability was only 0.61 (p<.001).

- **Factor 3** was loaded on positively by 6 items, and slightly negatively by one. The CA reliability was 0.63 but, when the slightly negative item was removed, this rose to 0.7. However, retest reliability of the improved factor was only 0.60 (p<.05). Two items are for the truth and meaning of 'miracles (supernatural events) do happen', and two are for the truth and meaning of 'God is a psychological illusion'. The other two items relate to there being meaning in forms of life after death (the truth of which loaded on factor 1, the *religious truth* factor).

- **Factor 4** was loaded on positively by the 6 mathematical responses (three statements, loading on the truth and meaning of each). It had a CA reliability of 0.77 but retest reliability of only 0.48 (p<.01).

- **Factor 5** was loaded on positively by 7 items, five of which related to the meaning of scientific statements (the remainder related to the truth of two of them). It had a CA reliability of 0.66.

- **Factor 6** was loaded on by 5 factors, mainly related to the meaning of evolution. CA reliability was 0.69.

- **Factor 7** was loaded on positively by 9 items. Eight of these were the truth and meaning of four statements about contradictions inherent in the world and the role of the mind in constructing reality. The additional item concerned the truth of childhood experiences in shaping the adult personality. CA reliability was 0.7, but retest reliability was only 0.56 (p<.001).

- **Factor 8** was loaded on by 4 items, relating to statements that had a cosmological implication (e.g. about life elsewhere in the universe). It had a CA reliability of 0.61.

- **Factor 9** was loaded on by 2 items, the truth and meaning of the statement 'The highest human potential lies within oneself'. CA reliability was 0.74 but retest reliability was only 0.41 (p<.01).

Most of these factors could potentially have a relevant meaning. The first factor is the closest to the concept of thinking about God mythologically (if God is viewed as a religious truth) and it produced good reliability data. Most other factors also had a clear meaning (for example, viewing mathematical statements allegorically or symbolically). However, many of the factors fell short of the statistical standard. The process of refinement of these factors involved going through a number of iterations of removing poorly performing items and redoing the factor analysis, until a group of factors emerged that met the strict statistical criteria *as well as* providing a clear and coherent meaning. The steps involved were:

1. A factor analysis was conducted involving the items in the questionnaire using *Winstat for Excel.*

2. A program was written or modified to interrogate the database and calculate a score for each factor that emerged from the factor analysis. This was a simple formula that involved adding the items that loaded positively on each factor (or adding the reversed score when it loaded negatively, using the formula '6 – itemscore') and then dividing by the number of items.

3. The results were downloaded to Excel and Cronbach Alpha (CA) reliability scores were calculated for each factor.

4. Retest reliability was calculated by correlating test and retest factor scores. This used responses voluntarily submitted by participants, typically within 1 to 5 weeks of having completed the original questionnaire. As this was an anonymous questionnaire, retest records were matched to the original tests using the best match

of job title, religion, and IP address. There were 42 responses, but 10 could not be adequately matched, so test-retest reliability was computed for 32 respondents.

5. The factor analysis would only be accepted if:

   a. all the factors that emerged produced reliabilities (both CA and test-retest) of 0.7 or above, and

   b. coherent meaning could be observed for each factor according to the theory developed earlier in the research.

6. If some factors failed to meet the reliability threshold, an iterative process of refinement would begin by removing all items below a certain loading threshold (typically starting with 0.3) and going back to step 1 to repeat the factor analysis with that reduced item set. If any items in the repeat factor analysis then fell below the chosen threshold, those items would also be removed, and the factor analysis repeated again. If this still failed to produce a set of factors that met the reliability threshold, the item loading threshold would be increased (typically by 0.1 or 0.05) and again the process repeated from step 1 with a new factor analysis.

7. If the iterative process of refinement failed to produce a reliable set of factors, the data was reviewed manually to select the most promising items and include those in a new factor analysis.

During this process, many factors were produced in each iteration. The table below summarises the process of arriving at the final factor analysis. The full results for the first factor analysis are contained in Appendix A, the results for the final factor analysis are shown below.

Table 4 - Myth Factor Analysis Iterations

Iterations	No of Factors	No of Items	Comment	Action
1	9	68	All but 2 loadings were >.03. All but factor 1 had poor reliability.	Remove items loading <.3
2	9	66	Similar results to 1st iteration.	Remove items loading <.4
3	6	56	Unclear factors	"
4	6	52	Unclear factors	"
5	5	50	Unclear factors	"
6	5	49	Factors more coherent, but poor reliability for all but factor 1.	Remove items loading <.5
7	5	41	Factors 3 and 5 unclear.	"
8	4	38	3rd factor unclear, with half its items having very low loadings.	"
9	4	33	Mostly coherent factors (religious truth, meaning, science & maths) but factor 1 mixed, and low reliabilities.	Remove items loading <.6
10	3	27	Factor 1 mixed religious truth and science items, poor loadings on latter.	"
11	2	24	Mixed factors – religious truth and science, religious meaning and maths.	Remove remaining science and maths items.
12	2	21	Clear factors, religious truth and meaning, but poor retest reliability of latter.	Start afresh with factor analysis of 14 religious truth statements.
13	1	14	Most items load >.06, but one loaded negatively (-.15)	Remove negative item.
14	1	13	Good reliability, above 0.7.	

Final Factor Analysis

n=323[144]

Table 5 - Myth Final Factor Analysis Eigenvalues

Eigenvalues

Factor	Eigenvalue	Variance (percent)	Percent cumulative
1	8.02	61.67	61.67

Table 6 - Myth Final Factor Analysis Loadings

Varimax factor loadings

	Factor 1	Commu-nality
msqRet5	0.85	0.73
msqRet10	0.85	0.72
msqRet12	0.83	0.69
msqRet7	0.83	0.68
msqRet3	0.82	0.68
msqRet8	0.82	0.67
msqRet0	0.82	0.67
msqRet2	0.80	0.64
msqRet1	0.78	0.61
msqRet4	0.76	0.58
msqRet11	0.76	0.58
msqRet9	0.62	0.38
msqRet13	0.62	0.38
Sum of Squares	8.02	8.02
Percent of Variance	61.67	61.67

During the process of refinement, some of the meaning of the factors became confused, with a mix of items that did not have a clear meaning, though this was resolved by the final analysis. At the end of the refinement, there was only one factor remaining, which was close to the first

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[144] This final number of records is greater than the number of records at the start of the factor analysis – which was 259. This is because the factor analysis can only include records where there is a complete response. When certain items are excluded from the next factor analysis, this allows some records to be included that had previously been excluded, because they now contain a complete set of responses (for the new, smaller subset of items).

factor in the original analysis. It contained items that indicate the degree to which a religious truth is interpreted literally (true/false) versus symbolically (as being allegorical). It had a CA reliability of 0.95, and a retest reliability of 0.78. It will be used as the scale for *mythological thinking*. In a Kolmogorov-Smirnov test, the distribution of scores in this scale was non-normal (p<.01):

Figure 31 - Distribution of Literal/Symbol Scores
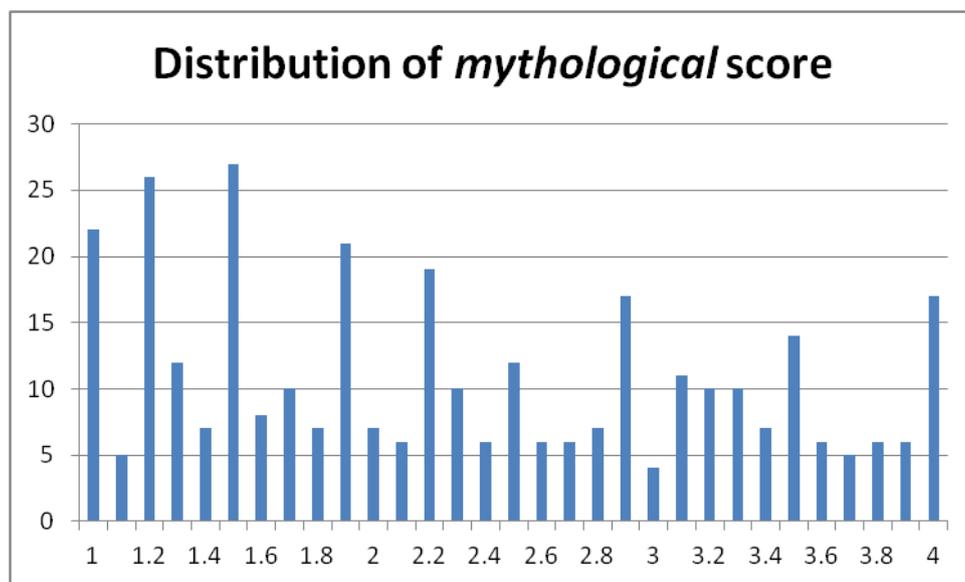
This suggests that, for correlations, Spearman Rank should be used rather than Pearson, because the latter assumes a normal distribution. It also raises a question over the use of ANOVA, t-TEST, and regression tests, which also assume a normal distribution. However, for larger sample sizes, these tests are robust to the assumption of normality. As there are over 300 records in the sample for analysis, these will be used without the need for transformation of the scores or the substitution of other tests.

ADVANCEMENT OF CONSCIOUSNESS

Distribution of Responses

When applying the Kolmogorov-Smirnov test for normality, the MMDI transcendence items report a non-normal distribution (p<.001). If this pattern is repeated with those items finally chosen for inclusion in the transcendence factor, this again would confirm the need to use Spearman-Rank for correlations. The diagram, below, combines the distribution of responses to all 36 questions in the MMDI. In the transcendence scale, responses on the horizontal line (red radio buttons) all count as the same value (equal to the value 3 in the Likert scale). The vertical response buttons record scores of (undifferentiated) 1, 2, 4 and 5 (transcended).

Figure 32 - Distribution of Consciousness Responses
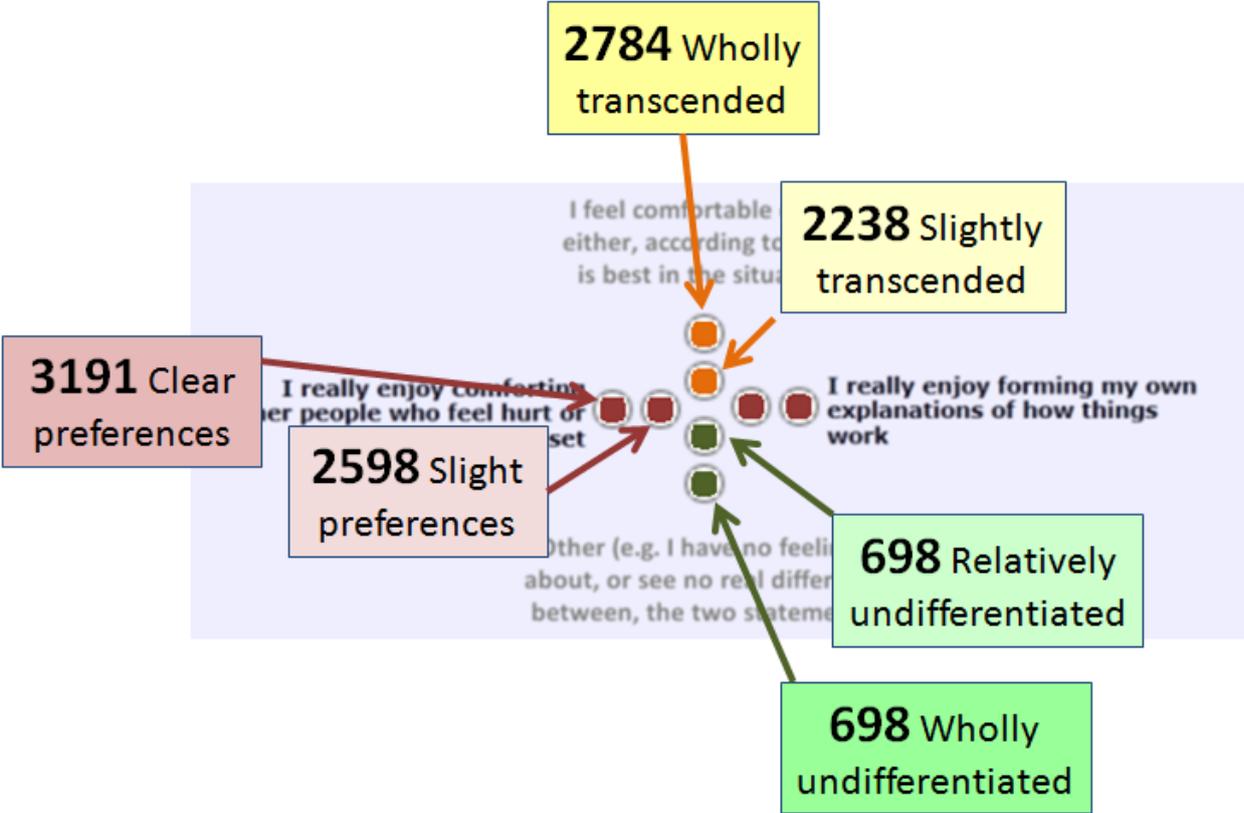
When responding on the vertical scale, far more responses were assigned to the transcendent questions (5022) than the undifferentiated ones (1396) – which is statistically significant (Chi Square, p<.001). More responses were assigned on the vertical scale (6418) than the horizontal scale (5789) – which is again statistically significant (Chi Square, p <.001).

However, the pattern of responses on the horizontal scale is different to that expected, based on data from the original MMDI questionnaire, which consists just of a six-point horizontal scale. The aim of introducing the vertical axis was to allow those who responded with the middle two buttons (on the original questionnaire) to indicate why they had chosen a middle score. That is, it asked the question whether they chose to respond in the middle because they had transcended the opposites or were unable to differentiate between them. The pattern of responses on the revised, research version of the MMDI suggests that the horizontal allocation of scores has been distorted by the introduction of the vertical axis. This can be illustrated by comparing the distributions of responses from the two forms of questionnaire.

Figure 33 - Old/New MMDI Distributions

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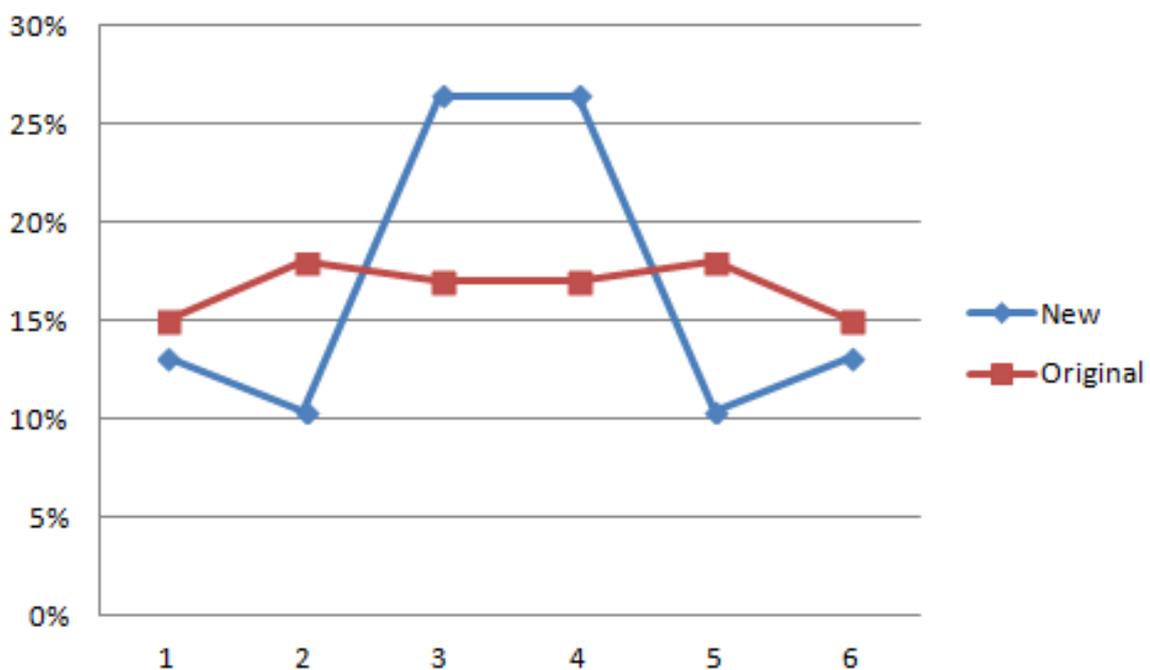
In this diagram, the red line represents the horizontal distribution of responses across the six radio buttons in the original questionnaire. The blue line represents the horizontal distribution of responses in the research version – it reallocates responses on the vertical axis equally between two notional middle buttons. The two outer-extreme buttons attracted a similar percentage of responses between the two questionnaires (the difference is not significant in a Chi Square test). However, the number of responses to the next pair of buttons (positions 2 and 5) decreased significantly (Chi Square, p<.001). Investigation of the reasons for this is beyond the scope of the present research, which will make the assumption that the techniques being used are valid. The caveat is noted, however, that the cross-format may have influenced the results.

Factor Analysis

When looking to conduct a factor analysis, there is some existing data that can provide a baseline comparison. The MMDI Technical Manual (Myers 2015) shows that the original (pre-research) version of the questionnaire produced four factors (n=999), which correspond to the four opposite function-attitudes in psychological type theory. In that questionnaire, both the factors and the items were given names showing the oppositions – *NiSe*, *NeSi*, *FiTe*, and *FeTi*. In the research questionnaire, the horizontal scale – for the 'opposite' scores of opposing function attitudes – was subject to an exploratory factor analysis using *Winstat for Excel* to check that it would produce a similar result. The settings used were Kaiser normal varimax rotation with a minimum eigenvalue of 1 per factor (these settings were also used for all subsequent factor analyses). The software automatically excluded records with missing responses, reporting 316 valid cases. This produced four factors with almost completely expected results. Each factor was loaded on by the correct nine items – *FeTi* items for factor 1, *NiSe* for factor 2, *FiTe* for factor 3, and *NeSi* for factor 4 – with the exception that one *NeSi*

item loaded on factor 3. This suggests that, as far as the horizontal scale is concerned, the new format of questionnaire is producing similar results.

Factor analysis

For the vertical scale scores, which indicate the degree of transcendence, the MMDI item names were prefixed with the letters *Tr* to indicate it is the transcendence score. The exploratory factor analysis for the (vertical) MMDI transcendence produced four factors. The first factor analysis is included in an appendix. Not all factors were reliable, and not all had clear or consistent meanings:

- **Factor 1** was loaded on positively by six *TrNeSi* items and seven *TrNiSe* items. This factor appears to be the transcendence of the sensing and intuition functions. CA reliability was 0.74, retest reliability was 0.77 (p<.001, n=32).

- **Factor 2** was loaded on positively by eight *TrFeTi* items, one *TrFiTe* item and one *TrNeSi* item. This factor appears to be the transcendence of the extraverted feeling and introverted thinking function-attitudes. CA reliability score was 0.69, just below the desired threshold. However, when the two odd items – *TrFiTe* and *TrNeSi* – were removed from the calculation it yielded a CA reliability score of 0.7. Retest reliability for the revised factor was 0.84 (p<.001).

- **Factor 3** was loaded on positively by four *TrFiTe* items and one *TrNiSe* item. It was also loaded on negatively by three items, one each for *TrFiTe, TrFeTi,* and *TrNeSi*. This factor appears to involve the transcendence of the introverted feeling and extraverted thinking, but is also picking up something that was not intended in the design. For the items that loaded negatively, the phrasing of the transcendence items (top and bottom of the cross on the questionnaire) was the same. They were the only three where the vertical axis was inverted and the top of the cross said 'I dislike both'.

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The CA reliability score was only 0.32, which could not be improved by removing the negative items. Given the poor CA reliability score, test-retest reliability was not calculated for this factor.

- **Factor 4** was loaded on positively by two *TrFiTe* items, and negatively by three items, one each for *TrFiTe, TrNiSe,* and *TrNeSi.* This factor also seemed to be picking up something not included in the design, as the items that loaded negatively were inverted and used the phrase 'I am annoyed by both' at the top (one other item with that phrase loaded positively on the NS factor). This factor therefore appears to be only indirectly related to the typological functions and perhaps more related to negative feelings. The CA reliability was only 0.23.

The process of refinement of the items for the factor analysis involved the following steps:

Table 7 - Transcendence Factor Analysis Iterations

Iteration	No of Factors	No of Items	Comment	Action
1	4	36	3rd and 4th factors had poor unreliability and unclear meaning.	Remove items loading <.3
2	3	29	2nd factor unclear meaning, and an unexpected negative loading	"
3	3	26	3rd factor unclear, and an unexpected negative loading	"
4	3	24	3rd factor unclear, and an unexpected negative loading	Remove one item <.3 and negative item
5	3	22	3rd factor unclear, poor reliability	For next run, revert to items in original factors 1 and 2
6	2	21	Clear meaning to factors, CA and retest reliabilities 0.7 or above.	"

Final Factor Analysis

n=325

Table 8 - Transcendence Final Factor Analysis Eigenvalues

Eigenvalues

Factor	Eigenvalue	Variance (percent)	Percent cumulative
1	3.03	14.44	14.44
2	1.22	5.79	20.23

Table 9 - Transcendence Final Factor Analysis Loadings

Varimax factor loadings

	Factor 1	Factor 2	Commu-nality
TrNiSe5	**0.50**	-0.00	0.25
TrNiSe1	**0.50**	0.09	0.26
TrNiSe4	**0.49**	-0.14	0.27
TrNiSe2	**0.48**	0.12	0.25
TrNeSi5	**0.46**	0.14	0.23
TrNeSi4	**0.39**	0.14	0.17
TrNeSi8	**0.38**	0.21	0.19
TrNiSe0	**0.38**	-0.01	0.14
TrNeSi2	**0.36**	0.22	0.18
TrNiSe6	**0.36**	0.16	0.15
TrNiSe7	**0.29**	0.19	0.12
TrNeSi0	**0.28**	0.18	0.11
TrNeSi3	**0.28**	0.25	0.14
TrFeTi2	0.03	**0.56**	0.31
TrFeTi4	0.11	**0.53**	0.29
TrFeTi6	0.03	**0.52**	0.27
TrFeTi0	0.11	**0.51**	0.27
TrFeTi5	0.16	**0.46**	0.24
TrFeTi8	0.02	**0.38**	0.14
TrFeTi3	0.24	**0.31**	0.15
TrFeTi1	0.23	**0.27**	0.12
Sum of Squares	2.28	1.97	4.25
Percent of Variance	10.86	9.37	20.23

The final factor analysis used the items that, in the first factor analysis, loaded on the first two

(reliable) factors. These two factors are both conceptually coherent and have good reliability.

SN items load on factor one and TF items (more specifically FeTi items) on factor two. CA reliability for the SN factor is 0.74, retest reliability is 0.77 (p<.001, n=32). CA reliability for the TF factor is 0.7, retest reliability is 0.84 (p<.001). For the purposes of this research, the overall *transcendence score* is calculated by taking the average of the two factor scores that have produced reliable results:

$$(SN\ factor + TF\ factor)\ /\ 2.$$

Test-retest reliability for the combined *transcendence* score is 0.87 (p<.001). In contrast to the whole data set (i.e. using all items), the Kolmogorov-Smirnov test showed a normal distribution for the overall *transcendence* score (p = 0.57):

Figure 34 - Distribution of Transcendence Scores
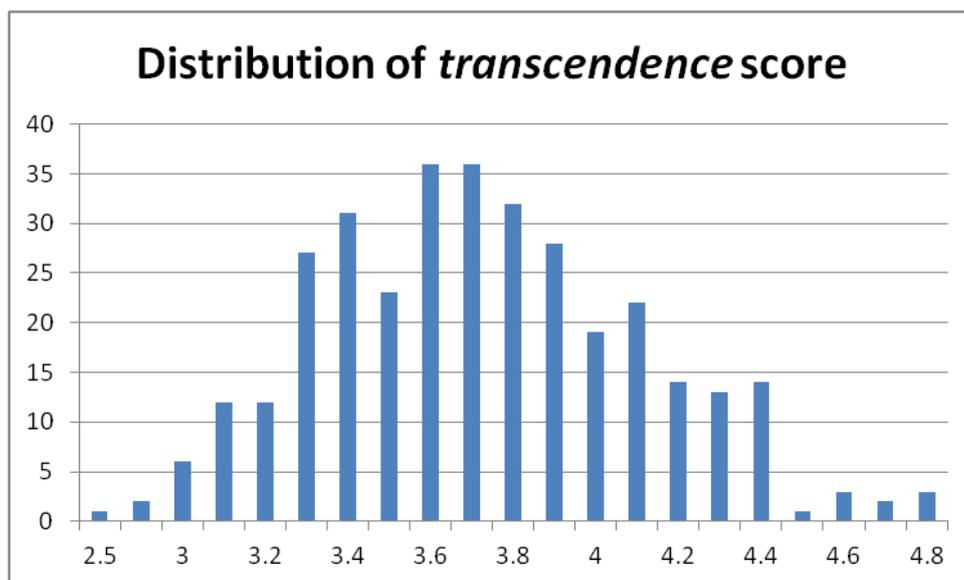
For correlations involving the *transcendence* score, therefore, either Pearson or Spearman Rank are suitable. However, in view of the non-normal distribution of *mythological thinking* scores, Spearman Rank was used in all subsequent correlations for consistency. The mean of the *transcendence* score is 3.7, and more than 97% of scores were above 3. This suggests that

it is usual for the population to transcend the opposites to some degree, and an undifferentiated personality is relatively rare.

