

**Original citation:**

Francis, Leslie J.. (2015) The Piper at the Gates of Dawn : mapping the spiritual experiences of Mole and Ratty onto a scientific analysis of mysticism. *Journal for the Study of Religious Experience* , 1 (1). pp. 20-31.

**Permanent WRAP URL:**

<http://wrap.warwick.ac.uk/81736>

**Copyright and reuse:**

The Warwick Research Archive Portal (WRAP) makes this work of researchers of the University of Warwick available open access under the following conditions.

This article is made available under the Attribution-NonCommercial-NoDerivatives 4.0 (CC BY-NC-ND 4.0) license and may be reused according to the conditions of the license. For more details see: <http://creativecommons.org/licenses/by-nc-nd/4.0/>

**A note on versions:**

The version presented in WRAP is the published version, or, version of record, and may be cited as it appears here.

For more information, please contact the WRAP Team at: [wrap@warwick.ac.uk](mailto:wrap@warwick.ac.uk)



# Journal for the Study of Religious Experience



## The Piper at the Gates of Dawn: Mapping the spiritual experiences of Mole and Ratty onto a scientific analysis of mysticism

Leslie J Francis

*Warwick Religions & Education Research Unit*

*Centre for Education Studies*

*The University of Warwick, Coventry*

[leslie.francis@warwick.ac.uk](mailto:leslie.francis@warwick.ac.uk)

Kenneth Grahame's masterpiece, *The wind in the willows*, contains a classic description of a religious experience as Ratty and Mole come face-to-face with the Piper at the Gates of Dawn. This chapter draws on Happold's identification of seven characteristics of mystical experience, as amplified by the Francis-Louden Mystical Orientation Scale, to test whether Ratty and Mole's experience can be properly classified as a mystical experience. It is argued that Ratty and Mole's experience passes the test of exemplifying all seven characteristics: ineffability, noesis, transiency, passivity, consciousness of the oneness of everything, sense of timelessness, and true ego.

*Keywords:* religious experience, mystical experience, Mystical Orientation Scale, psychology of religion

### Introducing Ratty and Mole

In Kenneth Grahame's classic masterpiece, *The wind in the willows*, Ratty and Mole are introduced together with the other well-known participants (including the famous Mr Toad) in a narrative concerning everyday life alongside the riverbank. While Mr Toad became notorious for his fascination with the emerging motor car and for his reckless speeding across the open road, Ratty and Mole became well-known for their attraction to a longer-established and more sedate way of life associated with messing about on the river, with small boats and long oars, and with picnic baskets overcrowded with all sorts of tasty treats.

For Ratty and Mole, the river was so much more than a frivolous retreat from the matters of everyday life. For them it was everyday life, literally embracing matters of life and death, and opening windows into encounters with transcendence and into rich and enriching religious or spiritual experiences. It is chapter seven of *The wind in the willows*, entitled 'The Piper at the Gates of Dawn', that contains what may be regarded as a classic account of a particular kind of religious or spiritual experience. The core section of this chapter is worth extensive citation to establish the substance for the analysis offered by the present paper, but first this core section has to be placed in context.

Those who are familiar with Kenneth Grahame's narrative will recall how chapter seven begins with Mole returning from a late supper with his good old friend and companion the Otter. Returning from that late supper Mole is far from at ease, because his old friend and companion the Otter had been far from ease over supper. Although trying to do his best to maintain his hospitable manner, the Otter could not disguise his anxiety. Like any good father, the Otter was distressed because Little Portly had gone missing, and the old Otter had no idea how or where to find him. Resolved to help his distressed friend, Mole set out to recruit the Water Rat and together they rowed their boat out into the dark night to hunt for Little Portly. But now it is appropriate for Kenneth Grahame to take up the tale in his own inimitable manner.