Other Validation of Advancement

At the beginning of the empirical stage of the study, two data points were identified that could help validate the notion that the MMDI transcendence scale is indicative of advancement of consciousness – correlation with educational level and age. There were no statistically significant correlations between *transcendence* and these items, nor any other quantitative demographic item – with the exception of 'sense of meaning in life' (0.11, p<.05). However, a visual check of the graphs (below) suggested there might be a more complex relationship between *transcendence,* education, and age than is indicated by a simple correlation.

Figure 35 - Education and Transcendence
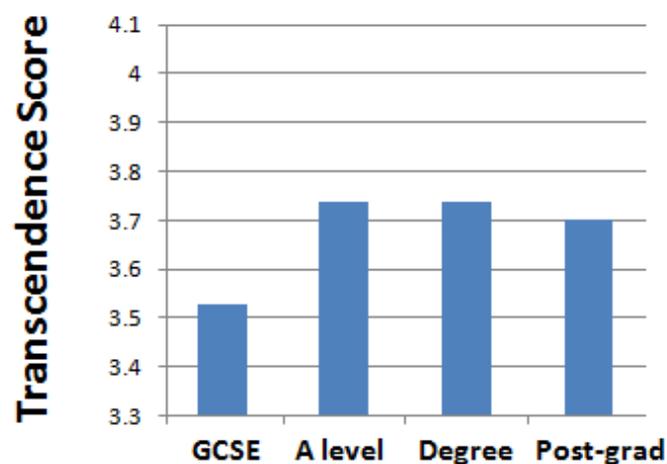
Those who reported little or no education, or did not answer the question, were excluded as they were very small data sets, only 3 and 6 people respectively.

This suggests a pattern of the following form: the *transcendence score* is low for those educated to GCSE level (average 3.5), rises at A level (average 3.7), and then stays at that

plateau. An independent t-test was performed to compare those educated at GCSE level (n=17) and those educated at A-level or higher (n=211). This produced a significant result (p<.05). For *transcendence* and *age*, the correlation was not significant, and the graph shows a surprising shape:

Figure 36 - Transcendence and Age
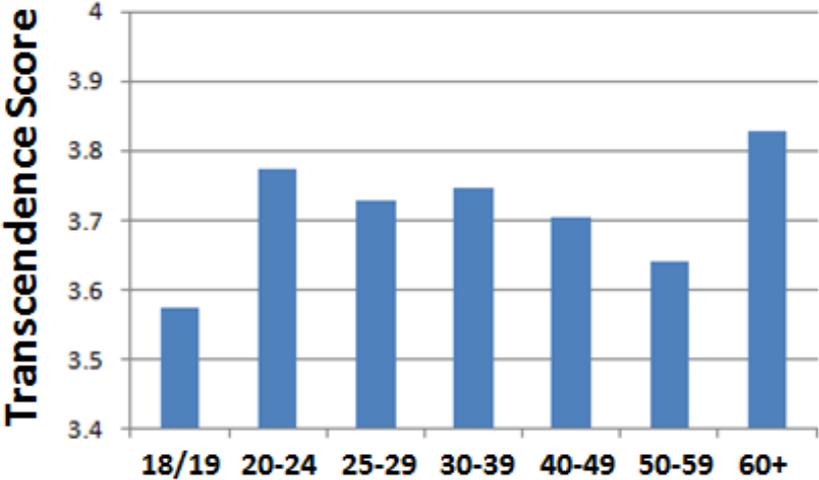
It had been anticipated that *transcendence* would increase with *age* because individuation is a process that tends to occur naturally in the second half of life (e.g. see Stein 2006 or Jung 1977, p. 210). This graph seems to show a rapid increase up to the 20s, then a gradual decline, followed by a sharp rise late in life. To confirm this result, a polynomial regression was performed, with three degrees. This produced a matching formula (p<.05 for all elements) of the form:

$$y=.01x^3-.12x^2+.45x+3.26.$$

There are several possible reasons for this result. As with all results, it is possible that the scale is not measuring what it purports to be measuring. It could also be the result of population bias (people who are looking for a different career). It could reflect the nature of Western culture which encourages one-sidedness in the workplace. Or it might suggest that

individuation does not progress so much after midlife as after retirement, at which point the individual's behaviour is not constrained by the demands of a career.

Despite the unexpected relationships between *transcendence* and education/age, there are some data points to suggest that the transcendence scale is measuring something of relevance to this research, though not necessarily in the way that had been envisaged at the outset. These data points include the face validity, factor analysis results, tendency for factors to relate to particular typological opposites, correlation between meaning and transcendence, and the (albeit unexpected) changes that are associated with age and education. They suggest that, for the purposes of this exploratory research, the *transcendence* score (combination of factors 1 and 2) is a good enough indicator of the advancement of consciousness. There are plenty of caveats, however, including the impact of the cross-format radio buttons on the pattern of responses, the bias in the population used for validation, and the unexpected variations in some of the result patterns.

RELIGIOUS TOLERANCE

The main subject of this research is the relationship between mythological thinking and the transcendence of opposites. However, religious tolerance is an anticipated benefit, and an additional questionnaire was added as a straw in the wind to assess whether there might be such a benefit and, if so, what form it might take. The distribution of responses to all the religious tolerance items is non-normal (Kolmogorov-Smirnov, $p < .001$) with 40% of responses being assigned to the lowest score (usually to 'disagree' with an assertion) and 5% to the highest.

Factor analysis

There were 310 valid (complete) responses and the first factor analysis produced three factors.

- **Factor 1** was loaded on positively by 13 items. These were mainly asserting the superiority of the respondent's own religion over others. For example, four of the first five items with the highest loadings asserted the truth of their religious viewpoint and that others' beliefs were wrong. Other items included the need to persuade other people that their beliefs were wrong, punishment for those who abandoned their beliefs, the call to make criticism of their own religion illegal, and the dependence of friendships on sharing religion. For example, one item that loaded on this factor asserted that for a friend to change their religion was a betrayal of their friendship. This factor had a CA reliability of 0.85 and a retest reliability of 0.79 (p<.001).

- **Factor 2** was loaded on by all the statements expressing trust (or distrust) of particular groups. They were short statements of the form 'I trust Buddhists'. The subjects for whom trust or distrust was expressed also included men, atheists, Jews, women, Christians, and Muslims. There was one trust statement that loaded on factor 1 – a slightly longer phrase saying 'I distrust people who say they are agnostic'. This factor had a CA reliability of 0.75 but retest reliability was only 0.38.

- **Factor 3** was loaded on by eight items. Five of them demonstrated respect for other religions. The others expressed abhorrence of certain religious practices, the uniqueness of the individual's own beliefs, and the questioning of religious leaders. This factor had a CA reliability of 0.57 but, when the three odd questions were removed, this rose to 0.7. However, retest reliability (for the revised factor) was only 0.66 (p<.001).

Table 10 - Tolerance Factor Analysis Iterations

Iterations	No of Factors	No of Items	Comment	Action
1	3	28	Coherent factors but not all adequately reliable.	Remove items loading <.4
2	2	21	Factors more mixed, 2nd factor poor retest reliability.	'
3	2	19	Factors still mixed, retest not improved.	Remove items loading <.5
4	2	13	2nd factor coherent (trust statements) but retest not reliable.	'
5	2	10	2nd factor not sufficiently reliable.	Remove items loading <.6
6	2	8	2nd factor retest not reliable	'
7	2	7	2nd factor retest not reliable	Remove second factor items
8	1	4	CA and retest reliability above 0.7	

Final Factor Analysis

n=333

Table 11 - Tolerance Final Factor Analysis Eigenvalues

Eigenvalues

Factor	Eigenvalue	Variance (percent)	Percent cumulative
1	2.36	59.06	59.06

Table 12 - Tolerance Final Factor Analysis Loadings

Varimax factor loadings

	Factor 1	Communality
tolerRt19	0.85	0.72
tolerRt9	0.82	0.67
tolerRt0	0.71	0.50
tolerRt26	0.69	0.47
Sum of Squares	2.36	2.36
Percent of Variance	59.06	59.06

For the final factor analysis, there was a CA reliability of 0.84 and retest reliability of 0.80. All four items were drawn from the original factor 1, and they had all been in the five highest loadings on that original factor.

To check that this new four-item factor was the best available, all the items in the original factor 1 were subject to a separate factor analysis. This experiment produced a single factor, with item loadings ranging from 0.30 to 0.80. The four items selected above (0, 9, 19, 26) were the top four items loading on this experimental factor. However, the reliabilities of this experimental factor were not an improvement (though they were above 0.7). Therefore, the four-item factor was used as the measure of religious tolerance. Each of these items relate to the truth of one's own religious perspective, the incorrectness of others' beliefs, and the need to persuade other people of the truth of one's own beliefs. It will be called the *religious superiority factor,* the inverse of religious tolerance, as it represents the view that one's own religious belief system is a superior truth that other people need to accept.

Supplemental analysis

Truth has emerged as a central concept in two of the four factors. In parts II and III, theoretical links had been established between mythology and advancement. This factor analysis suggests another theoretical link, *mythological thinking* and *religious superiority,* based on truth. The former views truth symbolically, the latter regards one's own view of truth as being superior to others' views. To check that these two factors were not measuring the same thing, a supplementary factor analysis was conducted containing only those items that load on these two factors. This resulted in two discrete factors, albeit with some cross-loadings:

Table 13 - Supplemental Tolerance Factor Analysis

Varimax factor loadings

	Factor 1	Factor 2
msqRet3	0.82	-0.15
msqRet5	0.82	-0.24
msqRet8	0.81	-0.16
msqRet7	0.80	-0.22
msqRet0	0.79	-0.22
msqRet10	0.78	-0.34
msqRet12	0.78	-0.29
msqRet1	0.77	-0.15
msqRet2	0.76	-0.23
msqRet11	0.75	-0.13
msqRet4	0.74	-0.18
msqRet13	0.59	-0.19
msqRet9	0.58	-0.19
tolerRt19	-0.34	0.79
tolerRt9	-0.28	0.76
tolerRt0	-0.08	0.72
tolerRt26	-0.15	0.67

For the religious superiority score, the distribution was non-normal according to a Kolmogorov-Smirnov test ($p < .01$). Therefore Spearman Rank will be used for correlations. Anova, t-Test, and regression tests will also be used when testing religious superiority, for the reasons stated earlier (the tests are robust to the assumption of normality for larger volumes of data).

Figure 37 - Distribution of Religious Superiority Scores

Distribution of *religious superiority*
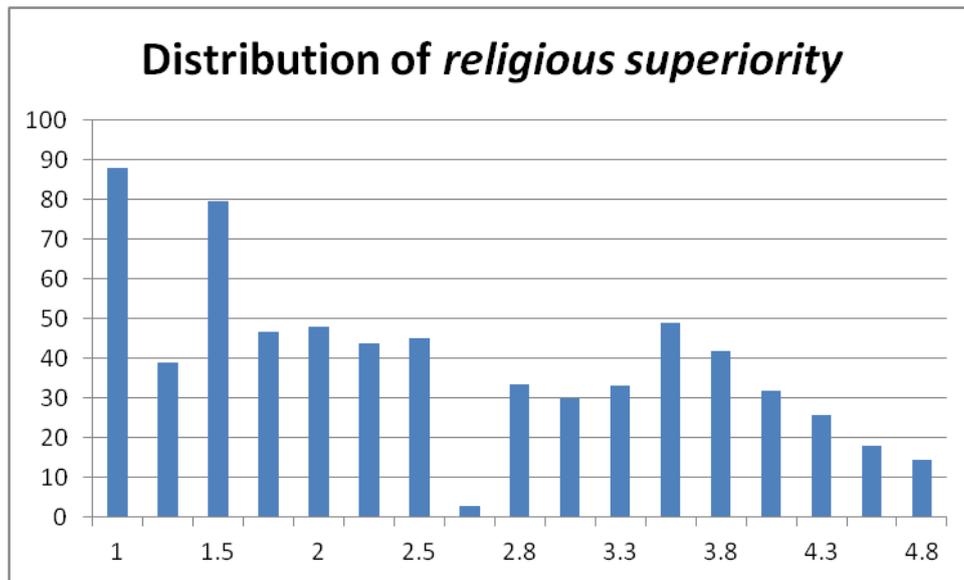
9 Analysis

ADVANCEMENT OF CONSCIOUSNESS

The initial factor analyses suggested there might be several dimensions to each of the advancement of consciousness, mythological thinking, and religious tolerance. However, as a result of the process of refinement, these concepts have been narrowed to three specific measures. The *transcendence* score is the average of the SN and TF transcendence factors. The *mythological thinking* score is the degree to which religious truth is considered symbolically rather than literally. The *religious superiority* score involves seeing one's own beliefs as superior to others' beliefs. Although there is very likely a much broader meaning for each concept, these narrow definitions provide reliable measures that are at the core of the concepts. This is suggested by both the conceptual content of the factors, and the fact that these concepts kept recurring with robust statistical properties from the very first factor analysis onwards.

This research is testing the idea that mythological thinking leads to the advancement of consciousness, with the consequential benefit of religious tolerance. The formal hypothesis is that the first two scales are related, and the null hypothesis is that there is no relationship. Various statistical techniques have been used to test this. The demographic variables, *mythological thinking,* and *transcendence* have been correlated and subject to ANOVA, t-Test, and multiple regression with the use of dummy codes and product variables to compare the interaction of quantitative and categorical variables. All correlations are Spearman Rank, because of the non-normal distributions in some of the variables.

Initial test of the hypothesis

The data collected during the validation exercise was reused for the data analysis. The four factor scores and three measures were calculated for 337 records. When *mythological thinking* and *transcendence* were correlated, they yielded the statistically significant result of 0.14 (p<.01). Although this correlation is low, a graphical analysis comparing mythological thinking with transcendence (Z-score) suggested there may be a complex relationship:

Figure 38 - Average Transcendence Z-score for each percentile of Mythological Thinking
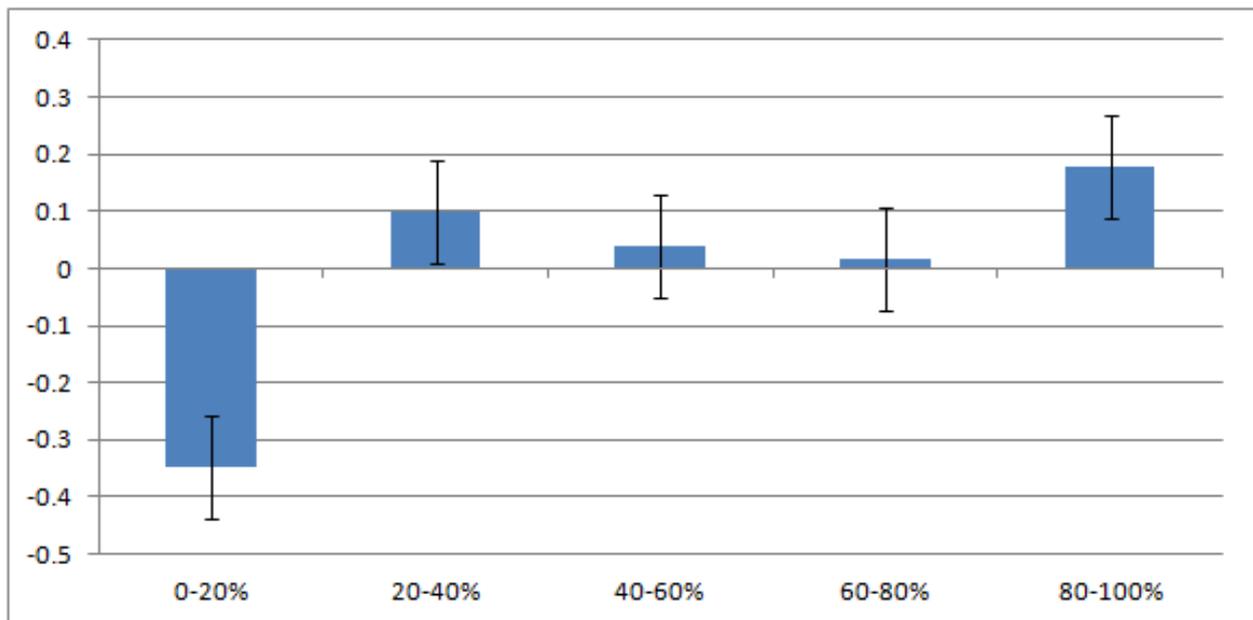
To confirm this, a t-Test was performed comparing the transcendence Z-scores of the bottom 20% of mythological thinking with the top 80%. This produced a significant result (p<.01). Also, polynomial regressions of various degrees were conducted, with *transcendence* as the dependent variable and *mythological thinking* as the independent variable. The regression with three degrees produced a statistically significant result, confirming the average line is not linear but has an equation of the form: $y = .08x^3 - .59x^2 + 1.45x + 2.61$ (p<.05). This suggests

mythological thinking and *transcendence* are related, though no account has yet been taken of other influences.

Quantitative variables

To begin investigation of the potential confounding role of other variables, correlations were performed between the quantitative variables and the Z-scores for *mythological thinking* and *transcendence.* Although some of the demographic variables correlated significantly with each other (highlighted with bold text and yellow-shaded boxes below) there were very few correlations between the demographics and the measures of *myth* and *transcendence.*

Table 14 - Correlations Between Quantitative Scales

Age								
0.06	*Contentment*							
0.42***	**0.09***	*Educational Level*						*n (valid cases) varied between 298 and 337*
0.07	**0.49*****	**0.11***	*Sense of Meaning*					
0.47***	0.09	**0.33*****	**0.16****	*Vocational Training*				
0.07	**0.42*****	-0.00	**0.42*****	**0.11***	*Work Feelings*			
0.33***	0.05	**0.20*****	0.01	**0.30*****	-0.03	*Work seniority*		
0.08	**-0.13****	0.06	-0.04	0.04	0.01	-0.05	*Myth*	
0.03	0.04	0.01	**0.11***	0.03	0.03	-0.01	**0.14****	*Trans*

* p<.05, ** p<.01, *** p<.001

The absence of a significant correlation between any one demographic variable and both *myth* and *transcendence* suggests that none of the quantitative variables are confounding the results. However, there is a statistically significant correlation between sense of meaning and *transcendence.* Although the correlation number is low, the graph suggests a potentially complex relationship:

Figure 39 - Average transcendence Z-score for each Meaning response
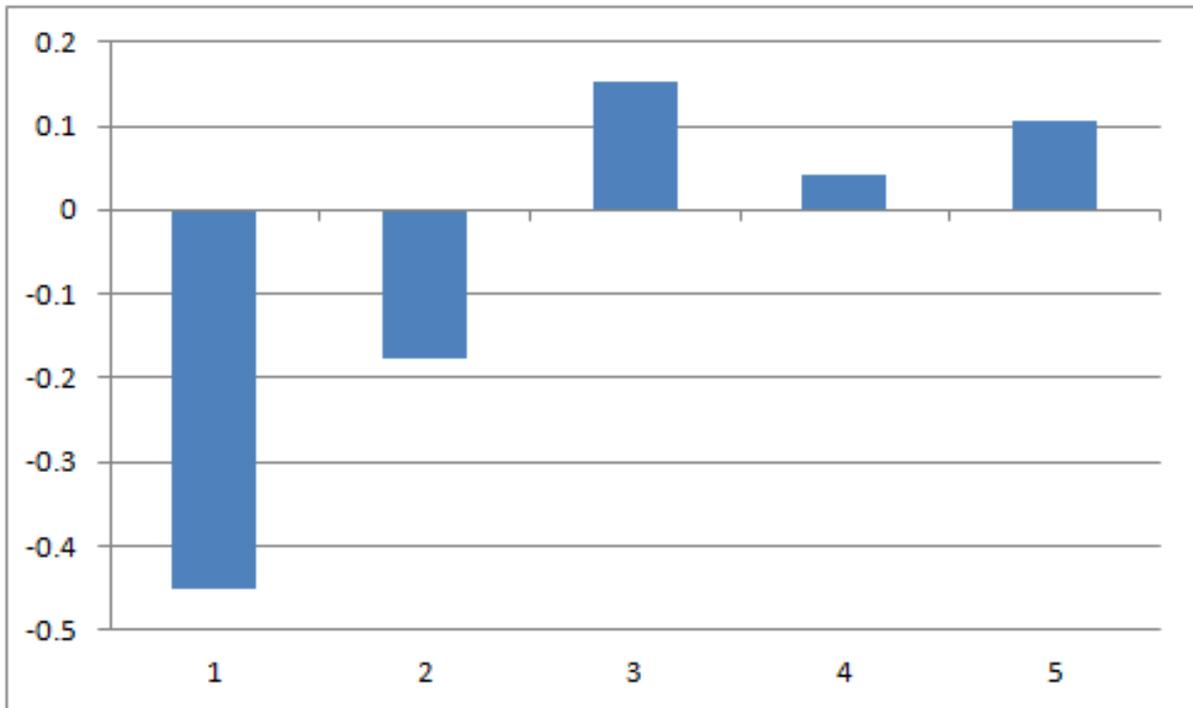
A t-Test was performed, comparing the *transcendence* Z-scores of those scoring 1 or 2 for meaning with those scoring 3 to 5. This produced a significant result (p<.05).

Categorical variables

To assess the potential impact of the categorical variables, ANOVA tests were carried out to assess whether there were any significant differences in *myth* and *transcendence* Z-scores between particular groups. This produced no significant differences with the exception of current religion, which had a significant impact on both *myth* (F(12,312)=3.23, p<.001) and *transcendence* (F(12, 312)=2.96, p<.001) scores:

Figure 40 - Myth and Trans by Religion
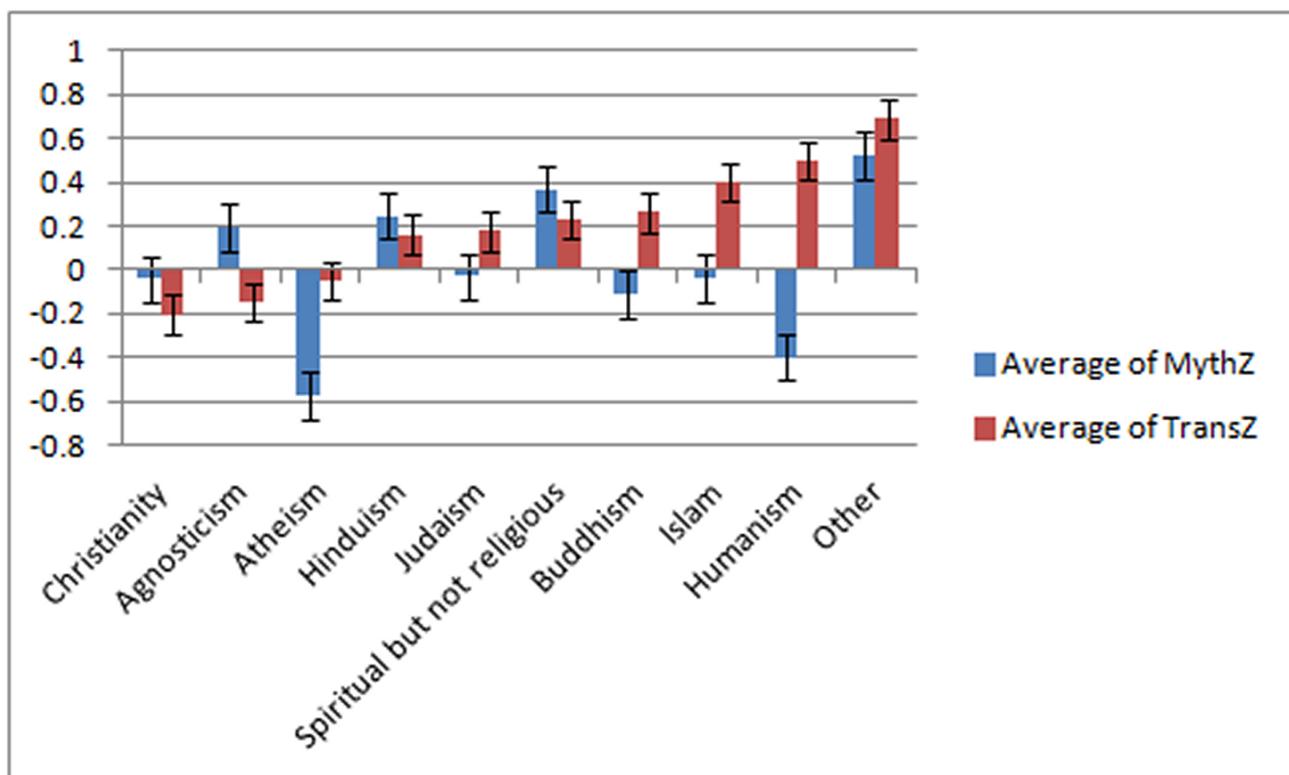
Four categories of religion have been excluded – those who did not declare their current religion and three religions for which there was only 1 respondent each: neo-paganism, spiritism, and Unitarian Universalism.

The diagram suggests that the scores do not co-vary. This can be seen, for example, by comparing atheists and agnostics – their average *transcendence* score is similar, but agnostics have a positive *myth* Z-score and atheists have a negative one. To test this statistically, and compare with the impact of the sense-of-meaning variable, religion was 'dummy coded' for use in a multiple regression. This involved creating separate variables for each of the religions listed above, indicating the person's response with a 0 or 1. For example, the variables included 'Christianity' and 'Atheism'. A Christian would score (1,0) for these two variables, an Atheist would score (0,1), and other religions would score (0,0) – with a '1' appearing in the variable for that other religion. These dummy religious variables were then included in a

stepwise multiple regression with standardised (Z-score) versions of the quantitative variables

(cut-off p<.05).

Table 15- Multiple Regression for Transcendence

	Coefficient	Conf. (±)	Std. Error	T	P
Constant	0.07	0.13	0.07	1.09	0.28
Christianity	-0.30	0.23	0.11	-2.58	0.01
Myth (Z)	0.11	0.11	0.05	2.04	0.04
Meaning (Z)	0.14	0.11	0.05	2.60	0.01

Religions not listed were eliminated as non-significant by the stepwise regression

The coefficients suggest that Christianity is antagonistic to *transcendence,* and meaning and

myth are positive predictors of it. To assess the potential interactive impact of these three

variables on *transcendence*, an additional four variables were created from their products –

meaning multiplied by myth, and Christianity multiplied by meaning, or myth, or the product

of meaning and myth. The seven variables were then subject to a multiple regression for

transcendence. In the following table, significant results are highlighted:

Table 16 - Extended Multiple Regression for Trans

	Coefficient	Conf. (±)	Std. Error	T	P
Constant	0.11	0.13	0.06	1.77	0.07
Christianity	-0.32	0.22	0.11	-2.83	0.00
Myth (Z)	0.12	0.13	0.06	1.94	0.05
Meaning (Z)	0.19	0.13	0.06	2.94	0.00
P-myth-mean	0.06	0.12	0.06	0.93	0.35
P-Chr-myth	-0.06	0.22	0.11	-0.57	0.56
P-Chr-mean	-0.12	0.22	0.11	-1.09	0.27
P-Chr-myth-mean	-0.00	0.22	0.11	-0.02	0.98

Christianity remains antagonistic to *transcendence* and none of the new variables are

significant. However, *myth* no longer makes a significant contribution to the equation, nor

does the product of Christianity and *mythological thinking*. At this point, therefore, it would

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appear that, although a relationship between *mythological thinking* and *transcendence* can be observed in the population, this is due to other factors. It raises the question as to whether the research hypothesis might hold true just for the more limited target audience of Christians. The diagram below helps to investigate this. The average *transcendence z-score* is shown for Christians in each percentile of *mythological thinking*. These z-scores are based on the whole population (including other religions), they are not re-calculated using only the Christian population.

Figure 41 - Transcendence Z-scores by myth percentile (for Christians only)
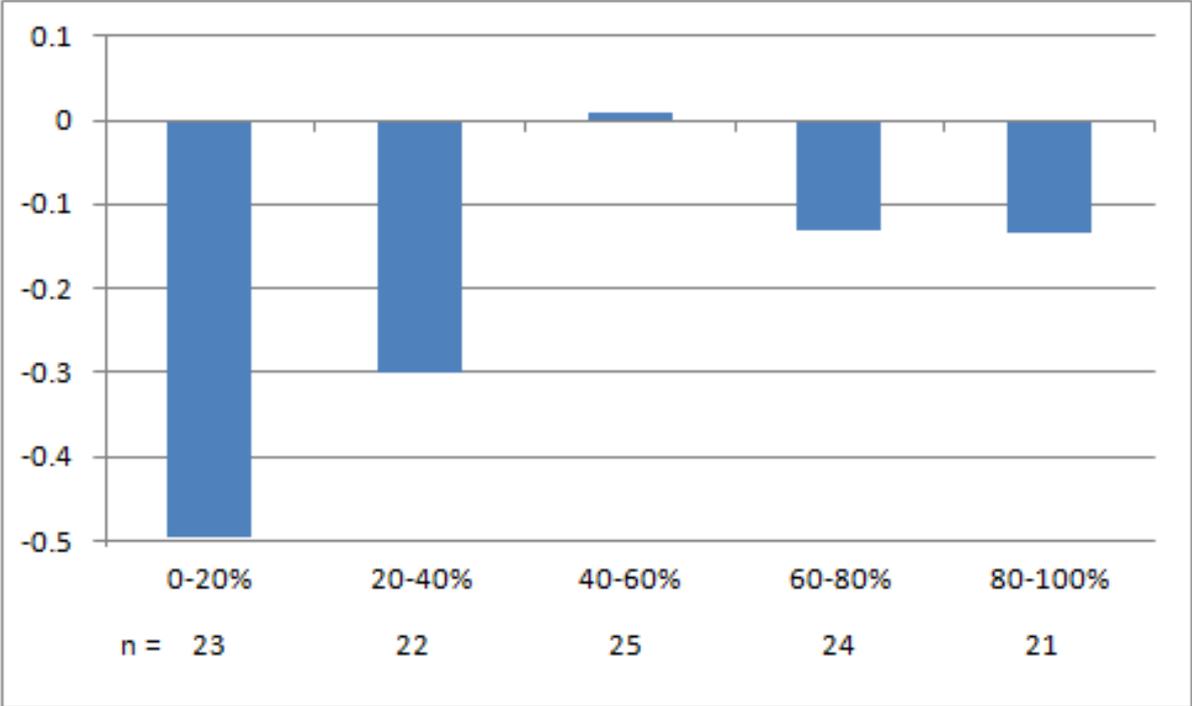
Whilst the visual pattern appears to show a relationship, t-Tests comparing the 0-40% and 40-100% percentiles, and comparing the 0-20% and 20-80% percentiles, produce non-significant results. Also, a Spearman Rank correlation and polynomial regressions up to four degrees all produce insignificant results. This suggests that thinking mythologically about God does not lead to an advancement of consciousness in the Christian population.

The anticipated benefit of thinking mythologically about God was that it would lead to an advancement of consciousness, which in turn would result in greater religious tolerance. Although the data analysis seems to have negated the first stage of this claim, further analyses were undertaken to assess whether there might still be evidence for the second part of this chain of relationships. This involved a similar process of investigation: the null hypothesis is that there is no relationship between *transcendence* and *religious superiority.* The first step was to establish correlations of *religious superiority* with *transcendence, myth,* and the quantitative demographic variables (significant results are highlighted):

Table 17 - Correlations with Religious Superiority

	Religious Superiority
Age	-0.06
Contentment	**0.13***
Education	**-0.11***
Meaning	**0.19***
Vocational Training	-0.08
Work Feelings	0.06
Work Relations/Seniority	-0.06
Mythological Thinking	**-0.32***
Transcendence	-0.06

*n = 300 to 337, * p<.05, ** p<.01, *** p<.001*

The correlation between *transcendence* and *religious superiority* is not significant, suggesting there is no relationship between them. To confirm this, two further tests were performed. The first was a multiple regression to assess which variables might be predictors for greater *religious superiority* (using stepwise p<.05 to eliminate insignificant variables), including all the demographic variables, the *myth* score, and the *transcendence* score. This identified three predictors – sense of meaning (coefficient +0.16, p<.001), *myth* (-0.33, p<.001), and vocational training (-.06, p<.05). The *transcendence* score was eliminated as a predictor. The

second test (or, rather, series of tests) was to conduct polynomial regressions of various degrees with *transcendence* as the independent variable and *religious superiority* as the dependent variable. There were no significant results for any of the tests.

OTHER RESULTS

Although there is no evidence of a relationship between *transcendence* and *religious superiority*, the correlations above suggest there might be a direct relationship between *myth* and *religious superiority*. This was taken as a new, supplementary hypothesis that was also investigated for potential confounding variables. The analysis so far has identified four candidates for confounding, quantitative variables – contentment (identified by a positive correlation with *religious superiority*), vocational training (identified in the multiple regression), education, and meaning (identified in both the correlations and regression). For the categorical variables, ANOVA was used to test their relationship with *religious superiority*. These produced insignificant results apart from marital status ($F(7,324)=2.08$, $p<.05$), original religion ($F(10,313)=2.22$, $p<.05$), and current religion ($F(12,312)=6.28$, $p<.001$). In the following graphs, Z-scores are used for ease of comparison with earlier graphs. However, it should be borne in mind that the distribution of *religious superiority* is not a norm curve, it is fairly flat.

Figure 42 - Religious superiority Z-score by marital status
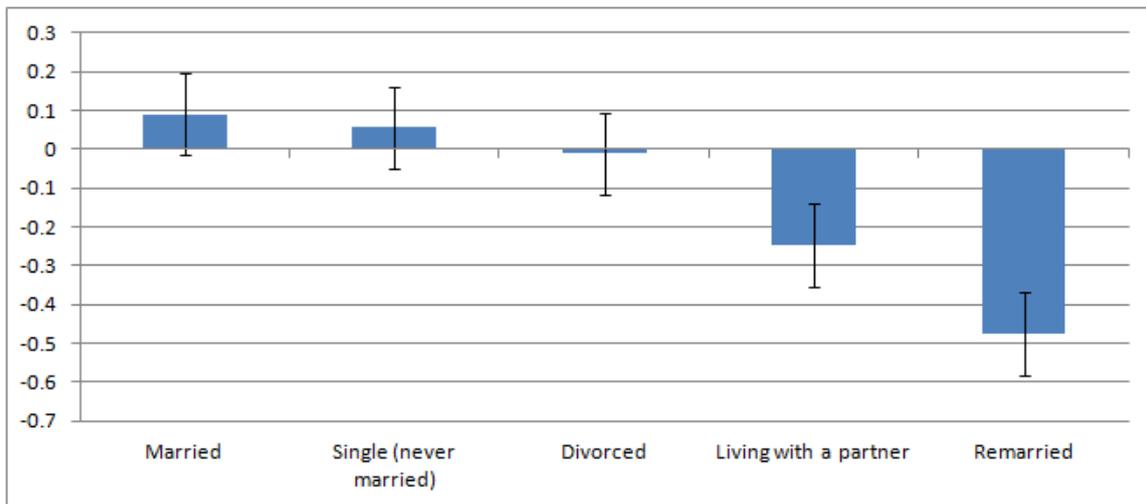
Categories of separated, widowed, and formal civil partnership were removed due to insufficient data.

Figure 43 - Religious superiority Z-score by original and current religion
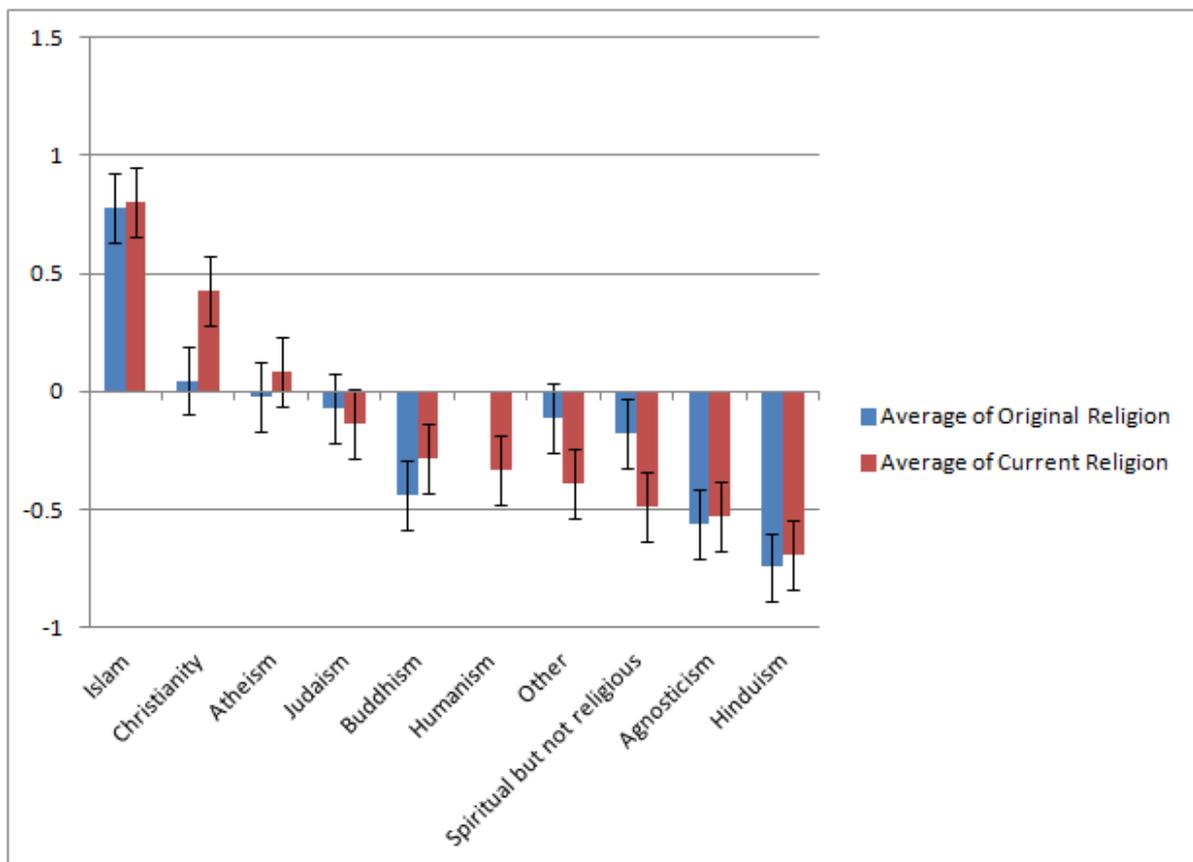
Categories of spiritism, neo-paganism, and universal Unitarianism removed due to insufficient data.

So far, several variables have been identified that could be confounding the relationship between *myth* and *religious superiority* – contentment, vocational training, education, meaning, marital status, original religion, and current religion. To assess their relative contributions and potential interactions, the categorical variables of marital status, original religion, and current religion were dummy coded. They were included – alongside standardised (Z-score) versions of all the quantitative variables, and the *myth* and *transcendence* scores – in a multiple regression (stepwise, cut-off p<.05). This identified six predictor variables for *Religious Superiority*:

Table 18 - Multiple Regression for Religious Superiority

	Coefficient	Conf. (±)	Std. Error	T	P
Constant	-0.34	0.14	0.07	-4.78	0.00
Atheism	0.34	0.29	0.15	2.29	0.02
Christianity	0.74	0.21	0.11	6.80	0.00
Islam	1.00	0.57	0.29	3.45	0.00
Meaning	0.17	0.10	0.05	3.51	0.00
Vocational Training	-0.11	0.10	0.05	-2.26	0.02
Mythological Thinking	-0.26	0.10	0.05	-5.16	0.00

To examine their interactions, a regression was performed including an additional 25 product variables (31 in total). These were obtained by multiplying the various combinations of variables with each other. This included 4 additional combinations of *myth*, meaning, and training (*myth x* meaning, *myth* x training, meaning x training, and *myth* x meaning x training). Then these 7 variables were multiplied by each of the 3 religions, adding a further 21 variables. The results were as follows (significant results are highlighted):

Table 19 - Expanded Multiple Regression for Religious Superiority

	Coefficient	Conf. (±)	Std. Error	T	P
Constant	-0.39	0.13	0.07	-5.85	0.00
Atheism	**0.33**	**0.32**	**0.16**	**2.06**	**0.04**
Christianity	**0.74**	**0.20**	**0.10**	**7.24**	**0.00**
Islam	**0.83**	**0.66**	**0.33**	**2.49**	**0.01**
Myth	-0.07	0.13	0.07	-1.13	0.26
Vocational Training	-0.12	0.13	0.07	-1.78	0.08
Meaning	**0.16**	**0.13**	**0.07**	**2.46**	**0.01**
P-myth-mean	-0.04	0.12	0.06	-0.68	0.49
P-Chr-myth	**-0.59**	**0.21**	**0.10**	**-5.66**	**0.00**
P-Chr-mean	-0.02	0.21	0.10	-0.22	0.82
P-Chr-myth-mean	-0.02	0.19	0.10	-0.25	0.80
P-Trg-Mean	-0.06	0.13	0.07	-0.94	0.35
P-Trg-Myth	**0.15**	**0.13**	**0.07**	**2.23**	**0.03**
P-Mean-Trg-Myth	0.04	0.14	0.07	0.52	0.60
P-Ath-Mean	-0.09	0.27	0.14	-0.66	0.51
P-Ath-Trg	0.24	0.37	0.19	1.26	0.21
P-Ath-Myth	-0.17	0.30	0.15	-1.16	0.25
P-Ath-Mean-Trg	-0.01	0.30	0.15	-0.04	0.97
P-Ath-Mean-Myth	0.00	0.00	0.00	0.67	0.50
P-Ath-Trg-Myth	0.03	0.35	0.18	0.18	0.86
P-Ath-Mean-Trg-Myth	-0.09	0.27	0.14	-0.63	0.53
P-Chr-Trg	-0.01	0.21	0.10	-0.14	0.89
P-Chr-Mean-Trg	0.03	0.22	0.11	0.24	0.81
P-Chr-Trg-Myth	0.04	0.21	0.11	0.37	0.71
P-Chr-Mean-Trg-Myth	0.04	0.22	0.11	0.40	0.69
P-Isl-Mean	0.37	0.76	0.38	0.95	0.34
P-Isl-Trg	-0.67	0.80	0.41	-1.66	0.10
P-Isl-Myth	0.34	0.99	0.50	0.68	0.50
P-Isl-Mean-Trg	-0.25	1.11	0.56	-0.45	0.65
P-Isl-Mean-Myth	0.00	0.00	0.00	0.83	0.41
P-Isl-Trg-Myth	-0.77	1.41	0.72	-1.08	0.28
P-Isl-Mean-Trg-Myth	-0.79	1.40	0.71	-1.11	0.27

Atheism, Christianity, and Islam remain predictors for *religious superiority*, as does having a sense of meaning/purpose in life. *Myth* is no longer a significant predictor for *religious superiority,* but the product of *myth* and Christianity was significant, with a negative coefficient. This suggests that *mythological thinking* has a moderating effect on the *religious superiority* expressed by Christians. The evidence suggests it does not have a wider applicability to other religions.

Part V Discussion

10 Review and Conclusions

The analysis suggests that the chain of association suggested by Jung's letter to Pastor Bernet does not hold. Although there is a small correlation between *mythological thinking* and *transcendence* in the population, this is due to other factors rather than being a direct relationship. There is no relationship between *transcendence* and *religious superiority*, using the measures identified in this research. The null hypothesis therefore has to be accepted. There are several caveats that need to be added to this conclusion. The statistical study has been short and exploratory. There has been limited validation of the questionnaires. The transcendence scale is based on only one type of opposites. There are narrow definitions for each of the measures. There are population biases. Some major religions have a relatively low representation. The questionnaires were designed primarily with a Christian audience in mind. The analysis has been performed for the generic category of Christians rather than individual branches or denominations. There may also be other unknown factors at play, which have not been included in the design of the research. Nevertheless, the analysis points to complex relationships between religion, thinking mythologically, transcendence, religious tolerance, and other factors. It suggests that Jung was on to something – though not in the form implied by Jung's letter. Rather than individuation being pivotal in the process, it is Jung's philosophy that has taken on the most important role.

Implications for Jungian theory

Before considering the implications of these results, there may be some objections from a Jungian perspective to the null result, which need to be addressed. For example, the psyche is

far more individual, variable, and complex than precise definitions allow, and it is replete with contradictions. It is also in the nature of a symbol, which unites consciousness and the unconscious and the rational and irrational, to resist the quest for clarification or singular meaning. However, the irrationality of the unconscious cannot be used as a 'get out of jail free' card – individuation does not result in the total submission of consciousness to irrational principles of the unconscious, but of the integration of the unconscious into the rational consciousness. When the transcendent function is produced, 'it is no longer the unconscious that takes the lead, but the ego' (Jung 1916/1957, para. 181). Individuation, which is 'closely connected with the transcendent function' (Jung 1921a, para. 759), involves 'an extension of the sphere of consciousness' (para. 762) which comprises 'the previous condition [of consciousness] augmented by the addition of formerly unconscious contents' (Jung 1939/1954, para. 828). An irrational symbol is therefore just one stage in Jung's process of psychological development. As the meaning of the symbol begins to unfold, and the new transcendent function emerges into consciousness, a new (and more complete) conscious standpoint takes its place. Eventually, from out of the symbol emerges a clearer and – importantly – a rational understanding. This does not necessarily abolish irrationality, acausality, or unconscious meaning, but it integrates them into a rational and conscious standpoint that is based on principles of reason.

Another argument that might be used to dismiss the results of this research is that I had misinterpreted Jung. If empirical research such as this into key Jungian ideas is rejected because it doesn't reflect what Jung really intended, this points to some of the weaknesses in Jung's work. He had a tendency to circumambulate, see most things as being related or connected in some way, and – as he openly admitted (Jung 1976, p. 70) – be ambiguous in his language. This can obfuscate his concepts and theoretical assertions. Although this may serve a useful role in reflecting the mystery and complexity of the psyche, and in creating the space

where new meaning can emerge, the advancement of knowledge also requires better understanding. It is therefore necessary to draw Jung's concepts under the light of clarification and subject them to scientific testing, a development that Jung accepted would eventually become inevitable:

> In a science as young as psychology, limiting definitions will sooner or later become an unavoidable necessity… if psychology is not to remain an unscientific and fortuitous conglomeration of individual opinions.

(Jung 1936a, p.555)

Segal's recent criticisms of contemporary analytical psychology suggest that it is still largely a fortuitous conglomeration. He finds it 'exasperating' (Segal 2014, p.82) that Jungian tenets tend to be assumed and other theories ignored, with Jungian explanations being changed after the event to fit the theory, rather than making predictions so the theory can be put to the test. However, the present research has taken a different approach – turning Jung's assertions into a set of specific and measurable statements, forming a prediction on that basis, and putting that prediction to the test.

Even if it could be demonstrated that I *had* misunderstood Jung, one of the main values of a theory is in being able to use it to influence change. If the theory is sufficiently ambiguous that its practical application cannot empirically be tested, then its efficacy in guiding positive change is severely diminished. In fact, it may even be harmful and the harm might not be apparent, because the malleability of the theory would enable it to lay claim only to positive benefits. If the suggestion that I had misinterpreted Jung has any legitimacy then the way to demonstrate it is by articulating the alleged 'correct' interpretation and subjecting it to the same sort of rigorous test as I have done here. The value of such research is not in finding an interpretation that is closer to Jung's original intention, but in testing the ideas to establish whether they represent a general psychological rule.

Related to this, there is another potential objection to the validity of the null result in this research – which is that there are acausal relationships in the psyche. Although there might (or might not) be some merit in such an argument, Jung's statements about the relationship of statistics to synchronicity provide support for the conclusions of the present research. After Jung enlisted the help of a theoretical physicist (Markus Fierz) to analyse the results of his astrological experiment, Jung accepted that 'from the scientific point of view, there is little hope of proving that astrological correspondence is something that conforms to law' (Jung 1952a, p. 476). Jung then goes on to argue that there is still some validity in his experiment, with respect to understanding individual or unusual cases. However, in doing so he accepts that it is not underpinned by a *general rule*. The present research has not been concerned with individual or exceptional cases, but only with the general rule. The null result does not deny the possibility that there may be some individuals for whom thinking mythologically has led to an advancement of consciousness, which in turn has led to greater religious tolerance. However, the evidence suggests that – if this happens – it is the exception. A further objection might be that rational rules can't be applied to paradoxes, an argument that again might have some merit. However, paradoxes can still be used to make predictions, and they are sometimes resolved over time, or at least understood better, by investigating the contradictory rules with greater clarity and testing them with specific measures. The null result of this research should therefore not be explained away. Rather, it should be accepted and used to develop a better understanding of the problems of the theory being examined, and to set the framework for the next stage of (post-doctoral) research.

FUTURE RESEARCH

Although the final conclusion of this research is that there is no direct relationship between *mythological thinking* and *transcendence,* the results raise a wide range of questions that could merit further investigation. Some of these questions may already have been addressed by research in other disciplines, such as the psychology of religion. The impact of religion on the results of the current research was not anticipated and therefore requires significant further investigation, with research that plans for and tests the impact that it might have. In this final section, therefore, we will examine some of the questions that arise from the results, and leave it to potential future research to determine whether those questions have already been examined – in part or in whole – or whether a Jungian perspective has anything new and distinctive to offer.

Monotheism

One of the first questions that arises relates to the overall conclusion of the lack of relationship between *myth* and *transcendence,* because the results suggests that the relationship may hold for certain groups (non-significant correlations have been removed):

Table 20 - Correlation of Myth and Trans by Religion

Religion	n	Myth/Trans. Corr.
Islam	12	-
Christianity	115	-
Atheism	51	-
Judaism	9	-
Buddhism	8	0.71*
Humanism	7	-
Other	12	-
Spiritual (not rel.)	63	-
Agnosticism	38	0.43**
Hinduism	7	-

*- not significant, *p<.05, **p<.01*

There is a degree of irony in these correlations because they suggest that greater *mythological thinking* could be associated with greater *transcendence* of opposites for Buddhists and agnostics. Jung's suggestion in his letter to Pastor Bernet was to think mythologically *about God,* but these two groups do not hold monotheistic beliefs. There could be useful further investigation of what particular aspects of these religious worldviews tend to make them more or less susceptible to the impact of mythological thinking.

The original focus of this study – as expressed in its title – was the Christian population and, in particular, those who hold protestant attitudes. Nevertheless, it was anticipated that there would be general applicability and the collection of demographic data was expected to confirm that religion (along with other demographic variables) did not make a significant difference to the impact of mythological thinking on the advancement of consciousness. The

analysis has turned this assumption on its head, and religion seems to be one of the most significant factors influencing both the advancement of consciousness and religious tolerance. As the table below shows, mythological thinking potentially acts as a moderator of religious superiority – although, again, it is only for certain religions:

Table 21 - Correlation of Myth and Superiority by Religion

Religion	n	*Rel. Sup. Z-score*	Myth/Rel. Sup. Corr.
Islam	12	*0.80*	-
Christianity	115	*0.43*	-0.57***
Atheism	51	*0.08*	-0.28*
Judaism	9	*-0.13*	-
Buddhism	8	*-0.28*	-
Humanism	7	*-0.33*	-
Other	12	*-0.39*	-
Spiritual (not rel.)	63	*-0.49*	0.31**
Agnosticism	38	*-0.52*	-
Hinduism	7	*-0.69*	-
(Whole population)	*337*	*n/a*	*-0.32*****

* p<.05, **p<.01, ***p<.001

One confounding influence on these results may be the dominance of Christianity in the population of the study, and under-representation of other religious standpoints. In some cases there is too little data to obtain a statistically significant result. Therefore, future research

would benefit from collecting a larger amount of data from those religions that have a smaller representation in this research, to confirm or otherwise the different impacts of mythological thinking on religious tolerance. It might also be beneficial to identify what aspect of the religion or the individual's identity contributes to religious superiority. The Z-scores shown above demonstrate that those religions oriented towards a monotheistic belief – whether asserting a positive standpoint or a nihilistic one – are the least tolerant. Those not tied to a monotheistic standpoint are the most tolerant. This difference between the two groups is confirmed as being statistically significant by a t-Test (p<.001). This raises a question as to whether there are other confounding factors, such as the tendency to prefer simple ('mono') solutions, or the need to defend oneself against complexity. There is also an interesting difference in feelings of superiority between people who identify as humanists and as atheists. Future versions of the research questionnaires could therefore investigate and identify particular aspects of each religion, including their components of personal identity, core beliefs, self-identification of participants on the liberal-to-conservative spectrum in the church, or other factors that could have an impact on religious tolerance. Future research could also benefit from a more granular analysis of Christianity, identifying the branch of Christianity (Orthodox, Protestant, and Catholic) and, in the case of Protestantism, the particular denomination (of which there are hundreds), and also how *strongly* an individual identifies with their religion or culture, feels autonomous, or has an external locus of control, etc.

The data from this research also suggests an interesting relationship between the religious categories of atheism and 'spiritual but not religious' that merits further investigation. For most religions, in terms of the number of participants, there is a fairly even spread across the *mythological thinking* spectrum – for example, there are similar numbers of Christians in each percentile. The two exceptions are atheism and the category of 'spiritual but not religious':

Figure 44 - Distribution of Atheists and Spiritual but not religious
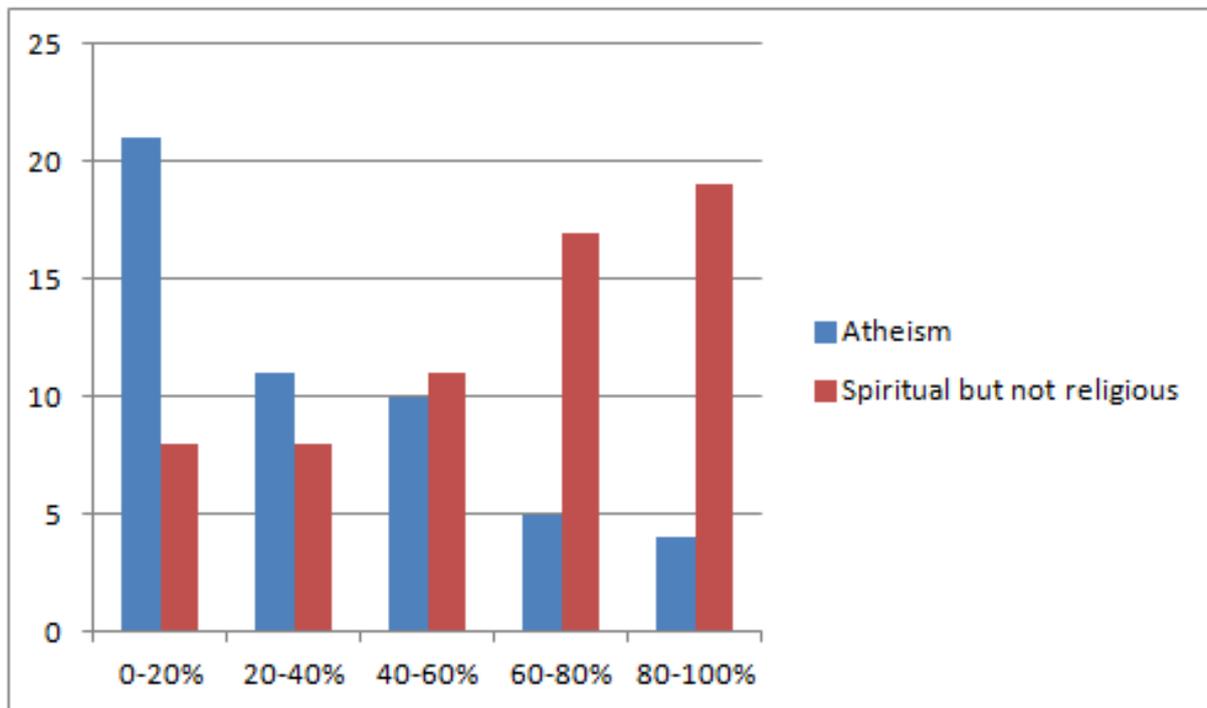
The chart shows that, in this particular population, atheists tend to be at the literal (true/false) end of the spectrum, whilst those identifying as 'spiritual but not religious' tend to be at the mythological/symbolic end. When the two sets of numbers are added together, they collectively provide a fairly even distribution throughout the spectrum. Future research could examine whether this principle holds for other populations and, if so, why this is the case. It could consider, for example, whether atheism tends to attract people who are more literally-minded, whether thinking more mythologically changes atheists' self-identification toward being 'spiritual but not religious', and why humanism appears to be a discrete category that is unrelated to these two.

There may also be an interesting line of investigation between monotheistic beliefs and marital status. An ANOVA test showed that marital status (married, divorced, living with a partner, etc.) was related to *religious superiority* but it disappeared as a predictor when a regression was performed using dummy codes to include all the variables. This suggests that

marital status and *religious superiority* might only be related via religion. Whilst there may be some rationale behind this – for example, a breakdown of a marriage forcing one to reconsider religious beliefs – it raises the question as to the interaction of religion and *religious superiority* with other forms of relationship – family, friends, working relations, group relations, etc. Some of the items loading on the initial factor 1 for religious tolerance expressed a sense of betrayal or disdain if friends changed their beliefs. Future versions of the questionnaires could usefully explore the impact of relationships in more depth, to see how they interact with religion and *religious superiority*.

Jungian concepts

The research has suggested that the advancement of consciousness (or individuation) does not yield any benefit in terms of religious tolerance. This raises the question, therefore, as to what the societal benefits are of individuation, if any, or whether the benefits are limited to individual psychotherapeutic results. In developing the concept of individuation, Jung cited various problems (under the heading of the 'type problem') including interpersonal, intra-personal, and philosophical conflicts. Future research could examine whether individuation yields tangible and measurable benefits in areas such as these.

Another related area for future research concerns the limitation of the present research to typological opposites. During the planning phase, ways of testing other forms of opposites were devised – such as using projection tests – but they could not be included due to the time limitations of the research. Broadening out the definition of advancement to include other opposites would help establish whether the transcendence of typological functions is representative of individuation as a whole or just one discrete aspect of it. It would enable investigation of the similarities and differences between typological and other forms of opposites, and the extent to which they are related.

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There were some interesting results in the area of transcendence of opposites, though these were discarded in an early stage of the investigation. During the validation phase it became apparent that a robust approach could be taken when choosing items and factors to be used in the testing of the main hypothesis. That is, even though these questionnaires were only experimental, there was no need to compromise the initial standard of having clear and meaningful factors with both Cronbach's Alpha and retest reliability being over 0.7. The robust approach taken to validation resulted in three good measures for each of the theoretical constructs being used in the research. However, this meant several factors were lost from the initial factor analysis which, whilst not reliable, nevertheless may have reflected something meaningful and worthy of further investigation. This included the third and fourth transcendence factors, which seemed to be confounded by negative emotions. One avenue for research, therefore, is to experiment with questions that are based on the avoidance of negatives (disliked qualities of the 'other') rather than identification with positives (self-identification with a one-sided or transcendent standpoint). It may also be useful to examine whether these questions can be separated from the function-attitude statements, because the evidence suggests that the new response cross-format may be distorting the results. Alternatively, it may be that the original two-dimensional scale introduces a distortion and the cross-format is a better reflection of what actually happens in psychological development. A comparison of the cross-format and two-dimensional scale is something that requires the involvement of advanced statistical expertise.

There were also two religious tolerance factors that were dropped due to poor reliability. They expressed trust/distrust in people of other religions or other sex, and positive respect for other religions. On the face of it, these seem reasonable factors to consider as part of religious tolerance, so there may be useful work in revisiting these statements and finding forms of wording that prove to be more reliable. The questions could also be broadened out to assess

how they relate to Jung's system of intimate and non-intimate projections that are an integral part of normal psychology and relationships (Myers 2013a). This might include comparing attitudes towards friends who hold different beliefs, introducing a greater variety of types of trust (e.g. keeping one's word, stewardship of money, telling the truth, being diplomatic, etc.), or testing the level of trust in different forms of 'otherness' (e.g. politicians, leaders, nationalities, etc.).

The statistics also revealed a potential relationship between truth and aggression that may be worth investigating. In the first factor analysis for the religious tolerance questionnaire, factor 1 was a clear factor, with Cronbach's and retest reliabilities above 0.7. Four of the first five items were concerned with one's own religious viewpoint being true and/or others' being false. These were the items that eventually formed part of the final *religious superiority* factor. However, some of the other items on that initial factor used strong wording of disdain towards people who held a different view of truth – not only using words such as 'betrayal' but also expressing the desire for them to be punished. One would have expected that these attitudes would have loaded on separate factors – one concerned with truth, the other concerned with aggressive attitudes toward people in the 'out-group'. Their conflation, in an otherwise clear and reliable factor from a well-educated population, invites further investigation.

Another area for further investigation is the application of mythological thinking to subject matters other than religious truth. The first factor analysis of the mythological thinking questionnaire initially produced nine factors. Once the main analysis had been completed, these were revisited to establish whether any of those initial factors were related to religious superiority. Scores for these original nine mythological factors were calculated and then included in a stepwise multiple regression for *religious superiority* (cut-off $p<.05$). Four of those original nine factors emerged as predictors:

Table 22 - Multiple Regression for Sup. (original myth factors)

	Coefficient	Conf. (±)	Std. Error	T	P
Constant	2.56	0.45	0.23	11.10	0.00
Religious Truth	-0.34	0.12	0.06	-5.68	0.00
Miracles/God as illusion/Life after death	-0.35	0.15	0.07	-4.78	0.00
Contradictions in world/Mind constructs reality	0.22	0.16	0.08	2.74	0.01
Cosmological statements	0.35	0.14	0.07	4.93	0.00

The first factor (thinking symbolically about religious truth) is similar to the factor used in the earlier formal analysis of results, and it has the expected negative coefficient with *religious superiority*. The second factor (thinking symbolically about miracles, life after death, and God as an illusion) also has a negative coefficient. The next two factors are a surprise, because they appear to suggest that *religious superiority* is greater when thinking symbolically about cosmology, contradictions, and the relation of the mind and reality. It is possible that the responses did not reflect the intent of the question, for example the respondent clicking a 'symbolic' radio button due to not knowing whether the answer was true or false, or as a defence against complexity. Alternatively, the result may reflect some form of underlying psychological principle – such as thinking symbolically about such issues reflecting or leading to a degree of intellectual superiority.

Another potential line of further investigation is the relationship of the sense of meaning to religious truth, tolerance, and transcendence. In the myth questionnaire, none of the meaningful-vs-insignificant scales survived the validation process – the only items in the final factor analysis were scales concerning truth-vs-falsity. However, the separate demographic variable – sense of meaning – reveals some puzzling results. It correlates positively with both *transcendence* and *religious superiority* (and not at all with *myth*). An ANOVA test, comparing demographic variables with 'sense of meaning', suggests that religion is also related to meaning ($F(12,308)=1.92$, $p<.05$) with a sizeable difference between atheism and humanism that is statistically significant (t-Test, $p<.05$):

Figure 45 - Sense of Meaning by Religion
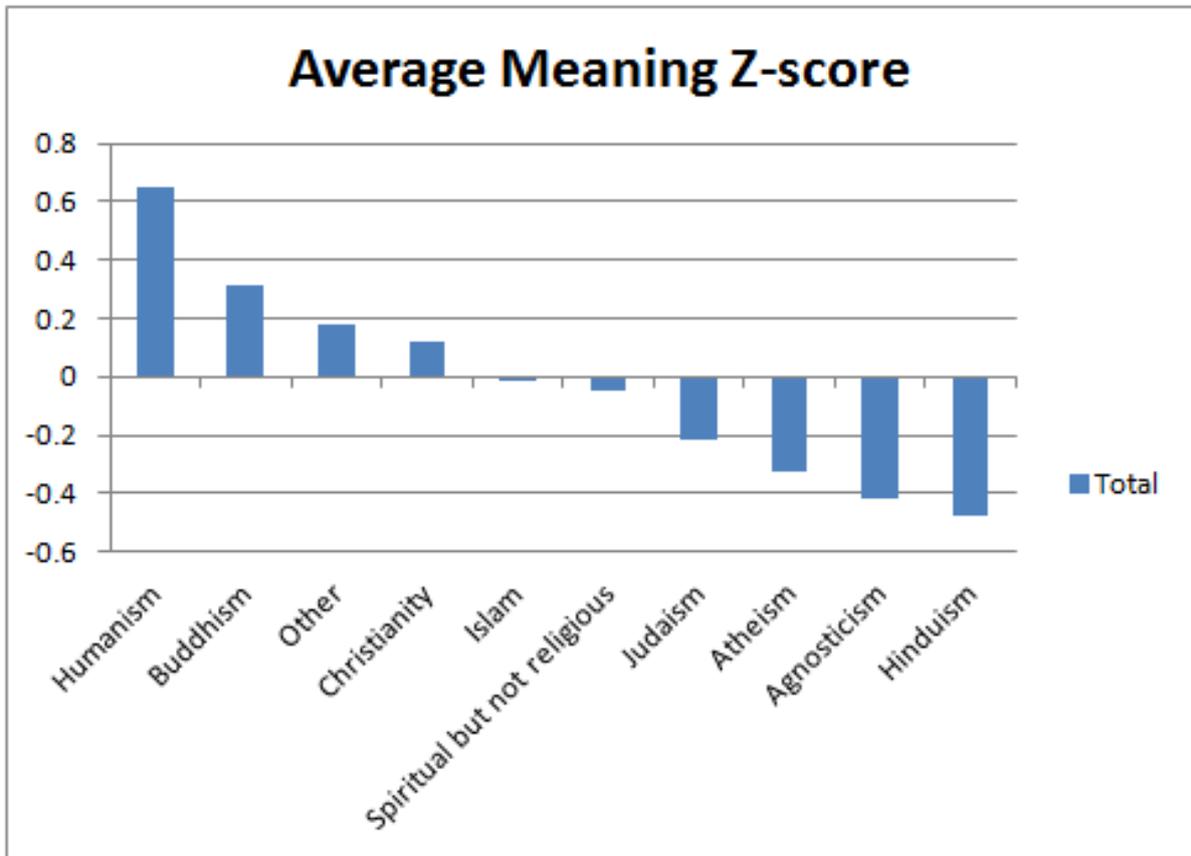
To identify possible sources for the sense of meaning, an exploratory stepwise multiple regression was conducted using all the quantitative variables, dummy codes for current religion (except religions with only one submission), dummy codes for marital status, *transcendence*, *religious superiority,* and *myth.* The significant predictors were:

Table 23 - Multiple Regression for Sense of Meaning

	Coefficient	Conf. (±)	Std. Error	T	P
Constant	0.06	0.10	0.05	1.29	0.20
Contentment	0.46	0.09	0.04	10.54	0.00
Religious Superiority	0.17	0.09	0.05	3.80	0.00
Work Feelings	0.12	0.07	0.04	3.09	0.00
Transcendence	0.11	0.09	0.04	2.53	0.01
Vocational Training	0.11	0.09	0.05	2.38	0.02
Atheism	-0.30	0.25	0.13	-2.34	0.02

This suggests that the individual sense of meaning may be drawn from several different sources – contentment in life, work feelings, vocational training, *transcendence,* and *religious superiority.* Atheism is the only religious standpoint that is a predictor of meaning, but with a negative coefficient. This might be what produces different results in the research between atheism and the categories of humanism and spiritual but not religious – though this requires further investigation. Overall, the results suggest that the relationships between the sense of meaning and other concepts is very complex, and the differing impacts of that variable on the various results does not have an obvious explanation.

CONCLUSIONS

This research started out with the aim of testing a single hypothesis – that thinking mythology about God leads to an advancement of consciousness. Although that particular test has failed, there are still many positive outcomes in terms of providing useful information, raising interesting questions, and establishing data or resources that can be used for further research. One important finding has been the degree of divergence between Myers-Briggs typology and Jungian individuation, and the need to restore the transcendent function in contemporary and popular versions of typology. This may have social benefits in terms of the resolution of conflict and reducing the polarisation in society. However, the data from the empirical study

raises a significant question over the nature of individuation, particularly as it did not have a statistically robust relationship with mythological thinking nor with religious tolerance. This needs to be investigated further, but this might be due to the subject matter – the other two questionnaires related to religion, and the advancement questionnaire related to typology. It might suggest that individuation is not a single, overall process, but a collection of discrete processes that are relevant only to independent subject areas. That is, it is possible for an individual to transcend one set of opposites (such as typological functions) whilst remaining very one-sided for a different set of opposites (such as religion). To use a building metaphor, individuation involves vertical development that is more akin to the development of a cityscape rather than the construction of a single tower. Towers can be built in certain areas whilst leaving other parts of the city undeveloped.

This research has also resulted in the development of some tangible assets that can be used for further research. There are four questionnaires which, although they could benefit from further refinement, provide a foundation for further examination of the relationships between religious tolerance, individuation, and mythological thinking. There is also a set of data which has been analysed to some extent for this research but can still be mined for further insights and relationships. There is also a web engine and mechanism for the collection of more data – though this could be improved by making it more usable on mobile devices. It enables the investigation of Jung's concepts of individuation and myth in a more rigorous way. However, the most significant products from the research are some key ideas that could potentially lead to greater religious (and other forms of) tolerance.

Myth as the imaginative

The comparison of Popper and Jung, along with a selection of other writers on the topic of living myth, has led to a very broad understanding of the term 'mythologem' and of myth.

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Although the term can have many different meanings, in this research it has come to represent a fundamental, imaginative activity in the psyche, as well as the products of that imagination. Myth is implicated in a wide range of psychic activities, such as structuring consciousness, making sense of the world, providing meaning, etc. This view is not a new one – it not only features in some of the writers referred to in part II, but it is one of the characterisations of myth suggested by Doty. He describes the differentiation of mythos and logos as leading to the current understanding of 'mythology as the imaginative' (Doty 1986, p. 7). He doesn't go quite as far as Popper in seeing science as myth, but he does see 'the most statistically driven science [as] shaped by the values of the underlying mythical orientation of cultures' (ibid.). Doty describes myth as fictional, but he provides a clarification that steps back from the colloquial interpretation of the word and portrays an understanding that is not too far from Jung's philosophy of *esse in anima*:

> I suggest that our myths are *fictional,* to be sure, but that fictional need not mean unreal and certainly not non-empirical; myths are *mysterious...* but they are not incomprehensible… Fiction is a sort of interpretation of the world [and] interpretation and explanation… have to be made…
>
> (Doty 1986, pp. 7-8, original emphasis)

Doty articulates in a slightly different way a point that Popper and Jung both made – that explanations of the world have to be made (though Doty stops short of extending that argument to scientific explanations). Jung's epistemology suggests that it is not only the external world that needs explanation but also the co-constructed reality. Popper's contribution is to argue that any making of explanations is intended to solve problems, and in the process it creates new ones. The progression of such explanations towards greater verisimilitude with objective truth is achieved through various forms of refutation (criticism,

falsification, etc.). Popper focuses more on truth, and Jung on meaning, but myth is concerned with both.

Doty also provides a perspective on the term mythologem, which he sees as having been derived from scholarship such as that of Kerényi[145] and as representing a mythological element, theme, or pattern. This latter point is useful in making the point that a mythologem is not entirely mythological but has a mythical aspect (Doty 1986, p. 20). However, the reference to Kerényi does not provide any other assistance for the present research. Although he co-authored a book with Jung on *The Science of Mythology*, they each wrote their own chapters rather than it being a fully collaborative affair. Jung used the term mythologem very sparingly in that book, so we can't automatically use Kerényi's definition as indicative of Jung's, and even if we did it doesn't add much to our understanding. Kerényi defined mythologem tautologically, as a body of material (and mythology as the moving of that material) that 'is not something that could be expressed just as well and just as fully in a non-mythological way' (Jung & Kerényi 1941, p. 4). Kerényi also introduces terminology that potentially confuses matters. He distinguishes between primary and secondary mythologems (p. 26), the former being pure archetypes and the latter being variations of them, and as examples of mythologems he suggests the orphan child, Vogul god, Kullervo, Narayana, Apollo, Hermes, and others. This might correspond to Jung's differentiation of a pure archetype and a mythologem (discussed earlier in the section on four mythologies). However, Kerényi also distinguishes between a mythologem and a scientific idea – for example, the idea that primal water represents the womb – which he terms a 'philosophem' (p. 55). This differentiation of science and myth cuts across Popper's and Jung's integration of science and myth, discussed earlier.

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[145] Carl Kerényi was a scholar of classical philology and religion and, from 1948, director of research at the C.G. Jung Institute in Zurich.

Doty's perspective – of mythology as the imaginative – enhances the integration of science and religion through myth. It puts them on a philosophically equal footing, but in doing so it also makes the demand of religion that it use reflection to improve its myths. This does not necessarily mean being driven by evidence, for there is much of theology that cannot be tested because of the absence of evidence and the means to obtain it. However, it does mean that more attention should be paid to contrary evidence, and to the problems that theology creates. The notion of science and psychology as forms of myth, which are constructed between individual perception and the external world, could make thinking of religion as myth more palatable to a protestant audience. Theology is a form of myth where the reality of God is co-constructed between the perceiving self and the reality of spirit.

Life cycle of myth

Another key discovery has been, alongside the variety of interpretations of what myth is, the variety of changes and transformations that myth can go through, which can be illustrated with an example that Barthes[146] suggested. He sees single words, images, or objects as carrying mythological meaning because they convey semiological associations. For some, this might not count as myth because it does not involve supernatural gods. Earlier in the research, we laid aside the scientific tendency to use such strict definitions, which establish distinct categories, because both Popper and Jung sometimes used their terms in a broad and protean way. However, even Jung might object to using the label myth if the association is purely semiotic, acting as a sign to convey a singular meaning. However, Barthes does not use the term semiological in that sense. For him, 'an object is the best messenger of the world above

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[146] Roland Barthes was primarily a linguist who initially saw myth in the colloquial sense of falsehood, but came to understand it as a form of language (Barthes 1957, p. xix). He has a very particular view of myth and its uses, which is informed by a Marxist perspective – for example, presenting the myth of everyday objects as maintaining bourgeois values. Nevertheless, it is useful to use Barthes' work as an example because the popularity of his work, and the fact that it deals with everyday objects. This makes it potentially relevant to the target audience of the research, and something that they could potentially relate to.

nature' (Barthes 1957 p. 101) and it demands involvement from the imagination because 'the signifier of a myth presents itself in an ambiguous way' (p. 140). The advantage of avoiding distinct definitions, such as limiting the term 'myth' to a particular form of story, is that it enables us to investigate the common root of a wide range of activities. By recognising the common elements of fantasy, or imaginative activity, or mythical disclosure, we can see how myth can be transformed through reflection on the nature of truth and meaning.

One of Barthes's examples was a soap advert, and this can be placed on different parts of the myth map depending on the individual's attitude to it. For the person who accepts the advert at face value it is a presupposition. The claim that dirt is 'forced out' (Barthes 1957, p. 31) is a fact that makes the soap powder worth buying, thereby giving it some meaning and placing it in the realm of naïve

Figure 46 - Myth Map
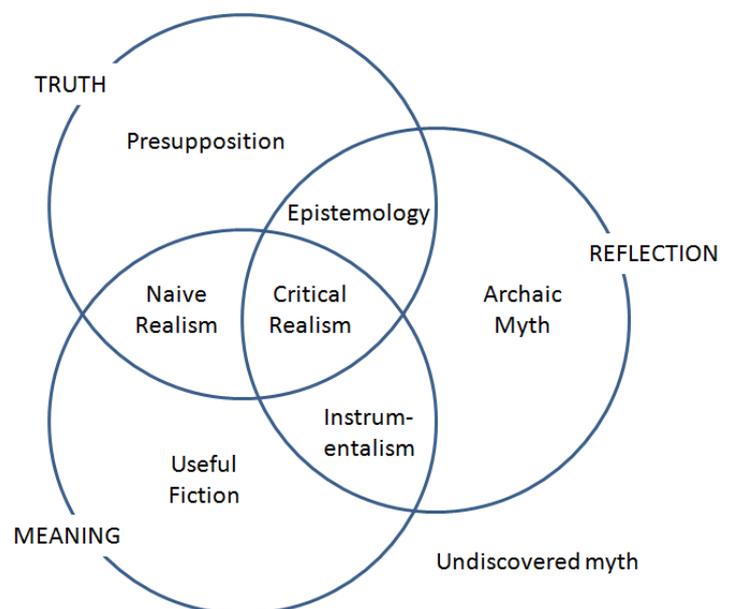
realism. If the Advertising Standards Authority were to examine that claim and find that it is untrue, then for them it counts as an archaic myth. Barthes himself is unconcerned by its truth and reflects on the claim as myth, asking questions about its meaning. As his concern is not the truth of the product – that is, the cleaning efficacy of the powder – it appears outside the circle of truth but within the circle of meaning. This puts it within the category of instrumentalism, using the advert to draw out meaning. For marketers, however, this is something they cannot afford to do because, if in their lack of concern for truth they end up portraying a falsehood, they will eventually pay a heavy commercial price. Ethical marketers need to operate in the centre of the myth map, in the areas of naïve realism and critical

realism, by paying attention to both the truth and meaning that might be associated with the product or advert.

Mythology as Epistemology

Another key theme that has emerged from the research is the role of mythology in Jung's epistemology. The discussion focused on three types of ontology – matter, spirit, and psyche – and afforded psyche a special status, as both an ontology and the medium in which we acquire all knowledge. This gives rise to four types of basic mythology – relating to matter, spirit, life (both matter and spirit) and psychology (little or no involvement of matter or spirit). This enables us to address a problem with myth that was identified by Morgan, that 'we cannot be sure that we are studying something real, rather than a rhetorical construction' (Morgan 2000, pp. 33-4). The answer given by Jung's philosophy is that everything is real, but there may also be differing degrees of involvement of the external realities of matter, spirit, and the objective psyche. The contribution of Popper is to suggest that our confidence in these myths can be improved through critical reflection – an approach that he believed could be applied across the board and not just in the physical sciences. Exactly how that can be applied to spirit is not clear, and has not been investigated, but that is a potential avenue for further investigation.

The research has also added a level of clarity in the relationship between myth and *weltanschauung* or worldview, with many writers seeming to use the term myth as if it was a worldview. The distinction that has emerged from this research is derived from Jung's artistic categories of visionary and psychological, which reflect in broad terms the interactions between mythos and logos, or mythical disclosure and reflection, or conjecture and refutation. This can even be applied to the epistemology of mathematics. This might seem to be a form of knowledge that rests on a priori principles and is therefore not subject to variations

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introduced by myth. However, the philosophical foundations of mathematics are themselves the subject of significant debate, and there are several competing theories. For example, a Platonic view sees mathematics as consisting of abstract entities, and logicism sees it as derived from propositions that are held to be true (Stanford[147] 2007/2012). This latter approach gives rise to the famous example in which several hundred pages of argument are required to establish the truth of the statement 1+1=2 (Whitehead & Russell[148] 1927, p. 362). However, even the validity of logic used has been called into question, for example with the development of paraconsistent theory that undermines Aristotle's principle of non-contradiction (Stanford 1996/2009). There are other philosophical approaches to mathematics, such as formalism which is more concerned with creating consistent rules that can be manipulated, irrespective of their truth. These approaches are devised to deal with problems that exist within existing theories and are therefore examples of how Popper's philosophy of science also applies in the field of mathematics (myth advances as a result of solving problems). Therefore, even mathematics is subject to differing theories or myths, which are evolving over time and through myth-making and critical discussion. And some mathematical philosophies have similarities with Jung's philosophy – such as intuitionism, which takes the view that mathematical numbers, theories, and proofs are all mental constructs. There are some philosophical writers who see this type of epistemology as needed in mathematics:

> Mathematical knowledge… needs the idea of constructivism as the means of gaining knowledge to prevent its customary appearance as the revelation of truth pre-existing human rationality.

> (Thomas[149] 1994, p. 35)

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[147] This is a reference to the online *Stanford Encyclopedia of Philosophy.*
[148] Alfred North Whitehead and Bertrand Russell were mathematicians and philosophers.
[149] Robert Thomas is a professor of applied mathematics.

This raises an interesting question – which has to go unanswered here – as to whether mathematics can be added to the list of external ontologies, alongside matter, spirit, and psyche. This approach might align with Jung's argument that numbers are mythological, based on them having a numinous character or lending themselves to amplification through mythological statements (e.g. Pauli & Jung 2001, p. 127). This argument was expanded upon by von Franz, examining the relationship between numbers and the unus mundus (von Franz 1974).

There is a hint of support for treating mathematics as being based on a form of mythology in the results of this research. There were some simple mathematical statements included in the mythological thinking style questionnaire. Although the reliability of the items did not enable them to be included in the final measure, what is interesting is that in the first factor analysis all these statements – both truth and meaning – loaded on a single factor and with relatively little loading from other items in the questionnaire. This suggests, at the very least, that it is possible to view mathematical statements mythically, and that there may be something characteristically unique about doing so. A simple example of mathematics being subject to myth can be found in Jung's writings when he suggests that 'if the wholeness symbolized by the quarternity is divided into equal halves, it produces two opposing triads' (Jung 1945/1948b, p. 235). In other words, he proposes that '$4 \div 2 = 2 \times 3$' is a formula that can be true. In doing so, he is assuming a certain underlying narrative about the nature of quarternities. How this might work can be visualised by combining two triangles (three sides each) to make a square (four sides). This demonstrates how changing the underlying narrative can change the meaning of the mathematical formula and the result that is produced.

Figure 47 - Triads
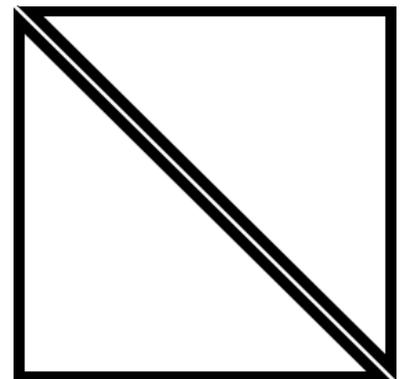
Mythology promoting Religious Tolerance

The most significant findings of this research are potentially those that relate to the topic of religious tolerance. Any conclusions can only be very tentative – suggesting areas for further investigation rather than drawing firm conclusions – because religious tolerance was not the main subject of the original hypothesis. The religious tolerance questionnaire was a supplement to the research – to provide an indication of the anticipated social benefit. Also, the demographic variable of religion was included on an erroneous assumption – that it would confirm there was no influence of religion on the relationship between mythological thinking and the advancement of consciousness. In the event, it has proven to be the most significant individual variable. Any further research therefore requires deconstruction of the variables that are associated with religion, including more detailed breakdown of religious affiliation and attitudes, and variables that identify different states of spirituality and faith. This could draw on existing research from a different body of knowledge, such as Erikson's or Fowler's models of the stages of faith (Wulff[150] 1991, pp. 369-409). It would also need to control for other correlates of religious belief that have already been established through empirical research in that field. In the present research, attention could not have been paid to these issues because their significance was not established until the results emerged in the latter stages. Also, focusing on religion rather than the advancement of consciousness would have taken the research in a different direction. This may have led to a much narrower view of myth than the one that has emerged in this research (incorporating science and psychology alongside religion).

Notwithstanding those caveats, there are a couple of key findings from the present research in respect of religious tolerance. The first is that, in the Christian population, it appears to have a

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[150] David Wulff is a professor of psychology, with a special interest in the psychology of religion.

direct relationship with the type of interactionist philosophy advocated by Jung. That is, for Christians at least, thinking mythologically is a significant moderator of religious superiority. The second key finding is that two groups of statements loaded on the religious superiority factor, which one would have expected, intuitively, to load on separate factors. The first group included statements that relate to having hold of the truth, the second expresses aggressive attitudes towards those who hold different views. There also needs to be a deconstruction of the demographic variable of 'sense of meaning', in view of its puzzling positive correlation with both advancement of consciousness and greater feelings of religious superiority.

The relation of Mythology and Truth

This relates to the final significant finding, which is the importance of the perceived truth of metaphysical assertions. It raises the question as to whether thinking of science and psychology as being forms of myth could eventually lead to a reduction in religious (and other) forms of intolerance and violence. As discussed in part II of this research, Bond suggests that symbolic thinking involves the experience of myth as providing meaning (Bond 1993, p. 18). However, the data identifies truth as giving rise to a much clearer and more significant factor in mythological thinking than meaning. This provides indirect support for the idea, discussed earlier in the dissertation, that the truth of metaphysical assertions can be a significant obstacle to thinking mythologically for a contemporary protestant Christian.

For the purposes of religious tolerance, therefore, promoting the experience of myth as meaning may be ineffective – it fails to address both the main obstacle to thinking mythologically (the truth of metaphysical assertions) and the main influence on religious tolerance (thinking mythologically about truth). This in turn raises the question as to how one can make a step towards thinking mythologically about religious truth, particularly in the target audience considered in this research, because it appears to carry with it the implication

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that one's beliefs are (metaphysically) false. The answer may lie in the philosophies of Jung and Popper, because mythology is not limited to religion. We may be able to make progress in the first instance by focusing on scientific, psychological, and mathematical worldviews as being grounded in myth and developed through critical reflection. It may then become an easier transition to thinking about one's own religious worldview in the same way. Von Franz suggested that the withdrawal of projections involves one layer at a time, and she used the image of peeling an onion (op. cit.). So, by thinking mythologically about science, psychology, and mathematics first, it may have the effect of making each subsequent layer thinner and easier to peel. It may also make it easier to go through Jung's fourth stage of the withdrawal of projections – concluding temporarily that there is no God – if one has already experienced doubts about the nature of material reality through the debate of scientific truths.

These are only speculative ideas and, for those adhering to a scientific worldview, they may raise concerns about moving towards a philosophy of subjectivism or relativism. On the other hand, for those adhering to a religious worldview, taking what appears to be a scientific approach to religion may seem to undermine the validity of faith, which is assurance of what we cannot see (Hebrews 11:1). However, Popper's approach to the development of myth steers a middle path. He doesn't simply allow any myth to stand – he provides a methodology for the ongoing improvement of those myths, which is centred on problems. And he doesn't require all beliefs to be based on evidence because there are many areas of knowledge where evidence is inaccessible or difficult to obtain. Popper's approach calls for the critical discussion of religious myths, and being prepared to improve them in the light of experience or evidence that is available. It involves taking a very broad view of myth, but it is a view that expresses the intention behind Jung's proposal in the Bernet letter. It also has more potential to be accepted by the target audience of this research – protestantly-minded Christians – than if they are presented just with the terminology of mythology that Jung used in the Bernet

letter. Jung did think in terms of myth being much broader than just religion. He just didn't communicate it well enough.

> Myth, says a Church Father, is "what is believed always, everywhere, by everybody"; hence the man who thinks he can live without myth, or outside it, is an exception.
>
> (Jung 1911-12/1952, p xxiv)

Appendices

Appendix A – Factor Analyses

TRANSCENDENCE (MMDI) 1ST FACTOR ANALYSIS

n=316

Table 24 – MMDI 1st Factor Analysis Eigenvalues

Eigenvalues

Factor	Eigenvalue	Variance (percent)	Percent cumulative
1	3.68	10.23	10.23
2	1.63	4.53	14.77
3	1.49	4.15	18.92
4	1.00	2.78	21.69

Table 25 - MMDI 1st Factor Analysis Loadings

Varimax factor loadings

	Factor 1	Factor 2	Factor 3	Factor 4	Commu-nality
TrNiSe1	**0.52**	0.08	0.15	-0.11	0.31
TrNiSe2	**0.49**	0.10	0.15	-0.01	0.27
TrNiSe5	**0.47**	-0.01	0.10	0.11	0.24
TrNeSi5	**0.45**	0.13	-0.01	0.04	0.22
TrNiSe4	**0.44**	-0.15	0.06	0.20	0.26
TrNiSe0	**0.40**	-0.03	0.14	-0.01	0.18
TrNiSe6	**0.38**	0.15	-0.15	0.03	0.19
TrNeSi4	**0.37**	0.20	-0.12	0.33	0.30
TrNeSi8	**0.35**	0.21	0.10	-0.02	0.18
TrNeSi2	**0.35**	0.22	-0.02	0.05	0.17
TrNeSi0	**0.31**	0.24	-0.18	-0.03	0.19
TrNeSi3	**0.29**	0.27	0.03	-0.12	0.17
TrNiSe7	**0.29**	0.21	-0.00	-0.01	0.13
TrFeTi2	0.05	**0.55**	-0.03	-0.19	0.34
TrFeTi4	0.06	**0.54**	0.17	0.13	0.34
TrFeTi0	0.10	**0.53**	-0.08	-0.05	0.30
TrFeTi6	0.01	**0.52**	0.19	-0.07	0.31
TrFeTi5	0.14	**0.44**	0.11	0.06	0.23
TrFeTi8	0.03	**0.34**	0.18	-0.11	0.16
TrFeTi3	0.21	**0.30**	0.25	0.11	0.21
TrFiTe0	0.09	**0.25**	0.15	0.16	0.12
TrFeTi1	0.22	**0.25**	0.07	0.11	0.12
TrNeSi6	0.11	**0.24**	-0.17	0.10	0.11
TrFiTe6	0.05	0.18	**0.59**	0.15	0.41
TrFiTe4	-0.08	-0.04	**0.48**	-0.05	0.24
TrFiTe8	0.12	0.08	**0.41**	-0.04	0.19
TrNiSe8	0.16	0.02	**0.40**	0.02	0.19
TrFiTe2	0.12	0.03	**0.39**	0.31	0.27
TrFeTi7	-0.04	-0.12	**-0.30**	-0.05	0.11
TrFiTe7	0.14	-0.14	**-0.25**	0.09	0.11
TrNeSi7	-0.14	0.03	**-0.17**	-0.09	0.06
TrFiTe5	0.17	0.28	0.08	**0.49**	0.36
TrFiTe3	0.20	0.04	0.08	**0.43**	0.24
TrNiSe3	0.10	0.22	-0.25	**-0.37**	0.26
TrFiTe1	0.08	0.06	0.26	**-0.34**	0.20
TrNeSi1	0.09	0.09	0.00	**-0.33**	0.13
Sum of Squares	2.43	2.32	1.79	1.28	7.81
Percent of Variance	6.74	6.45	4.96	3.55	21.69

MYTHOLOGICAL THINKING 1ST FACTOR ANALYSIS

n=259

Table 26 – Mythological Thinking 1st Factor Analysis Eigenvalues

Eigenvalues

Factor	Eigenvalue	Variance (percent)	Percent cumulative
1	11.69	17.19	17.19
2	4.74	6.98	24.16
3	2.66	3.91	28.07
4	2.06	3.03	31.10
5	1.84	2.71	33.81
6	1.58	2.32	36.13
7	1.32	1.94	38.08
8	1.16	1.70	39.78
9	1.10	1.62	41.39

Table 27 – Mythological Thinking 1st Factor Analysis Loadings

Varimax factor loadings

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9	Commu-nality
SyRet5	**0.66**	0.41	0.08	0.05	0.09	-0.04	0.05	-0.09	-0.12	0.65
SyRet3	**0.65**	0.37	0.13	0.14	0.05	-0.03	0.01	-0.15	-0.00	0.63
SyRet8	**0.65**	0.26	0.23	-0.02	-0.01	0.03	0.04	0.10	-0.04	0.56
SyRet10	**0.65**	0.24	0.12	0.00	0.09	0.16	0.04	0.11	0.01	0.54
SyRet7	**0.63**	0.22	0.19	0.04	0.07	0.08	-0.11	0.01	0.08	0.51
SyRet11	**0.62**	0.23	-0.20	0.03	0.01	0.25	-0.00	0.07	-0.00	0.55
SyRet1	**0.62**	0.25	0.01	0.15	-0.01	-0.05	-0.00	-0.09	-0.13	0.49
SyRet4	**0.59**	0.37	0.12	0.11	0.07	0.10	-0.05	-0.06	-0.16	0.56
SyRet2	**0.57**	0.28	0.00	0.10	0.04	-0.04	0.10	-0.01	-0.11	0.44
SyRet12	**0.57**	0.26	-0.01	0.10	0.09	0.07	-0.05	0.24	0.03	0.47
SyRet0	**0.57**	0.16	0.15	-0.02	-0.06	0.21	-0.11	0.04	0.16	0.45
SyRet6	**0.46**	0.09	0.43	0.06	0.05	0.14	0.14	-0.11	0.04	0.46
SyRet13	**0.45**	-0.02	0.36	0.06	0.04	0.03	0.09	-0.02	0.10	0.36
SySct8	**0.41**	0.04	0.21	-0.02	0.19	0.36	0.19	0.11	-0.14	0.45
SyPst6	**0.40**	0.08	0.31	0.04	0.10	0.31	0.15	0.21	-0.06	0.44
SyRet9	**0.36**	0.25	0.09	0.02	0.15	0.11	-0.01	0.16	-0.05	0.27
SyRem5	0.28	**0.69**	0.01	0.03	-0.13	0.05	0.06	-0.02	-0.01	0.58
SyRem1	0.25	**0.67**	0.02	0.09	-0.01	0.07	-0.04	-0.04	0.08	0.54
SyRem12	0.21	**0.65**	0.09	0.09	0.11	-0.02	-0.07	0.03	-0.02	0.50
SyRem10	0.28	**0.61**	0.23	0.03	0.04	0.08	-0.06	0.01	-0.10	0.53

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SyRem4	0.30	**0.61**	-0.01	0.01	-0.05	0.19	-0.05	0.07	-0.11	0.52
SyRem11	0.22	**0.61**	-0.05	-0.04	-0.06	0.27	-0.04	0.13	-0.13	0.53
SyRem3	0.31	**0.60**	0.22	0.05	-0.09	0.05	-0.01	-0.07	0.03	0.52
SyRem2	0.29	**0.57**	0.15	0.02	-0.07	0.00	-0.01	-0.03	0.06	0.45
SyRem8	0.28	**0.57**	0.30	-0.08	-0.03	0.03	0.03	0.04	0.05	0.51
SyRem9	0.03	**0.48**	0.17	-0.01	0.18	-0.07	-0.07	0.09	-0.08	0.32
SyRem7	0.13	**0.42**	0.38	-0.02	0.02	0.15	-0.11	0.02	0.05	0.38
SyRem0	0.24	**0.32**	0.31	-0.04	-0.14	0.09	-0.09	-0.01	0.17	0.32
SyScm3	-0.01	0.24	**0.51**	-0.10	0.07	-0.12	-0.04	0.22	-0.14	0.42
SySct3	0.19	0.07	**0.50**	-0.02	0.04	-0.07	-0.01	0.28	-0.04	0.38
SyPsm3	0.09	0.19	**0.48**	-0.02	0.08	0.11	0.05	-0.06	-0.04	0.30
SyPst3	0.38	0.03	**0.46**	0.07	-0.13	0.04	0.15	0.01	0.01	0.41
SyRem13	0.14	0.33	**0.42**	-0.03	0.15	0.09	0.01	-0.04	0.02	0.34
SyRem6	0.15	0.32	**0.40**	0.01	0.08	0.10	0.08	-0.13	-0.01	0.33
SySct0	0.10	-0.10	**-0.27**	0.07	0.16	0.16	0.20	0.20	-0.09	0.24
SyMat1	0.09	0.01	-0.04	**0.75**	0.03	-0.02	0.02	0.02	0.11	0.59
SyMat2	0.10	-0.05	-0.03	**0.73**	-0.01	-0.11	0.07	0.01	0.09	0.57
SyMam2	0.00	0.14	0.07	**0.71**	0.04	0.07	0.07	0.10	-0.03	0.55
SyMam1	-0.01	0.12	0.06	**0.65**	0.14	0.20	-0.02	0.16	0.03	0.53
SyMat0	0.10	-0.11	-0.06	**0.49**	-0.01	-0.05	0.04	-0.03	-0.05	0.27
SyMam0	0.06	0.12	-0.03	**0.38**	0.12	0.21	0.03	0.04	-0.07	0.23
SyScm7	0.00	-0.05	0.04	0.07	**0.64**	0.15	-0.07	0.08	-0.01	0.45
SyScm6	0.01	0.06	-0.04	-0.04	**0.53**	0.08	0.18	0.22	0.08	0.38
SySct7	0.20	-0.04	0.07	0.20	**0.46**	0.00	-0.10	0.25	-0.00	0.37
SyPsm7	0.00	-0.04	0.10	-0.01	**0.44**	0.08	0.22	-0.11	0.22	0.32
SyPsm1	0.14	0.04	0.06	0.06	**0.38**	0.18	0.24	0.02	0.12	0.27
SyScm0	0.03	-0.05	-0.09	0.04	**0.34**	0.22	0.24	0.07	-0.09	0.25
SyPst1	0.16	-0.05	0.11	0.12	**0.25**	0.04	0.22	0.08	0.06	0.18
SyPst5	0.23	0.12	-0.03	-0.01	0.05	**0.61**	-0.05	0.05	0.16	0.47
SyPsm5	0.07	0.12	0.05	-0.01	0.22	**0.53**	0.06	-0.08	0.24	0.42
SyScm1	0.02	0.10	0.04	0.13	0.21	**0.48**	0.12	0.30	-0.04	0.41
SyPsm6	0.17	0.12	0.28	0.06	0.09	**0.46**	0.20	0.11	-0.22	0.44
SyScm8	0.15	0.17	0.23	0.09	0.36	**0.43**	0.09	-0.04	-0.13	0.45
SyPst2	0.02	-0.09	0.00	0.01	-0.05	0.00	**0.66**	0.10	0.09	0.47
SyPsm2	-0.14	-0.04	0.01	-0.13	-0.03	0.14	**0.47**	0.01	0.01	0.28
SySct2	0.09	0.05	0.10	0.07	0.14	-0.04	**0.44**	0.17	0.04	0.27
SyPst0	0.03	-0.04	0.02	0.07	0.09	0.08	**0.42**	-0.00	0.18	0.23
SyScm2	-0.05	0.19	0.18	-0.04	0.33	0.01	**0.41**	0.08	-0.08	0.36
SySct5	0.04	-0.09	-0.05	0.10	0.03	-0.05	**0.41**	0.06	0.03	0.20
SyPsm0	0.03	-0.03	0.01	0.01	0.22	0.25	**0.34**	-0.03	0.13	0.25
SyScm5	-0.14	0.07	-0.02	0.05	0.28	0.07	**0.33**	-0.03	-0.04	0.22
SyPst7	0.13	-0.19	0.13	0.14	0.16	-0.03	**0.22**	0.03	0.20	0.21
SySct4	0.04	-0.00	0.07	0.05	0.10	0.02	0.14	**0.66**	0.02	0.48
SyScm4	-0.16	0.10	0.08	0.14	0.17	0.22	0.18	**0.47**	0.06	0.40
SySct1	0.23	0.00	-0.13	0.19	0.11	0.33	0.08	**0.38**	-0.08	0.38
SySct6	0.13	-0.05	-0.11	0.10	0.35	-0.01	0.22	**0.37**	0.17	0.37
SyPst4	-0.06	-0.09	-0.06	0.05	0.01	-0.01	0.18	0.09	**0.64**	0.46
SyPsm4	-0.09	0.02	-0.02	0.00	0.16	0.08	0.17	-0.03	**0.61**	0.44
Sum of Squares	6.46	5.59	2.84	2.78	2.47	2.42	2.39	1.74	1.45	28.15
Percent of Variance	9.50	8.23	4.18	4.08	3.63	3.57	3.52	2.56	2.13	41.39

RELIGIOUS TOLERANCE 1ST FACTOR ANALYSIS

n=310

Table 28 – Religious Tolerance 1st Factor Analysis Eigenvalues

Eigenvalues

Factor	Eigenvalue	Variance (percent)	Percent cumulative
1	5.31	18.96	18.96
2	2.65	9.45	28.41
3	1.12	4.00	32.41

Table 29 – Religious Tolerance 1ˢᵗ Factor Analysis Loadings

Varimax factor loadings

	Factor 1	Factor 2	Factor 3	Commu-nality
tolerRt19	**0.77**	0.01	0.23	0.64
tolerRt9	**0.72**	0.03	0.24	0.58
tolerTr2	**0.63**	-0.13	0.08	0.42
tolerRt26	**0.63**	0.20	0.16	0.47
tolerRt0	**0.58**	0.03	0.41	0.51
tolerRt11	**0.56**	0.23	-0.22	0.41
tolerTr6	**0.54**	-0.17	0.08	0.33
tolerRt5	**0.53**	0.19	-0.08	0.33
tolerRt17	**0.50**	0.18	0.11	0.29
tolerRt10	**0.45**	0.33	-0.02	0.31
tolerTr16	**0.45**	-0.02	0.01	0.20
tolerRt1	**0.30**	0.04	-0.03	0.09
tolerRt23	**0.28**	0.24	0.19	0.17
tolerRt15	-0.03	**0.74**	0.15	0.58
tolerRt18	-0.05	**0.62**	0.02	0.38
tolerRt12	0.01	**0.58**	0.18	0.37
tolerRt25	0.19	**0.55**	0.20	0.37
tolerRt4	0.10	**0.53**	0.19	0.33
tolerRt21	-0.06	**0.53**	0.00	0.28
tolerRt7	0.17	**0.34**	-0.06	0.15
tolerRt20	0.21	0.29	**0.58**	0.46
tolerRt14	0.15	0.41	**0.48**	0.42
tolerRt13	0.12	0.24	**0.44**	0.27
tolerRt8	0.15	0.26	**0.42**	0.26
tolerRt3	0.11	0.20	**0.32**	0.16
tolerTr24	-0.16	-0.11	**0.30**	0.13
tolerTr27	-0.06	-0.12	**0.29**	0.10
tolerRt22	0.09	0.15	**0.18**	0.06
Sum of Squares	4.20	3.08	1.80	9.07
Percent of Variance	14.99	11.00	6.42	32.41

ADDITIONAL DEMOGRAPHIC INFORMATION

Table 30 – Demographic Changes in Religion

	Original	Current	Net gain/loss
Agnosticism	14	38	24
Atheism	20	50	30
Buddhism	6	8	2
Christianity	219	114	-105
Hinduism	12	7	-5
Humanism	0	6	6
Islam	12	12	0
Judaism	10	8	-2
Other	9	12	3
Spiritual but not religious	15	62	47

Table 31 - Demographic Movements Between Religions

Original Religion	Current Religion									
	Agnosticism	Atheism	Buddhism	Christianity	Hinduism	Humanism	Islam	Judaism	Other	Spiritual but not religious
Agnosticism	7	4								3
Atheism		14	1	2		1				2
Buddhism	2		2							2
Christianity	26	27	5	109		4	2		8	38
Hinduism	1	1			7					3
Humanism										
Islam						1	10			1
Judaism	1			1				8		
Other		2							4	3
Spiritual but not religious	1	2		2						10

Appendix B – MMDI data review

Table 32 - MMDI Data Countries Represented

Country	n	East/West assignment
AUSTRALIA	2770	W
CANADA	2553	W
CHINA	110	E
FINLAND	163	W
FRANCE	305	W
GERMANY	197	W
HONG KONG	132	E
INDIA	1623	E
INDONESIA	150	E
IRELAND	330	W
ITALY	204	W
JAPAN	127	E
MALAYSIA	359	E
NETHERLANDS	156	W
NEW ZEALAND	424	W
PAKISTAN	176	E
PHILIPPINES	538	E
PUERTO RICO	127	W
REPUBLIC OF KOREA	296	E
ROMANIA	101	W
SINGAPORE	561	E
SWEDEN	169	W
UNITED ARAB EMIRATES	137	E
UNITED KINGDOM	7843	W
UNITED STATES	25749	W

Table 33 - MMDI Data Age Range

Age Range		n
1	Under 16	4244
2	16-19	9445
3	20-24	10399
4	25-29	6293
5	30-39	7268
6	40-49	4615
7	50-59	2386
8	60 or over	650

Appendix C – Online Questionnaires and Debrief

PARTICIPANT CONSENT FORM

Steve Myers'
PhD research project

Being supervised by
Prof. Roderick Main

University of Essex

Introduction

Ph.D. Research Project: Mythology for Christians

To thank you for completing this Ph.D. research questionnaire, when you have finished you can have a full set of commercial reports on your personality, career options, and leadership style. There will be a link on the final screen.

Please read this page carefully. Also, make a note of any login details on the next screen, and your report link on the final screen. As this questionnaire is anonymous, you won't be able to recover your reports in future if you lose them.

Background

My project is examining an aspect of the theory of the psychologist C.G. Jung. It has several aims, including the promotion of religious tolerance. I am looking for adult participants of all persuasions, including Christian, atheist, Muslim, Jewish, Buddhist, Hindu, agnostic, etc. At the moment, the project is not suitable for anyone experiencing a significant life trauma (e.g. bereavement, redundancy), any form of mental illness, or under-18s.

What is involved?

Participation involves completing some online questionnaires on your computer or tablet (they are not designed for use on a small screen, such as a mobile phone). They will take approximately 30 minutes to complete and, in normal use, will use well under a megabyte of your data allowance. The questions are about yourself, your personality, your beliefs, and your attitude towards other religions.

Privacy

In this version of the questionnaire, the information collected via this secure website is anonymous and will be stored on a secure database. I will not disclose individual responses to anyone and will only be analysing/publishing averages and trends.

Feedback on your results

After you have completed the questionnaire, your PROVISIONAL results will be in an e-book, which you can download in PDF or EPUB format, or view online in a web page. The reason for the results being provisional will be discussed in the e-book.

How to exit

You do not have to participate in this research (it is voluntary). You can exit at any time, and optionally request that I delete your data, by clicking on the small 'Exit Research' link at the bottom of every screen and following the prompts.

What next?

If you wish to continue and participate, I will give you a username and password on the next screen. Please make a note of them, as they cannot be recovered if you lose them. If you have

any questions or concerns, please contact me (click on my picture at the top). **Please answer these five questions carefully:**

- I am 18 or over

- I am experiencing a life trauma at the moment

- I am being treated for a mental health issue

- I agree my responses can be stored securely and anonymously for research.

A drop down box and submit button asked the respondent to confirm they have understood this page and wish to continue.

DEMOGRAPHICS QUESTIONNAIRE

Section 1 out of 4: Demographic Information

Introduction

In the first section that follows, there are some demographic questions about you. This information is stored anonymously and needed for research purposes, e.g. to identify and correct for hidden biases in the questionnaire that may be influencing the results

If there are questions you don't understand, don't know, or would prefer not to answer, then just leave that field blank and skip it. However, please answer as many as you can because empty answers make the questionnaire less useful.

Questions

Each question was presented with a range of options available from a drop-down box.

- What is your age?

- In what country were you born?

- Do you have children?

- How is your skin colour best described?

- How content are you in life overall?

- What level of academic qualifications have you obtained (ignore any study in progress)?

- What is your gender?

- What is your current job?

- What is your first language?

- In which country do you currently live?

- What is your marital status and history?

- How much purpose or meaning is there in your life?

- What is your sexual orientation?

- What was the primary religion in which you were brought up?

- What is your religion now?

- How much formal vocational or professional training have you had in total?

- How do you feel about your job?

- What is your relationship with other people at work?

ADVANCEMENT OF CONSCIOUSNESS QUESTIONNAIRE

In each question box below, compare the four statements and select a radio button nearest the

statement you agree with most. If you don't know the answer, skip it.

	I feel comfortable doing either	
I really enjoy comforting other people who feel hurt or upset	**FeTi0**	I really enjoy forming my own explanations of how things work
	I dislike both	

	I feel comfortable doing either	
I really enjoy getting people to organise themselves better	**FiTe0**	I really enjoy thinking about what I believe is important
	I dislike both	

	I feel comfortable doing either	
I really enjoy dreaming up imaginative ideas	**NiSe0**	I really enjoy getting things done as and when they arise
	I dislike both	

	I feel comfortable doing either	
I really enjoy it when I can get to know one thing or person very, very well	**NeSi0**	I really enjoy it when things are constantly changing
	I dislike both	

	I feel comfortable doing either	
I really like building better relationships between people	**FeTi1**	I really like finding logical flaws in theories or explanations
	I dislike both	

	I feel comfortable doing either	
I really enjoy thinking about the unfathomable	**NiSe1**	I really enjoy accomplishing immediate tasks
	I dislike both	

I get annoyed if people insist on following procedures	I am annoyed by both **FiTe1** Neither of them annoy me	I get annoyed if people won't compromise over their private convictions
I get annoyed if people change things that are already working well	I am annoyed by both **NeSi1** Neither of them annoy me	I get annoyed if people want all the facts before trying anything new
I very much like trying out new ways of doing things	I feel comfortable doing either **NeSi2** I dislike both	I very much like contemplating my own observations
I very much like holding fast to my own, personal values	I feel comfortable doing either **FiTe2** I dislike both	I very much like checking that everyone has done what they were meant to do
I very much like forming my own rationale of why things happen	I feel comfortable doing either **FeTi2** I dislike both	I very much like taking care of other people's feelings
I very much like thinking about what is in the unknown	I feel comfortable doing either **NiSe2** I dislike both	I very much like doing practical things that have a tangible result

	I feel comfortable doing either	
If need be, I am comfortable taking an individual stand on my personal beliefs	**FiTe3**	If need be, I am comfortable imposing rules on other people
	I dislike both	

	I am annoyed by both	
People irritate me when they invest effort in something that will soon be obsolete	**NiSe3**	People irritate me when they think so much about the future that today's tasks are left undone
	Neither of them annoy me	

	I am annoyed by both	
People irritate me when they make notes of every detail	**NeSi3**	People irritate me when they start new, experimental initiatives
	Neither of them annoy me	

	I feel comfortable doing either	
I really enjoy a theory when it is true and correct	**FeTi3**	I really enjoy relationships when there is a lot of rapport
	I dislike both	

	I am satisfied by both	
I feel very satisfied by challenging the status quo, to shake things up a bit	**NeSi4**	I feel very satisfied by reviewing my own experiences and knowledge
	Neither satisfy me	

	Both are equally important	
My personal convictions are the most important thing	**FiTe4**	Following the rules is the most important thing
	Both are unimportant	

I am satisfied by both

I feel very satisfied by imagining a radical vision of the future

NiSe4

I feel very satisfied by taking immediate action to deal with things as they arise

Neither satisfy me

I am satisfied by both

I feel very satisfied by building a more appreciative atmosphere amongst friends

FeTi4

I feel very satisfied by figuring out for myself how something works

Neither satisfy me

I feel comfortable doing either

I really enjoy having my own moral compass to guide my thoughts and beliefs

FiTe5

I really enjoy overcoming opposition to get people to do what they are supposed to do

I dislike both

I feel comfortable doing either

I enjoy getting things done

NiSe5

I enjoy anticipating the future

I dislike both

I feel comfortable doing either

I enjoy changing things to see what happens

NeSi5

I enjoy thinking about what I know

I dislike both

I feel comfortable doing either

I enjoy meeting friends

FeTi5

I enjoy solving problems on my own

I dislike both

I am satisfied by both

I feel satisfied when I'm dealing with a crisis

NiSe6

I feel satisfied when I'm contemplating the mysterious

Neither satisfy me

	I feel comfortable doing either	
I enjoy gathering lots and lots of information	**NeSi6**	I enjoy flitting from one activity to another
	I dislike both	

	I am satisfied by both	
I feel satisfied when my explanations are correct	**FeTi6**	I feel satisfied when others have good relationships
	Neither satisfy me	

	I am satisfied by both	
I feel satisfied when others follow the correct procedures	**FiTe6**	I feel satisfied when I can adhere to my personal values
	Neither satisfy me	

	I dislike both	
I dislike having to compromise my values	**FiTe7**	I dislike it when there is chaos around me
	I like both	

	I dislike both	
I dislike doing the same things again and again	**NeSi7**	I dislike ambiguity and lack of clarity in information
	I like both	

	I dislike both	
I dislike conflict between people	**FeTi7**	I dislike incoherent theories
	I like both	

	I feel comfortable doing either	
I enjoy seeing the tangible results of my efforts	**NiSe7**	I enjoy closing my eyes and contemplating whatever images and thoughts come to mind
	I dislike both	

I enjoy thinking about the past

I feel comfortable doing either

NeSi8

I dislike both

I enjoy working towards a better future

Getting life's day to day tasks done is what matters most

Both are equally important

NiSe8

Both are unimportant

Knowing where you are going in the long term is what matters most

Thinking logically is what matters most

Both are equally important

FeTi8

Both are unimportant

Caring for others is what matters most

Having a well-prepared plan is what matters most

Both are equally important

FiTe8

Both are unimportant

Adhering to one's conscience is what matters most

MYTHOLOGICAL THINKING QUESTIONNAIRE

In this questionnaire below, there are several statements with two blocks of radio buttons.

Each one is in this format (the statement is '1+1=2'):

For each statement, please select **two radio buttons**. The first radio button is to show whether, on balance, you believe the statement is more likely to be **true or false**:

- **true** – it is either true or (on balance) probably true, as far as you know based on current knowledge or evidence.

- **false** – false or probably false, based on your current knowledge.

- **allegorical** – the statement represents a hidden truth that is of a different form or nature.

If you are unsure what allegorical means, choose one of the TRUE or FALSE radio buttons.

If you think that a statement is both true and allegorical, or both false and allegorical, you can indicate this using one of the intermediate radio buttons.

The second radio button is to show, on balance, whether the statement has **meaning** for you or is **insignificant**:

- **meaningful** – the statement has some meaning for you, which can be of any form. For example, it might be fascinating, inspiring, awesome, give you a sense of purpose, or stir strong emotions (whether positive or negative).

- **insignificant** – on balance, the statement is unimportant and has relatively little or no impact on you.

- **symbolic** – it is possible for you to extract various forms of meaning, not directly contained in the statement, by reflecting or meditating on it.

If you are unsure what symbolic means, choose one of the MEANINGFUL or INSIGNIFICANT radio buttons. If you think a statement is both meaningful and symbolic, or insignificant and symbolic, you can indicate this using one of the intermediate radio buttons.

Statements

For each statement, please select **two radio buttons**.

The statements are repeated below not as presented to the respondent, but with the category and item names and numbers that were used by the system. The meaning of the codes is:

- Ma   Mathematics

- Re   Religion

- Sc   Science

- Ps   Psychology

- 't' suffix   Truth radio button response

- 'm' suffix   Meaning radio button response

- The number is the question number in that category

Statements (as seen by the system):

Ma	1 + 1 = 2	Mat0	Mam0
Re	Our lives are directed/shaped by God	Ret0	Rem0
Sc	The earth is 4½ billion years old	Sct0	Scm0
Ps	Everyone has unconscious psychological complexes that influence their behaviour	Pst0	Psm0
Re	In the Garden of Eden, mankind became separated from God	Ret1	Rem1
Re	God is the source of all good, the devil is the source of all evil	Ret2	Rem2
Re	After Jesus died on the cross, he was resurrected again and is alive today	Ret3	Rem3
Ps	The human mind consists of several different parts, each with its own function	Pst1	Psm1
Re	The Ark saved Noah, his family, and the animals from a great flood	Ret4	Rem4
Re	Jesus was born in a virgin birth	Ret5	Rem5
Ma	1 + 1 = 3	Mat1	Mam1
Ps	We don't see the world as it is, all our perceptions are constructed in the mind	Pst2	Psm2
Ps	God is a psychological illusion	Pst3	Psm3
Re	After we die, we are reincarnated in this world, in a new body	Ret6	Rem6
Sc	Humans evolved from earlier forms of animal life	Sct1	Scm1
Re	There is an eternal life which is spent either in heaven or hell	Ret7	Rem7

Sc	The fundamental nature of the world contains many seemingly-absurd contradictions	Sct2	Scm2
Sc	Miracles (supernatural events) do happen	Sct3	Scm3
Sc	There is probably intelligent life elsewhere in the universe	Sct4	Scm4
Re	Those who believe in Jesus are saved through his death and resurrection	Ret8	Rem8
Ma	1 + 1 = 10	Mat2	Mam2
Re	There are angels and demons who influence us	Ret9	Rem9
Re	There will be an end to the world, at which point everyone will be resurrected and judged	Ret10	Rem10
Sc	A table appears solid but consists mostly of empty space	Sct5	Scm5
Ps	The highest human potential lies within oneself	Pst4	Psm4
Ps	The enlightenment enabled us to see that human reasoning is more important than religious belief	Pst5	Psm5
Sc	The universe is governed by laws of nature (some of which are complex and mysterious)	Sct6	Scm6
Sc	Science has the potential to improve life for us all	Sct7	Scm7
Re	God created the world in 6 days	Ret11	Rem11
Ps	The universe is self-existing and was not created	Pst6	Psm6
Re	There is a devil who is a source of evil in the world	Ret12	Rem12
Ps	People's core beliefs are formed by early childhood experiences	Pst7	Psm7

Sc | All that happens in the world is due to natural principles (not divine intervention) | Sct8 Scm8

Re | We all have the potential for eternal life | Ret13Rem13

RELIGIOUS TOLERANCE QUESTIONNAIRE

In an earlier response, you identified your religious belief as being *(their chosen religion)*. For the purpose of this questionnaire, please consider that as a category of religious belief. This questionnaire asks for your attitudes towards other people, particularly those who have different beliefs.

Please indicate how strongly you agree or disagree with each of the following statements. Answer in general or as an average (i.e. not in relation to your knowledge of any particular individual).

Statements

The following statements are presented as seen by the system, not the respondent. The meanings of the codes are:

- Numbers indicate the question number

- 'Rt' are statements expected to be closely aligned to religious tolerance

- 'Tr' are statements expected to correlate strongly (perhaps inversely) with the transcendence score from the advancement questionnaire.

- R/L indicates whether higher scores on the Likert scale are assigned to the radio buttons from left to right (R) or right to left (L).

Statements as seen by the system:

0 Rt0 (stated religion) is correct, other religions are wrong   (R)

1 Rt1 Public criticism or defamation of (stated religion) should be made illegal   (R)

2 Tr2 I am a strong defender of (stated religion)   (R)

3 Rt3 There are many practices in other religions that I find abhorrent   (R)

4 Rt4 I trust Buddhists   (L)

5 Rt5 Anyone who commits apostasy – i.e. abandons (stated religion) – should be punished   (R)

6 Tr6 I believe what the leaders in (stated religion) have taught is the truth   (R)

7 Rt7 I distrust men   (R)

8 Rt8 People should be allowed to hold any religious views they want   (L)

9 Rt9 I try to persuade people, who have different beliefs, to adopt (stated religion)   (R)

10 Rt10 I distrust people who say they are agnostic   (R)

11 Rt11 Anyone who commits blasphemy against (stated religion) should be punished   (R)

12 Rt12 I trust atheists   (L)

13 Rt13 People should be allowed to express any religious views they hold   (L)

14 Rt14 I enjoy working with people who have different religious beliefs   (L)

15 Rt15 I trust Jews   (L)

16 Tr16 I feel a special connection with other (stated religion) people   (R)

17 Rt17 If (stated religion) friends change their religion, that is a betrayal of our friendship   (R)

18 Rt18 I trust women   (L)

19 Rt19 I have a duty to persuade people that (stated religion) is true   (R)

20 Rt20 I respect religious beliefs that are different to mine (L)

21 Rt21 I distrust Christians (R)

22 Rt22 In my job, I provide the same level of service to people whether they are (stated religion) or adhere to a different religion (L)

23 Rt23 I don't like to associate or be friends with people who not (stated religion) (R)

24 Tr24 My religious views are unique (L)

25 Rt25 I distrust Muslims (R)

26 Rt26 People who use different religious practices to (stated religion) are wrong to do so (R)

27 Tr27 I sometimes question what (stated religion) leaders teach or believe (L)

Contents

1 Introduction

This personalised eBook describes the results of the questionnaire you completed

at https://research.myers.co, which is based on the psychological theories of Carl Gustav Jung.

C.G. Jung was one of the forefathers of psychology and, at research.myers.co, I am testing out

some of his ideas on mythology, religious tolerance, and consciousness as part of my PhD

research. The results described in these pages should be regarded as tentative, for two reasons.

Firstly, all personality questionnaires can be wrong, including those that have been

extensively researched. For example, the most widely-used questionnaire in the world (the

MBTI) produces an incorrect result in 25% of cases. Secondly, this myers.co questionnaire is

still being researched, so does not yet have the same type of validation or reliability data to

back it up as most other (commercial) questionnaires.

Despite the tentative nature of the results, you may still find this eBook useful in helping to develop greater self-understanding or considering how you want to mature or develop psychologically (to 'individuate' as Jung called it). The main purpose of the book is not to give you ANSWERS about yourself, but to ask the right QUESTIONS. The value of the book is not in its content, but in your reflection on what it says.

The questionnaire has four sections and this book provides analysis for three of them. The first set of questions collected demographic data which is held anonymously, purely for research purposes. The other three sections are designed to establish (a) your personality style and approach to conflicting perspectives, (b) style of mythological thought, and (c) degree of religious tolerance. The book will go through each of these three sections in order. It will introduce the meaning of the various terms used, and give your personal score with an illustrative scale. These scales are repeated in a summary at the end of the book.

If you are familiar with the Myers-Briggs Type Indicator®, please note that the questionnaire at the myers.co website is not the same. The authors of the two questionnaires (Isabel Briggs Myers and Steve Myers respectively) are no relation. The only connection is that both questionnaires are derived from the same Jungian theory, though they interpret that theory in different ways.

2 Basic Personality Functions

C.G. Jung's theory (called ANALYTICAL PSYCHOLOGY) covers many aspects of the human mind – how it works, develops, relates, and the role each individual plays in society and culture. One part of his theory (called PSYCHOLOGICAL TYPES) examines five psychological (or mental) functions that can be found in human consciousness and are used in everyday life. These functions – akin to regions of the brain – have a significant impact on the style you use

when dealing with people, relationships, or everyday tasks. You use these mental functions to recognise and deal with different types of thought and situation – for example known facts, unknown possibilities, logical explanations, or the inherent worth of things. There is also a function that you use to resolve conflict, contradiction, or opposition.

Sensation

The first mental function is called Sensation and you use it relate your thoughts and actions to existing knowledge and experience – for example, when achieving specific goals, clarifying information, or producing tangible outcomes. When you use this function you tend to be realistic, down-to-earth, and practical. You pay attention to facts, use realistic approaches that you know will work, and get things done through perseverance. You can use the Sensation function at any time, and you do frequently – for example when looking at your watch to see the time, or when painting someone's portrait. In both these examples, you are using what you know to clarify information or create something tangible.

Sensation

Score:

This scale shows the degree to which you have DIFFERENTIATED the Sensation function. Jung used the term differentiation to describe the ability to use this function on its own, separately from the other functions. The more a function is differentiated, the more you are able to direct its use, and the more you become comfortable using it.

Intuition

The second mental function is called Intuition and you use it to uncover possibilities of which you are not yet aware – for example investigating potential, trying out innovative ideas,

creating something radically new, or imagining how things might be for you in the future. When you use this function, which is concerned with the unknown, you tend to be imaginative, idealistic, and try to break new ground, doing things that haven't been done before.

Intuition

Score:

You can use the Intuition function at any time, and do – for example when contemplating what a new career might involve, or creating an abstract sculpture that could have many different meanings. In both these examples, you imagine things that you do not yet know.

Thinking

The third mental function is called Thinking and you use it to make logical connections between things or ideas – for example to analyse problems, form explanations of how things work, organise things correctly, or determine the right tools for a particular task. When you use this function, which is concerned with logic and truth, you tend to be analytical, business-like, and well-organised – for example establishing procedures and making sure they are followed correctly.

Thinking

Score: 50%

You can use the Thinking function at any time – for example when planning your day, solving a mechanical problem with your car, or arranging a big event such as a wedding or large party. In these examples, you use logical structure to get ideas, people, and things organised in the correct way.

Feeling

The fourth mental function is called Feeling, and you use it to assess and promote the value, worth, or importance of things, people, and ideas. Examples include drawing attention to important campaigns, designing things of aesthetic appeal, or building relationships with people who are important to you. This function is concerned with values, and when you use it you tend to be friendly and personal – though this is not always the case because having different values to other people can sometimes lead to conflict.

Feeling

Score:

As with the other functions, you can use Feeling at any time – for example deciding what pictures you would like to hang on a wall, or when socialising with friends. In these examples, you are organising your thoughts or lifestyle around values that are important to you.

Summary

Each of the four mental functions described above are BASIC FUNCTIONS. They are called basic because everyone is born with them and they perform the same role in each person: Sensation looks at WHAT IS THERE, Intuition at WHAT MIGHT BE, Thinking at HOW IT WORKS, and Feeling at HOW IMPORTANT IT IS. Each function processes a different type of information or experience.

- Sensation – knowledge, experience, and facts.

- Intuition – the unknown, discovery, and possibilities.

- Thinking – logic, truth, and structure.

- Feeling – values, harmony, and relationships.

We can all develop these functions, and when we do their characteristics change in a way that that is broadly similar in different people. Undeveloped functions tend to be more stressful or tiring to use, and to be less reliable. Developed functions are more comfortable to use, and you tend to become more adept at processing that type of information than you would otherwise have been.

3 Using the Basic Functions

Ideally, you would have the flexibility to be able to use different functions in different contexts, according to what is the best way of dealing with that situation (Jung called this MOMENTARY ADAPTATION). For example, if you are an operator in a nuclear power station, to be successful you would need to use Sensation and Thinking above all else – watching the readings from the reactor and following prescribed procedures. However, if you work for a marketing or PR agency, to be successful you need to use Intuition and Feeling – building relationships with people in the industry, coming up with new ideas, and doing something innovative to grab the attention of consumers.

Sometimes, the use of a function can become a habit – i.e. you tend to use the same function irrespective of the needs of the context. Jung called this HABITUAL ADAPTATION – you keep responding or adapting to every circumstance in the same way. When someone habitually uses a function they are said to be a PSYCHOLOGICAL TYPE, that is, someone who tends to respond in a particular way to different circumstances. In many circumstances, this may not matter, but in others it can be disastrous. For example, trying out unknown possibilities in a nuclear power station is dangerous and illegal. On the other hand, if a marketing/PR agency only uses existing ideas they will probably go out of business.

Development

When you develop a function its characteristics tend to change in a way that is analogous to physical fitness. Initially, the function is poorly developed and you may have difficulty using it. For example, with poorly-developed Sensation you may find it stressful or tiring to process lots of factual information (for example doing your accounts or tax return) and you might miss important information altogether. If your Sensation function is well-developed, you find it much more comfortable to deal with facts, and you probably become more adept at doing it than you otherwise would have been. The same principle applies to the other mental functions. In developing Intuition you become more comfortable dealing with ambiguity and the unknown. When Thinking is developed you become more comfortable with analysing problems or organising people. With a developed Feeling function you feel more comfortable when dealing with relationships and people's different values.

4 Opposites

These four basic functions tend to work against each other. If you look at the facts in a situation (i.e. Sensation) then you tend to overlook the possibilities (i.e. Intuition), and vice versa. If you look at the logic or truth of something, then you tend to overlook its importance or impact on relationships. Sensation tends to work in opposition to Intuition, whilst Thinking tends to work in opposition to Feeling. The more you differentiate one function, the less you differentiate its opposite – the pairs of functions are like two ends of a see-saw.

Therefore, a high-score for one function and a low score for the other may indicate that you have differentiated one of the opposites much more than the other, and that you tend to use it habitually. This is normal because in C.G. Jung's model of psychological growth you can't develop both the opposites at the same time. At certain stages of your life, you will tend to

develop one of the opposites and then at a later stage you may develop the other. Although developing one function is a necessary stage of development, it can also create problems through an imbalance, taking a one-sided approach to things. This can make it difficult to use the two functions co-operatively, and it can also have an influence on your relationships.

Reconciling Opposites

Although the functions tend to work in opposition, it is possible to reconcile the contradictions that arise between each pair by using a new function that can be developed. This function provides a new, third perspective that reconciles and integrates the two opposites. I'll illustrate how it works with the example of football.

The function of Sensation looks at facts, and an adult's level of skill can be established factually through skill tests or by gathering statistics from football matches on the rate of successful passes, etc. The function of Intuition looks at possibilities, which might be used by a youth scout when watching young football players, to identify those who have the potential to develop into professional footballers. They don't have the skill yet, this potential is only a future possibility.

These two perspectives can be brought together in a talent management system that combines facts and possibilities by measuring a young person's potential. That is, there are measures that can be used with young footballers to predict how good they could be in the future. Whether they realise this potential will depend on many things, such as motivation, training, development, etc. By taking account of this new perspective – a measure of potential which is both fact and possibility – we expand our view to include three perspectives:

1. Sensation/fact – measurement of football skill as an adult.

2. Intuition/possibility – A young person's potential to become a good footballer.

3. Talent management/measure of potential – A prediction of how good the young person might be as an adult.

This new function (talent management) is said to TRANSCEND the opposites because it takes a wider perspective than facts or possibilities alone. It enables you to look at both the facts of sensation and the possibilities of intuition AT THE SAME TIME. When someone looks at football players from the point of view of talent management, they can think about any or all of three perspectives – a young person's potential, the skills of an adult, and how the two are related or reconciled.

If a person only takes one point of view – for example looking at an adult's skill but not a young player's potential – then they are ONE-SIDED in their outlook. This occurs when one of the opposites has been developed but not the other, and the function has become a habitual means of adaptation. One-sidedness is a restriction on our ability to see and understand a situation in its entirety, because we cannot understand the standpoint of people who take a different view to our own. One-sidedness occurs not only in respect of the psychological functions, but also in many areas of conscious life such as politics, religion, culture, etc. One-sidedness is not only the cause of much conflict between people and societies, but by its very nature it makes the resolution of that conflict much more difficult. In Jung's model of psychological growth, this one-sidedness is a stage that we all go through. However, we can develop out of this one-sidedness so that we can appreciate both opposites and become able to take the third (transcendent) viewpoint.

5 The Fifth Function

The four basic functions (Sensation, Intuition, Thinking, and Feeling) give rise to four perspectives (facts, possibilities, logic, and values). In a similar way, there is a fifth function,

called the TRANSCENDENT FUNCTION, that gives rise to the 'third' perspective that reconciles the conflict between the opposites. This is a more advanced function that is very different from the basic ones described above.

We are all born with all the basic functions, and they are the same in each individual (though this varies according to development). In contrast, the transcendent function is a new function that emerges over time through a particular form of development. It is unique to each individual (or society) and it is constantly changing. In C.G. Jung's model of psychological growth, the transcendent function emerges in individuals when we begin to pay attention to, respect, and ENGAGE WITH views that are opposite to our own.

This means that (constructive) disagreement has to become a norm, because the function will not develop if we hold to a one-sided view, or try to ignore the differences by regarding both as being the same. For example, if one were to say 'facts are important, and possibilities are important' this only expresses two perspectives and it is possible for them to coexist by maintaining a split between them. This is a bit like saying that the way to resolve a civil war is to divide the country in two. This is a poor solution because, whilst there may be space for both, it is not resolve the conflict that exists, and it prevents effective co-operation between the two sides.

Developing the transcendent function involves recognising not only the conflict between our own views and other people, but also the conflict and contradictions in our own personalities – particularly between the conscious and the unconscious mind. By definition, it is difficult for us to see what is in our own unconscious mind, but Jung provided some techniques that can help – such as dream analysis, seeking to understand 'numinous' images or people, etc. There are many conflicts within our own personalities and by exploring them we can keep developing new 'third perspectives' that reconcile them.

This third perspective is therefore not a single perspective, and the transcendent function is not a static psychological function. It is something that continually changes and leads to an ongoing change in our personality and perspective. As the transcendent function continues to develop, so too our perspective develops, and we become able to recognise and reconcile more and more conflicting points of view.

Transcendent

Score:

This scale is concerned with the extent to which you have developed the transcendent function to resolve the conflicts between the basic psychological functions. It may also provide an indication of how you deal with other forms of conflict or opposition:

- Far left – you tend not to pay attention to opposites or contradictions.

- Left – you notice differences and tend to see one side as better than the other.

- Middle – you see the value in both opposites.

- Right – you take a third (transcendent) view that reconciles the opposites.

- Far right – you actively seek to recognise and resolve conflicts with other views that you hold, for example political, cultural, or religious differences.

In personal development, the main role of the transcendent function is to resolve differences with OTHER perspectives. This term OTHER is taken from anthropology and refers to anything that is 'not me'. Something is OTHER when it is opposite to our personal values or beliefs. A one-sided approach sees our own view as good and true and OTHER views as bad or false. As the transcendent function develops, we begin to see the value and drawbacks of both our own and Other views. It brings a more balanced view that makes it easier to recognise and resolve the causes of conflict.

6 Mythological Thought

Another aspect of your personality, that the myers.co questionnaire is looking at, is your style of mythological thought. We are all mythic beings because, even if we aren't aware of it, we use mythology as an integral part of the way we think. A mythology is a story or narrative that is created by the human imagination to explain the world around us. Some people use other definitions of mythology, such as a story that is untrue, or a story about ancient gods, but I am not using those definitions here. Mythology plays an important role in understanding the things we observe, even when we are not aware of it.

Mythology in everyday life

To illustrate the role of mythology in making sense of our everyday observations, do the following:

Turn on your TV (for example to BBC News, as per this first image). Then ask yourself what you are looking at. You might answer with 'I am looking at Huw Edwards, the BBC presenter, describing the latest news'.

Turn over to a different channel. This time you might say (as per the second image) 'I'm watching cars racing around a track'.
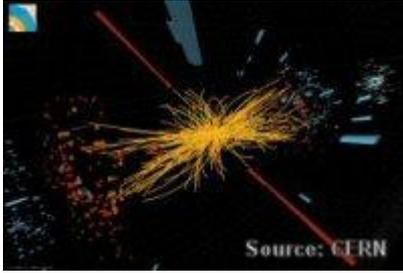
Finally, look at the bottom image. What are you now looking at?

In all three cases, what you were looking at was almost exactly the same – a 2-dimensional LCD panel containing lots of red, green, and blue pixels. What differed between them was the arrangement of the pixels. Your INTERPRETATION of them was shaped by the assumed narrative or story you told yourself (unconsciously) about each image. Those stories go something like this…

1. In the first image, Huw Edwards is sitting in a studio in London, at the same time as when you are looking at the TV screen. He is in front of a camera, which converts his image from light into an electronic signal. This is transmitted through the TV network, via your aerial, into your TV, and then converted back into light by the LCD screen. As a result, you think you are watching Huw Edwards 'live' in London.

2. The story of transmission for the second image is very similar to the first. However, it starts at a different place in the world and you may not immediately know whether the picture you are watching is 'live' or recorded.

3. The final image is probably fairly meaningless, because you do not know the narrative behind it. The image is from 'Cern' and is used by scientists to understand how the world at a very small scale.

Your understanding of each image is shaped by the assumed narratives, and the above stories lead you to believe each image is a true reflection of a reality that is taking place elsewhere in the world. If you adopt a different narrative then the meaning of the images changes. For

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example, if you believed that the image of Huw Edwards was a recording produced for COMIC RELIEF then you would assume that, although it is true he had been in a studio, what he is saying is false. Another narrative could change the meaning again – for example, if you believed that the video was heavily edited for Comic Relief, then neither the story nor the fact that Huw Edwards read it are true. These narratives were unconscious but, by articulating them, you are making them CONSCIOUS – in Jung's psychological theory, making such myths conscious has significant benefits for the individual and society.

The formation of mythology

Mythology usually originates from two or three sources. There may be some kind of event or reality in the external world, which the human imagination seeks to explain. Or there may be some inner inspiration, which some may attribute to God or spirit – though even in 'revelation' the human imagination is still involved in articulating that revelation. Mythology is viewed as true or false according to how closely it seems to correspond with known facts or experience.

Some stories (whether true or false) remain for a long time in human consciousness and memory. The Greek classics are examples of old narratives that are taken to be fiction, and all of history contains stories that are taken to be true. However, mythology can also be very temporal or short-lived. In the above exercise, Huw Edwards may have been relating a story that will be forgotten in a few days.

Mythology is also a frequent battleground between individuals, groups, and societies. In politics and journalism, for example, the battle is between narratives – each newspaper or political party trying to convince the audience that their narrative is more relevant, true, and important than any other. Those narratives are often constructed with the involvement of many people. For example a BBC news story is constructed through a journalistic process that makes many decisions about what images to show and what explanation of those images

should be offered. These choices are strongly influenced by the underlying beliefs of the journalists and the culture in which they operate. That is, not only do the journalists construct news mythology, but they also use existing mythology as part of that process. You can see how different mythologies are formed by comparing how right-wing and left-wing newspapers report the same political events.

Mythology in science, psychology, and religion

Mythology is not limited to making sense of our everyday observations, it is also an integral part of the way we expand our knowledge in academic disciplines such as science. Karl Popper (a leading philosopher of science) argued that we advance our knowledge of science by thinking about problems in our observations and then mythologising about solutions. That is, we use our imaginations to come up with new mythology – stories, narratives, or theories – to explain how that problem arises and can be solved. In Popper's philosophy, we then put those new stories to the test by trying to refute them through criticism or (where possible) by conducting scientific tests. We can put some stories to the test, such as the laws of physics, but others cannot be tested scientifically, such as the existence of God (for this reason, Popper was an agnostic). Even where we can test it, we can never prove a story is true (argues Popper) but we can only show when it is false. Current scientific theories are those stories that have so far passed the tests of falseness, but they might fail future tests as scientific knowledge advances.

C.G. Jung use a similar argument not only about science but also about religion and psychology – that they are all forms of mythology. This does not mean that they are false, rather they are the best narratives we can come up with to explain our observations and experiences about the material world, the spiritual world, and how the mind works. These

stories arise in the human imagination, inspired by the human experience of matter, spirit, or emotion. They are often refined in the light of experience, but sometimes they are not.

Mythology and truth

If we recognise the role of mythology in shaping our observations and thoughts, then any concept of 'truth' must always be tentative. Although there may be things that are absolutely true, we cannot declare our narratives to be absolutely true because they are always subject to the limitations of human imagination. A useful dictionary definition of truth in this context is that truth is 'consistent with fact or reality; not false or erroneous.' This slightly negative and tentative definition of truth (that is, that truth is not false) adopts a Popperian stance. It allows for the possibility that, as new facts come to light and we review our myths, we might discover that what we once believed to be true is now false, or is only partly true, or is just a representation of the truth.

An oft-used example of the provisional nature of truth is the belief – once held in Britain – that all swans are white. It was only when contradictory evidence emerged (the observation of black swans in Australia) that the belief could be challenged. This does not undermine the concept of absolute truth – for the black swans had always existed. Rather, it is an acknowledgement that our understanding is always based on mythology (narratives and stories) that we use to INTERPRET our observations or represent that truth.

Mythology and meaning

Mythology can also provide us with a sense of meaning or purpose, and stir our emotions, through its ability to connect us with something that is bigger than us or beyond our conscious understanding. For example, many scientists find the nature of the universe to be awe-inspiring. The myths of science – such as dark matter or the big bang (or big bounce) – enable

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scientists to see their place in a powerful and mysterious natural world. The myths of religion – such as the garden of Eden or the cross – provide us with a connection to God or spirit. The myths of psychology – such as psychodynamic theory or neuroscience – connect us with the mysterious workings of the human mind.

Myths can provide meaning or stir emotion even when they are false. This can be seen in the way many people identify with characters in fictional books, TV soaps, or dramatic movies. For example, the success of the film Star Wars was due largely to the use of mythology theory in constructing the characters and story. These principles are now used extensively in Hollywood when writing new movies.

Generally speaking, the less we are aware of mythology in shaping our view of truth and meaning, the more it can 'grip' us emotionally. This raises two important questions about our personal use of mythology:

- Are we aware that our thoughts and perceptions of truth and meaning are structured by underlying myths (i.e. stories)?
- Do we recognise that different myths can lead to different interpretations of truth and meaning?

If the answer to both these questions is NO, then your style of mythological thought is LITERAL. That is, you take the truth or meaning of things at face value and don't realise how unconscious myths may be shaping your thoughts. If the answer to both is YES, then your mythological style is SYMBOLIC. That is, you see how the perception of truth can change in different myths, and how they might represent different truths about you, the world around you, and your inner spiritual, emotional, or psychological development. If you mix the answers – yes for one question and no for the other – then it might indicate the use of two more styles of mythological thought: metaphoric and reflexive.

7 Styles of Mythological Thought

These four styles of mythological thought – literal, metaphoric, reflexive, and symbolic – are not discrete categories with clear boundaries. Most people use aspects of most of them, depending on what is being perceived. The results of the questionnaire for your mythological style is:

Symbolic   Literal

50%

Literal Thought

When your thought is literal, you take things at face value – as they are described or as you see them. For example, you may believe that a newspaper headline is true as written. An oft-used example in philosophy is that of a table – when you look at, touch, and feel a table it is simply a solid object (and nothing more). You may also see some things as inherently emotional, meaningful or important.

In literal thought, everything is externalised – that is, they are seen as entirely separate from oneself and your feelings are caused by what happens outside. Your view of God will also tend to be literal, either as a being who makes decisions about your life or as something that does not exist. Similarly, Heaven and Hell are places people go after they die, or they are merely imaginary places.

Metaphoric Thought

When you think metaphorically, you use one thing in order to represent or understand another. For example, you might read a story in the bible about GIANTS and see those giants as representing difficult problems that you experience in life. Metaphors, used in this way, are

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still external to oneself. For example, heaven and hell may be viewed as spiritual rather than physical places, but those places are still outside of oneself.

Reflexive Thought

In reflexive thought, you begin to recognise the role that your beliefs and stories have in shaping your observations. What you observe then takes on a significance or meaning for your personally, and for your development. Your personality affects how you see the world, and what you observe reflects something of your personality. Reflexive thought therefore tends to use observations as personal lessons of a psychological or spiritual nature.

Reflexive thought operates within the context of your belief system – that is, a single myth or single collection of myths. For example, you might interpret something as a psychological projection to be withdrawn, or heaven and hell as representing your current spiritual state. Reflecting on these can help to develop your personality, within the form of development that is prescribed by your myth.

Symbolic Thought

Symbolic thought includes reflexive thought but adds the recognition that there are myths other than your own that may have the same degree of validity when describing truth or meaning. You not only perceive the personal significance of things for you, but you are also open to meaning, interpretations and experiences that are outside your current myth. By paying attention to multiple perspectives, it can have a transformative effective on your personality in ways that you perhaps do not anticipate.

8 Religious Tolerance

The final type of information with which the myers.co questionnaire is concerned is your attitude towards other people who hold different beliefs. This particular scale covers a very wide range of attitudes.

A definition of religious tolerance that is often used is to allow other people to hold beliefs that you do not think are true, and to treat them with equal respect nonetheless. This particular scale (below) goes a little further, in that a score at the extreme right indicates an acceptance that the other person's beliefs may be as true as yours. That is, you recognise that your beliefs and the other person's beliefs are both myth, and there may be no way to (objectively) determine whose myth is nearer the truth.

Dogmatism is often defined as regarding your own beliefs as undeniably true. However, this scale again goes a little further than that. A score towards the far left indicates that you regard your beliefs as so true that others have to accept your beliefs or there will be consequences for them.

This scale is not about the clarity or consistency of your beliefs. People who score towards the right can have clear beliefs, and those towards the left may have unclear or inconsistent beliefs. The scale is about your attitude towards people who have different beliefs to you.

Tolerant   Dogmatic

Score:

9 Summary

The scores produced from your questionnaire were:

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Sensation

Score:

Intuition

Score:

Thinking

Score:

Feeling

Score:

Transcendent

Score:

Symbolic   Literal

Score:

Tolerant   Dogmatic

Score:

Appendix D – Computer System

A new online computer system was designed, programmed, tested, and implemented, to administer the study. It consisted of the following components:

1. An existing web server, using a common 'LAMP' environment – the Linux operating system, Apache web server software, MySQL database, and PHP programming language.

2. A new subdomain (research) of an existing domain (myers.co), with an SSL secure certificate to encrypt the data when it is being communicated over the internet. The research website is therefore https://research.myers.co

3. A new database to store logon details, progress through the questionnaires (e.g. should a user stop and them resume), and record the results of each questionnaire. The design was made flexible so that changes could be made easily to questions or question structures during the stages of piloting and testing.

4. A control program to present a consistent interface to the user, create and manage logon details to restrict access, determine which questionnaire to present next, and update the database with the results of each questionnaire as it was completed. This program consisted of approximately 300 lines, which was a mixture of PHP programming, html web page mark-up, and CSS formatting.

5. Two small modules provided support to the control program and sent an email to me when users opted out of the research part way through, asking for their (anonymous) data to be removed. No such requests were received, but the facility needed to be there for legal and ethical reasons (48 lines).

6. A page of participant information (shown in appendix C) which asked questions to confirm they had read it and were understandingly giving their consent (50 lines).

7. A module to record when participant consent has been given and generate logon details. In the event that fully-informed consent was not given, it would return the user to the commercial website, from where they had come (56 lines).

8. The demographics questionnaire (questions in appendix C). This included drop down lists for some options, and selection filters for those questions when there was a large choice – e.g. for country or occupation (185 lines).

9. The advancement of consciousness questionnaire, adapted from the existing MMDI questionnaire as described in the body of the dissertation (228 lines).

10. The mythological thinking questionnaire (219 lines).

11. The religious tolerance questionnaire (158 lines).

12. A programme that calculates the information needed to produce the commercial reports that were being used to incentivise participation. This was an existing programme that uses the horizontal scale responses.

13. A new module to calculate the advancement of consciousness, mythological thinking, and religious tolerance scores to give respondents some feedback on their questionnaire (110 lines).

14. A module to produce feedback for the respondents in html, pdf, or e-book format (565 lines).

References

Arbib, M.A., Hesse, M.B. (1986). *The Construction of Reality*. Cambridge: University Press.

Bair, D. (2003). *Jung: A Biography*. New York: Back Bay Books.

Barbour, I. (1974). *Myths, models, and paradigms: A comparative study*. San Francisco: Harper & Row Publishers.

Baron, R.A. (1989). *Psychology: The Essential Science*. London: Allyn and Bacon.

Barth, K. (1962). 'Bultmann - an attempt to understand him'. In Bartsch 1972.

Barthes, R. (1957). *Mythologies*. London: Random House, 2009.

Bartsch, H-W. (1954). 'The present state of the debate'. In Bartsch 1972.

_____ (1972), editor. *Kerygma and Myth: A Theological Debate*. London: SPCK.

Barušs, I. (1986/87). 'Metanalysis of definitions of consciousness'. In Lancaster 2004.

Bayne, R. (2004). *Psychological Types at Work: An MBTI Perspective*. London: Thomson Learning.

Bechtel, W., Williamson, R.C. (2005). 'Vitalism'. In Craig 2005.

Becker, K.L. (2001). *Unlikely Companions: C.G. Jung on the Spiritual Exercises of Ignatius of Loyola*. Leominster: Gracewing.

Beebe, J. (2006). 'Psychological types'. In *The Handbook of Jungian Psychology*, edited by Renos Papadopoulos. Hove: Routledge.

Bennet, A. (2010). *The Shadows of Type*. Lulu.com.

Berens, L. (1999). *Dynamics of Personality Type: Understanding and Applying Jung's Cognitive Processes*. Huntington Beach: Telos Publications.

Bernet, W.A. (1955). *Inhalt und Grenze der religiösen Erfahrung: eine Untersuchung der Probleme der religiösen Erfahrung in Auseinandersetzung mit der Psychologie C.G. Jung*. Bern: Paul Haupt.

Bierlein, J.F. (1999). *Living Myths: How Myth Gives Meaning to Human Existence*. New York: Ballantine Wellspring Books.

Bishop, P. (2002). *Jung's Answer to Job*. Hove: Routledge.

_____ (2014). *Carl Jung*. London: Reaktion Books.

Block, N. (1995). 'On a confusion about a function of consciousness'. In *Behavioral and Brain Sciences, vol 18:2, pp. 227-247.*

Bond, D.S. (1993). *Living Myth: Personal Meaning as a Way of Life*. Boston: Shambhala Publications.

Brisson, L. (2000). *Plato the myth maker*. Chicago: University of Chicago Press.

Brooke, R. (1991). *Jung and Phenomenology*. Pittsburgh: Trivium Publications.

Buber, M. (1952). 'Eclipse of god: studies the relation between religion and philosophy'. Quoted in Stephens 2001.

Bultmann, R. (1953). 'New testament and mythology'. In Bartsch 1972.

Burnett, D. (2013). *Nothing personal: The questionable Myers-Briggs test*. <http://www.theguardian.com/science/brain-flapping/2013/mar/19/myers-briggs-test-unscientific > accessed 24-Aug-15.

Buxton, R. (2001), editor. *From Myth to Reason*. Oxford: Oxford University Press .

Béziau, J-Y., Carnielli, W., Gabbay, D. (2007). *Handbook of Paraconsistency*. London: College Publications.

Campbell, J. (1964). *Occidental Mythology: The Masks of God*. Harmondsworth: Arkana/Penguin Books.

_____ (1968). *Creative Mythology: The Masks of God*. Harmondsworth: Arkana/Penguin Books.

_____ (1969). *Flight of the Wild Gander: selected essays 1944-1968*. Novato: New World Library, 2002.

Carus, P. (1909). *The Pleroma: An Essay On The Origin Of Christianity*. New York: Cosimo Classics, 2007.

Chambers (2014). *The Chambers Dictionary*. London: Chambers Harrap Publishers.

Cheetham, R. (2004). 'Foreword'. In Slee 2004. London: SCM Press.

Cole, D. (2002). 'The functions of consciousness'. In Fetzer 2002.

Collins (2006). *Collins English Dictionary, Concise Edition*. Glasgow: HarperCollins Publishers.

Consulting Psychologists Press (2015). *Myers-Briggs Type Indicator®*. <https://www.cpp.com/products/mbti/index.aspx> accessed 2-Sep-15.

Corlett, E.S., Millner, N.B. (1993). *Navigating Midlife: Using Typology as a Guide*. Palo Alto: CPP Books.

Corlett, J.G., Pearson, C. (2003). *Mapping the Organizational Psyche: A Jungian Theory of Organizational Dynamics and Change*. Gainsville: Center for Applications of Psychological Type.

Cornford, F.M (1971). *Principium Sapientiae*. Gloucester, Mass: P Smith.

Cotterell, A. (2006). *The Encyclopedia of Classic Mythology*. London: Lorenz Books.

Craig, E. (2005), editor. *The Shorter Routledge Encyclopedia of Philosophy*. Abingdon: Routledge.

Crellin, C. (2014). *Jung's Theory of Personality: A modern reappraisal (Research in Analytical Psychology and Jungian Studies)* . Hove: Routledge, Kindle Edition.

Cross, G. (1911). *Friederich Schleiermacher: A condensed presentation of his chief work, "The Christian Faith"*. Amazon: Kindle Book.

Dawkins, R. (2006). *The God Delusion*. London: Bantam Press.

Day, M.S. (1984). *The Many Meanings of Myth*. Lanham: University Press of America.

Doniger, W. (2006), editor. *Britannica Encyclopedia of World Religions*. Chicago: Encyclopædia Britannica, Inc.

Doty, W. G. (1986). *Mythography: The Study of Myths and Rituals*. Tuscaloosa: The University of Alabama Press, 2000.

Dourley, J. P. (2001). *Revisioning Incarnation: Jung on the Relativity of God*. <http://www.jungianstudies.org/publications/papers/dourleyjp1.pdf> accessed 30-Jul-09.

Downes, S.M. (2005). 'Constructivism'. In Craig 2005.

Edinger, E.F. (1972). *Ego and Archetype*. Boston and London: Shambala.

_____ (1995). *Science of the Soul*. Toronto: Inner City Books, 2002.

_____ (1996). *The New God-Image: A Study of Jung's Key Letters Concerning the Evolution of the Western God-Image*. Wilmette: Chiron Publications.

Eliade, M. (1963). *Myth and Reality*. New York: Harper & Row.

_____ (1967). 'Cosmogonic myth and sacred history'. In *Religious Studies, vol 2:2, pp. 171-183*. Cambridge: Cambridge University Press.

Ellenberger, H.F. (1970). *The Discovery of the Unconscious*. New York: Basic Books, Inc.

Embree, L. (2005). 'Phenomenological Movement'. In Craig 2005.

Fetzer, J.H. (2002), editor. *Consciousness Evolving*. Amsterdam: John Benjamins Publishing Company.

Feyerabend, P. (1999). *Knowledge, Science and Relativism: Philosophical Papers Volume 3*, edited by John Preston. Cambridge: Cambridge University Press.

Flournoy, T. (1900). *From India to the Planet Mars: A Study of a Case of Somnanmbulism*, translated by Daniel B. Vermilye. New York & London: Harper & Brothers Publishers.

Fordham, M. (1985). 'Integration-deintegration in infancy'. In *Explorations into the Self*. London: Academic Press.

Forryan, B., Glover, J.M. (1979). *General Index, Collected Works Volume 20*. London:Routledge.

Frazer, J.G. (1922). *The Golden Bough: A Study in Magic and Religion*. Ware: Wordsworth Editions Ltd, 1993.

Freeman, J. (1989). *Face to Face with John Freeman*. London: BBC Books.

Freke, T., Gandy, P. (1999). *The Jesus Mysteries: was the original Jesus a Pagan God?*. London: Harper Collins Publishers.

Freud, S. (1900). *The Interpretation of Dreams*, translated by Joyce Crick. Oxford: Oxford University Press, 1999.

Friedman, M. (1966). 'Jung's image of psychological man'. In *Psychoanalytic Review, vol 53, pp. 95-108*. Delaware: Psycholanalytic Electronic Publishing.

Gallup (2008). *Gallup Poll Social Series: Values and Beliefs, May 8-11, 2008*. Source: , 20 Jan 2011.

Giegerich, W. (2003). 'The End of Meaning and the Birth of Man: Jung's idea of the death of symbols'. In *Journal of Jungian Theory and Practice*. London: Guild of Pastoral Psychology. <http://jatqp.co.uk/Module%2013/Giegerich%20-%20JungV6N1p1-66.pdf> accessed 19-Feb-17.

Grant, C. (1998). *Myths We Live By*. Ottowa: University of Ottowa Press.

Grau, H.G. (1973). 'The Barth-Bultmann correspondence'. In *Theology Today, vol 30, pp. 138-147*. Princeton: Princeton Theological Seminary.

Groesbeck, C.J. (1978). 'Psychological types in the analysis of the transference'. In *Journal of Analytical Psychology, vol 23, pp. 23-53*.

Hacohen, M.H. (2002). *Karl Popper, the formative years, 1902-1945: politics and philosophy in interwar Vienna*. Cambridge: Cambridge University Press.

Hammond, N.G.L, Sculland, H.H. (1979), editors. *The Oxford Classical Dictionary*. Oxford: Clarendon Press.

Hartzler, M., & Hartzler, G. (1999). *Conscious Individuation: Exercises to Develop Skills Associated with the MBTI® Preferences and Functions in Attitude*. Louisville: Type Resources.

Hatab, L.J. (1990). *Myth and Philosophy: A Contest of Truths*. Chicago and La Salle: Open Court.

Heisig, J. W. (1979). *Imago Dei: A study of C.G. Jung's Psychology of Religion*. London: Associated University Presses.

Heller, S. (2006). *The Absence of Myth*. New York: State University of New York Press.

Hick, J. (1977), editor. *The Myth of God Incarnate*. London: SCM Press Ltd .

Horton, J (1998). 'Toleration as a virtue'. In *Toleration: An Elusive Virtue*. Princeton: Princeton University Press.

Hy, L.X., Loevinger, J. (1996). *Measuring Ego Development*. San Francisco: Jossey-Bass.

Inwood, M. (2005). 'Hermeneutics'. In Craig 2005.

Jaffé, A. (1970). *The Myth of Meaning*. Zurich: Daimon Verlag, 1986.

_____ (1989). *Was C.G. Jung a Mystic & Other Essays*. Einsiedeln: Daimon Verlag.

James, W. (1912). *Essays in Radical Empiricism*. Mineola: Dover Publications, 2003.

Jarvie, I.C. (2005). 'Popper, Karl Raimund (1902-94)'. In Craig 2005.

Johnston, J.G. (2011). *Jung's Compass of Psychological Types*. Perrysburg: MSE Press.

Jones, R.A. (2014), editor. *Jung and the Question of Science*. Hove: Routledge.

Jung, C.G. (1896-9). *The Zofingia Lectures*. London: Routledge and Kegan Paul, 1983.

_____ (1901). 'Sigmund Freud: on dreams'. In *CW18*.

_____ (1902). 'On the psychology of so-called occult phenomena'. In *CW1*.

_____ (1911-12/1952). *Symbols of Transformation*. Princeton: Bollingen Paperbacks, 1967.

_____ (1913). 'A contribution to psychological types'. In *CW6*.

_____ (1914). 'On psychological understanding'. In *CW3*.

_____ (1916/1948). 'General aspects of dream psychology'. In *CW8*.

_____ (1916/1957). 'The transcendent function'. In *CW8*.

_____ (1916a). 'The structure of the unconscious'. In *CW7*.

_____ (1916b). 'Adaptation, individuation, collectivity'. In *CW18*.

_____ (1917/1926/1943). 'On the psychology of the unconscious'. In *CW7*.

_____ (1920/1948). 'The psychological foundation of belief in spirits'. In *CW8*.

_____ (1921a). *Psychological Types*. London: Routledge, 1971.

_____ (1921b). *Psychologische Typen*. Ostfildern: Patmos, 1995.

_____ (1923). 'Psychological types'. In *CW6*.

_____ (1925). *Analytical Psychology: Notes of the seminar given in 1925*. Princeton: Bollingen Paperbacks, 1989.

_____ (1926). 'Spirit and life'. In *CW8*.

_____ (1926/1946). 'Analytical psychology and education: three lectures'. In *CW17*.

_____ (1928/1931). 'Analytical psychology and weltanschauung'. In *CW8*.

_____ (1928a). 'The significance of the unconscious in individual eduction'. In *CW17*.

_____ (1928b). 'The relations between the ego and the unconscious'. In *CW7*.

_____ (1929). 'Commentary on the secret of the golden flower'. In *CW13*.

_____ (1930-1931). 'The stages of life'. In *CW8*.

_____ (1930/1950). 'Psychology and literature'. In *CW15*.

_____ (1931a). 'A psychological theory of types'. In *CW6*.

_____ (1931b). 'The aims of psychotherapy'. In *CW16*.

_____ (1932a). 'Ulysses: a monologue'. In *CW15*.

_____ (1932b). 'Psychotherapists or the clergy'. In *CW11*.

_____ (1933/1934). 'The meaning of psychology for modern man'. In *CW10*.

_____ (1933a). *Modern Man in Search of a Soul*. Abingdon: Routledge Classics, 2001.

_____ (1933b). 'On hallucination'. In *CW18*.

_____ (1933c). 'The real and the surreal'. In *CW8*.

_____ (1934). 'Foreword to the Argentine edition'. In *CW6*.

_____ (1934/1950). 'A study the process of individuation'. In *CW9i*.

_____ (1934/1954). 'Archetypes of the collective unconscious'. In *CW9i*.

_____ (1935a). 'Principles of practical psychotherapy'. In *CW16*.

_____ (1935b). 'The Tavistock Lectures'. In *CW18*.

_____ (1936/1954). 'Concerning the archetypes and the anima concept'. In *CW9i*.

_____ (1936a). 'Psychological typology'. In *CW6*.

_____ (1936b). 'Individual dream symbolism in relation to alchemy'. In *CW14*.

_____ (1937/1966). 'The realities of practical psychotherapy'. In *CW16*.

_____ (1937a). 'Psychology and religion'. In *CW11*.

_____ (1938/1940a). 'Psychology and religion'. In *CW11*.

_____ (1938/1940b). 'Modern psychology'. Quoted in *The Psychology of Kundalina Yoga*. Princeton: Bollingen Paperbacks.

_____ (1938/1954a). 'The visions of Zosimos'. In *CW13*.

_____ (1938/1954b). 'Psychological aspects of the mother archetype'. In *CW9i*.

_____ (1939/1954). 'On "the Tibetan book of the great liberation"'. In *CW11*.

_____ (1939a). 'Foreword to Suzuki's introduction to zen buddhism'. In *CW11*.

_____ (1939b). 'In memory of Sigmund Freud'. In *CW15*.

_____ (1940). 'The psychology of the child archetype'. In *CW9i*.

_____ (1941). 'The psychological aspects of the kore'. In *CW9i*.

_____ (1942). 'Paracelsus as a spiritual phenomenon'. In *CW13*.

_____ (1942/1948). 'A psychological approach to the dogma of the trinity'. In *CW11*.

_____ (1942/1954). 'Transformation symbolism in the mass'. In *CW11*.

_____ (1943/1948). 'The spirit Mercurius'. In *CW13*.

_____ (1944a). 'Introduction to the religious and psychological problems of alchemy'. In *CW12*.

_____ (1944b). 'Why I am not a catholic'. In *CW18*.

_____ (1945). 'Medicine and psychotherapy'. In *CW16*.

_____ (1945/1948a). 'On the nature of dreams'. In *CW8*.

_____ (1945/1948b). 'The phenomenology of the spirit in fairy tales'. In *CW9i*.

_____ (1945/1954). 'The philosophical tree'. In *CW13*.

_____ (1946). 'The psychology of the transference'. In *CW16*.

_____ (1947/1954). 'On the nature of the psyche'. In *CW8*.

_____ (1948a). 'Techniques of attitude change conducive to world peace'. In *CW18*.

_____ (1948b). 'Address on the occasion of the founding of the C.G. Jung institute'. In *CW18*.

_____ (1951). 'Aion: researches into the phenomenology of the self'. In *CW9ii*.

_____ (1952a). 'Synchronicity: an acausal connecting principle'. In *CW8*.

_____ (1952b). 'Answer to Job'. In *CW11*.

_____ (1954a). 'Foreword to the origins and history of consciousness'. In Neumann 1954.

_____ (1954b). 'Letter to Père Lachat'. In *CW18*.

_____ (1955). 'Letter to Pastor Walter Bernet, 13 june'. In *Letters 2*.

_____ (1955-56). 'Mysterium coniunctionis'. In *CW14*.

_____ (1956). 'Jung and religious belief'. In *CW18*.

_____ (1957a). 'The undiscovered self (present and future)'. In *CW10*.

_____ (1957b). 'The Houston films'. In Jung 1977.

_____ (1958). 'Flying saucers: a modern myth'. In *CW10*.

_____ (1959a). 'The face to face interview'. In Jung 1977. Princeton: Bollingen Paperbacks, 1977.

_____ (1959b). 'Letter to M. Leonard, 5 dec'. In *Letters 2*.

_____ (1959c). 'Letter to Valentine Brooke, 16 nov'. In *Letters 2*.

_____ (1959d). 'A visionary rumour'. In *Journal of Analytical Psychology, vol 4:1, pp 5-19*.

_____ (1963). *Memories, Dreams, Reflections,*. London: Harper Collins Publishers, 1995.

_____ (1964). *Man and His Symbols*. London: Picador, 1978.

_____ (1973). *C.G. Jung Letters, Volume 1, 1906-1950*, edited by Gerhard Adler in collaboration with Aniela Jaffé. London: Routledge and Kegan Paul.

_____ (1976). *C.G. Jung Letters, Volume 2, 1951-1961*, edited by G. Adler in collaboration with A. Jaffé. London: Routledge and Kegan Paul.

_____ (1977). *C.G. Jung Speaking: Interviews and Encounters*. Princeton: Bollingen Paperbacks.

_____ (2009). *The Red Book: Liber Novus*, edited by Sonu Shamdasani, translated by M. Kyburz, J. Peck, and S. Shamdasani. . New York: W W Norton.

Jung, C.G., Kerényi, C. (1941). *The Science of Mythology*. Abingdon: Routledge Classics, 2002.

Jung, C.G., Riklin, F. (1904-7, 1910). 'The associations of normal subjects'. In *CW2*.

Jung, C.G., Schmid-Guisan, H. (2013). *The Question of Psychological Types. Correspondence* , edited by John Beebe and Ernst Falzeder. Princeton: Princeton University Press.

Jung, C.G., White, V. (2007). *The Jung-White Letters*, edited by A. C. Lammers and A. Cunningham. Hove: Routledge.

Kelly, G. (1963). *A Theory of Personality: The Psychology of Personal Constructs*. London: WW Norton & Company.

Kelly, S. (1993). *Individuation and the Absolute*. Mahwah: Paulist Press, 1993.

Kitagawa, J.M. (1968). 'The making of a historian of religions'. In *Journal of the American Academy of Religion, vol 36:3, pp. 191-202*.

Klein, P.D. (2005). 'Epistemology'. In Craig 2005.

Kotsch, W.E. (2000). 'Jung's mediatory science as a psychology beyond objectivism'. In *Journal of Analytical Psychology, vol 45, pp. 217–244*.

Lakoff, G., Johnson, M. (1980). *Metaphors We Live By*. Chicago: The University of Chicago Press.

Lancaster, B.L. (2004). *Approaches to Consciousness: The Marriage of Science and Mysticism*. Basingstoke: Palgrave Macmillan.

Lewis, C.S. (1970). *God in the Dock: Essays on Theology and Ethics*. Michigan: William B Eerdmans Publishing Company, 2014.

Loevinger, J. (1976). *Ego Development*. San Francisco: Jossey-Bass.

Lohmeyer, E. (1944). 'Interpretation of the mythological'. In Bartsch 1972.

Lu, K. (2013). 'Can individual psychology explain social phenomena? An appraisal of the theory of cultural complexes'. In *Psychoanalysis Culture & Society, vol 18, pp. 386-404.*

Lévi-Strauss, C. (1974). *Structural Anthropology*. New York: Basic Books .

_____ (1988). *The Jealous Potter*. Chicago: University of Chicago Press.

Main, R. (2007). *Revelations of Chance, Synchronicity as Spiritual Experience*. Albany: State University of New York Press.

_____ (2013). *C.G. Jung's uses of myth, conference presentation, University of Essex*.

Mattoon, M.A. (1993), editor. *Chicago 92: Proceedings of the Twelfth International Congress for Analytical Psychology: The Transcendent Function: Individual and Collective Aspects*. Einsiedeln: Daimon.

McAdams, D. P. (1993). *The Stories We Live By*. New York: The Guilford Press.

Meier, C.A. (1995). *Personality: The Individuation Process in Light of C.G. Jung's Typology*. Einsiedeln: Daimon.

Merleau-Ponty, M. (1945). *Phenomenology of Perception*. Abingdon: Routledge and Kegan Paul, 2002.

Midgley, M. (2004). *The Myths We Live By*. London and New York: Routledge, 2011.

Miller, J.C. (2004). *The Transcendent Function*. Albany: State University of New York Press.

Morgan, K. (2000). *Myth & Philosophy: from the Presocratics to Plato*. Cambridge: Cambridge University Press, 2006.

Mundle, C. W. K. (1957). 'Review: the interpretation of nature and psyche'. In *The British Journal for the Philosophy of Science, vol 8:29, pp. 73-76.*

Myers, I.B. (1977). *Conversations with Isabel*, transcript by Marcia Miller. Gainesville: Center for the Applications of Psychological Type .

_____ (1980). *Gifts Differing*. Palo Alto: Davis Black Publishing, 1995.

Myers, I.B., McCaulley, M (1985). *Manual: A Guide to the Development and Use of the Myers-Briggs Type Indicator*. Palo Alto: Consulting Psychologists Press.

Myers, P.B. (1995). 'Preface'. In Myers 1980. Palo Alto: Davis Black Publishing.

Myers, S. (2009a). *Did Jung have adequate reason to say "I know", unpublished Masters Dissertation*. University of Essex, Centre for Psychoanalytic Studies.

_____ (2009b). 'The cryptomnesic origins of Jung's dream of the multi-storeyed house'. In *Journal of Analytical Psychology, vol 54, pp. 513-531.*

_____ (2012). 'Psychological vs visionary sources of myth in film'. In *International Journal of Jungian Studies, vol 4:2, pp 150-161.*

_____ (2013a). 'Normality in analytical psychology'. In *Journal of Behavioral Sciences, vol 3:4, pp 647-661.*

_____ (2013b). 'Gandhi, directed by Richard Attenborough (film review)'. In *Spring 90: Jung and India.* New Orleans: Spring Journal and Books.

_____ (2015). *MMDI Technical Manual.* <http://www.teamtechnology.co.uk/mmdimanual.htm> accessed 22-Nov-15.

Nagy, M. (1991). *Philosophical Issues in the Psychology of C.G. Jung.* Albany: State University of New York Press.

Neumann, E (1954). *The Origins and History of Consciousness.* Princeton: Bollingen Paperbacks, 1970.

Nietzsche, F. W. (1886). *The Birth of Tragedy.* Cambridge: University Press, 1999.

Oakes, M. (1987). *The Stone Speaks: The Memoir of a Personal Transformation.* Wilmette: Chiron Publications.

Oxford (1986). *The Mini Oxford Encyclopaedic Dictionary.* Oxford: Oxford University Press.

Papadopoulos, R.K. (2002). 'The other other: when the exotic other subjugates the familiar other'. In *The Journal of Analytical Psychology, vol 47:2, pp. 163-188.*

_____ (2006). 'Jung's epistemology and methodology'. In *The Handbook of Jungian Psychology.* Hove: Routledge.

Pauli, W., Jung, C.G. (2001). *Atom and Archetype: The Pauli-Jung Letters 1932-1958.* London: Routledge.

Pearson, C.S. (1986). *The Hero Within: Six Archetypes We Live By.* New York: HarperCollins Publishers, 1998.

Perry, R.B. (1912). 'Editor's preface'. In James 1912.

Pittenger, D.J. (1993). 'Measuring the MBTI… and coming up short'. In *Journal of Career Planning and Employment, vol 54:1, pp. 48-52.*

Polger, T., Flanagan, O. (2002). 'Consciousness, adaptation and epiphenomenalism'. In Fetzer 2002.

Popper, K.R. (1963a). *The Myth of the Framework.* New York: Routledge, 1996.

_____ (1963b). *Conjectures and Refutations.* London and New York: Routledge, 2002.

Raff, J., Vocatura, L.B. (2002). *Healing the Wounded God.* Maine: Nicolas-Hays.

Raphael, F. (1999). *Popper*. New York: Routledge.

Robinson, J.A.T. (1963). *Honest to God*. London: SCM Press.

Roy, M. (2004). 'Religious archetype as cultural complex'. In Singer, Kimbles 2004.

Rutledge, H. (2013). *The MBTI–my most valid tool*. <http://oka-online.com/the-mbti-my-most-valid-tool/> accessed 9-Dec-16.

Samuels, A. (1985). *Jung and the Post-Jungians*. London: Routledge, 1986.

_____ (1993). *The Political Psyche*. London: Routledge.

Samuels, A., Shorter, B., Plaut, F. (1986). *A Critical Dictionary of Jungian Analysis*. Hove: Routledge.

Sands, F. (1955). 'Men, women and god: an interview with Frederick Sands – part 5: I believe in god (Daily Mail)'. In Heisig 1979.

Saunders, F.W. (1991). *Katharine and Isabel*. Palo Alto: Consulting Psychologists Press.

Schwartz-Salant, N. (1998). *The Mystery of Human Relationship: Alchemy and the Transformation of the Self*. London: Routledge.

Scruton, R. (1982). 'Kant'. In *German Philosophers*. Oxford: Oxford University Press, 1997.

Searle, J. (2004). *The Phenomenological Illusion*. <http://socrates.berkeley.edu/~jsearle/PhenomenologicalIllusion.pdf > accessed 21-Jul-09.

Segal, R.A. (1998). *Jung on Mythology*. London: Routledge.

_____ (2002). 'Series editor's foreword'. In *Jung and the Jungians on Myth*. London: Routledge.

_____ (2004). *Myth: A Very Short Introduction*. Oxford: Oxford University Press, 2nd edition, 2015.

_____ (2014). 'Explanation and interpretation'. In Jones 2014.

Shamdasani, S. (2003). *Jung and the Making of Modern Psychology: The Dream of a Science*. Cambridge: Cambridge University Press.

Sharp, D. (1991). *C.G. Jung Lexicon*. Toronto: Inner City Books.

_____ (2001). *Digesting Jung: Food for the Journey*. Toronto: Inner City Books.

Simpson, J., Roud, S. (2000). *A Dictionary of English Folklore*. Oxford: Oxford University Press.

Singer, T., Kimbles, L.K. (2004), editors. *The Cultural Complex: Contemporary Jungian Perspectives on Psyche and Society*. Hove: Brunner-Routledge.

Slee, C. (2004), editor. *Honest to God: 40 years on*. London: SCM Press.

Soon, C.S, Brass, M., Heinze, H.J., Haynes, J.D (2008). 'Unconscious determinants of free decisions in the human brain'. In *Nature Neuroscience, vol 11, pp.543–545*. New York: Nature Publishing Group.

Spector, S.A. (2001). *Wonders Divine*. London: Associated University Presses.

Spoto, A. (1995). *Jung's Typology in Perspective*. Wilmette: Chiron Publications.

Stanford (1996/2009). 'Paraconsistent logic'. In *Stanford Encyclopedia of Philosophy*. <http://plato.stanford.edu/entries/logic-paraconsistent/> accessed 15-Jan-12.

_____ (2007/2012). 'Philosophy of mathematics'. In *Stanford Encyclopedia of Philosophy*. <https://plato.stanford.edu/entries/philosophy-mathematics/> accessed 12-Dec-16.

Stein, M. (1986). *Jung's Treatment of Christianity*. Wilmette: Chiron Publications.

_____ (2006). *The Principle of Individuation: Toward the Development of Human Consciousness*. Wilmette: Chiron Publications.

Stephens, B.D. (2001). 'The Martin Buber-Carl Jung disputations: protecting the sacred in the battle for the boundaries of analytical psychology'. In *The Journal of Analytical Psychology, vol 46:3, pp. 455-491*.

Thomas, R.S.D. (1994). 'Radical constructive criticisms of von Glasersfeld's radical constructivism'. In *Constructing Mathematical Knowledge*, edited by Ernest, P.. London: Routledge Farmer.

Throckmorton, B.H. (1959). *The New Testament and Mythology*. London: Darton, Longman and Todd.

Thury, E.M, Devinney, M.K. (2005). *Introduction to Mythology*. Oxford: University Press.

Trubshaw, B. (2003). *Explore Mythology*. Loughborough: Heart of Albion Press.

Tweed, T.A. (1992). *The American Encounter with Buddhism, 1844-1912: Victorian Culture and the Limits of Dissent*. Bloomington: Indiana University Press.

UNESCO (1948a). *Methods of Attitude Change Conducive to International Understanding*. <http://unesdoc.unesco.org/images/0015/001582/158272eb.pdf > accessed 23-Aug-15.

_____ (1948b). *Conference of Delegates of National Commissions on Methods of Attitude Change Conducive to International Understanding*. <http://unesdoc.unesco.org/images/0015/001581/158154eb.pdf> accessed 23-Aug-15.

Ulanov, A.B. (2008). 'Jung and religion: the opposing self'. In *The Cambridge Companion to Jung*, edited by Polly-Young Eisendrath and Terence Dawson. Cambridge: Cambridge University Press.

Velmans, M., & Schneider, S. (2007), editors. *The Blackwell Companion to Consciousness*. Oxford: Blackwell Publishers.

Walker, S. (2002). *Jung and the Jungians on Myth*. New York and London: Routledge.

Ware, K. (1979). *The Orthodox Way*. New York: St Vladimir's Seminary Press.

Watkins, J. (1994). 'Obituary: Karl Popper (1902-1994)'. In *The British Journal for the Philosophy of Science, vol 45:4, pp.1089-1090.*

Wheelwright, J.B. (1982). *St. George and the Dandelion*. San Francisco: The CG Jung Institute of San Francisco.

White, V. (1952). *God and the Unconscious*. Dallas: Spring Publications, 1982.

Whitehead, A.N., Russell, B. (1927). *Principia Mathematica Volume 1*. Cambridge: Cambridge University Press.

Wiles, M. (1976a). 'Christianity without incarnation?'. In Hick 1977.

_____ (1976b). 'Myth in theology'. In Hick 1977.

Wulff, D.M. (1991). *Psychology of Religion: Classic and Contemporary Views*. Chichester: John Wiley & Sons.

Young, F. (1977). 'Two roots or a tangled mass'. In Hick 1977.

Young-Eisendrath, P., Hall, J.A. (1991). *Jung's Self Psychology: A Constructivist Perspective*. New York: Guilford Press.

Zurcher, A. (2014). *Debunking the Myers-Briggs personality test*. <http://www.bbc.co.uk/news/blogs-echochambers-28315137 > accessed 24-Aug-15.

de Angulo, X. (1977). 'Comments on a doctoral thesis'. In Jung 1977.

von Franz, M.L. (1971/1986). 'The inferior function'. In *Lectures on Jung's Typology*. Putnam: Spring Publications, 2013.

_____ (1974). *Number and Time*. Evanston: Northwestern University Press.

_____ (1980). *Projection and Recollection*. Chicago and La Salle: Open Court.

von Glasersfeld, E. (1995). *Radical Constructivism: A Way of Learning - Studies in Mathematics Education Series*. London: Routledge.