*In silence Mole rowed steadily, and soon they came to a point where the river divided, a long backwater branching off to one side. With a slight movement of his head Rat, who had long dropped the rudder-lines, directed the rower to take the backwater. The creeping tide of light gained and gained, and now they could see the colour of the flowers that gemmed the water's edge.*

*"Clearer and nearer still," cried the Rat joyously. "Now you must surely hear it! Ah - at last - I see you do!"*

*Breathless and transfixed the Mole stopped rowing as the liquid run of that glad piping broke on him like a wave, caught him up, and possessed him utterly. He saw the tears on his comrade's cheeks, and bowed his head and understood. For a space they hung there, brushed by the purple loosestrife that fringed the bank; then the clear imperious summons that marched hand-in-hand with the intoxicating melody imposed its will on Mole, and mechanically he bent to his oars again. And the light grew steadily stronger, but no birds sang as they were wont to do at the approach of dawn; and but for the heavenly music all was marvellously still.*

*On either side of them, as they glided onwards, the rich meadow-grass seemed that morning of a freshness and a greenness unsurpassable. Never had they noticed the roses so vivid, the willow-herb so riotous, the meadow-sweet so odorous and pervading. Then the murmur of the approaching weir began to hold the air, and they felt a consciousness that they were nearing the end, whatever it might be, that surely awaited their expedition.*

*In the midmost of the stream, embraced in the weir's shimmering arm-spread, a small island lay anchored, fringed close with willow and silver birch and alder. Reserved, shy, but full of significance, it hid whatever it might hold behind a veil, keeping it till the hour should come, and, with the hour, those who were called and chosen.*

*"This is the place of my song-dream, the place the music played to me," whispered the Rat, as if in a trance. "Here, in this holy place, here if anywhere, surely we shall find Him!"*

*Then suddenly the Mole felt a great Awe fall upon him, an awe that turned his muscles into water, bowed his head, and rooted his feet to the ground. It was no panic terror - indeed he felt wonderfully at peace and happy - but it was an awe that smote and held him and, without seeing, he knew it could only mean that some august Presence was very, very near. With difficulty he turned to look for his friend, and saw him at his side cowed, stricken, and trembling violently. And still there was utter silence in the populous bird-haunted branches around them; and still the light grew and grew.*

*Trembling he obeyed, and raised his humble head; and then, in that utter clearness of the imminent dawn, while Nature, flushed with fullness of incredible colour, seemed to hold her breath for the event, he looked in the very eyes of the Friend and Helper; saw the backward sweep of the curved horns, gleaming in the growing daylight; saw the stern, hooked nose between the kindly eyes that were looking down on them humorously; saw the long supple hand still holding the pan-pipes only just fallen away from the parted lips; saw, last of all, nestling between his very hooves, sleeping soundly in entire peace and contentment, the little, round, podgy, childish form of the baby otter. All this he saw, for one moment breathless and intense, vivid on the morning sky; and still, as he looked, he lived; and still, as he lived, he wondered.*

*"Rat!" he found breath to whisper, shaking. "Are you afraid?"*

*"Afraid?" murmured the Rat, his eyes shining with unutterable love. "Afraid! Of Him? O, never, never! And yet - and yet - O, Mole, I am afraid!"*

*Then the two animals, crouching to the earth, bowed their heads and did worship.*

## Scientific analysis of religious and spiritual experience

Religious and spiritual experience may occur in a variety of forms. When Alister Hardy began his now famous quest to collect examples of religious and spiritual experience, trained as a biologist accustomed to classificatory systems, he envisaged the value of sifting and sorting religious and spiritual experiences into different species or categories. Building on work that he had initiated in 1925, after his retirement from the Linacre Chair of Zoology at the University of Oxford, in 1966 Hardy inaugurated the Religious Experience Research Unit in Oxford. He first placed his appeal for accounts of religious experiences in the religious press, drawing a poor response of some 200 replies. Then he placed his appeal in the *Guardian*, generating over 3,000 responses. Hardy's own writings provide a full and grounded introduction to his motivation underpinning this early initiative to generate a natural science of religious and spiritual experience, including especially the books, *The living stream* (1965), *The divine flame* (1966), *The biology of God* (1975), *The spiritual nature of man* (1979), *Darwin and the spirit of man* (1984), and *The significance of religious experience* (1985). All of this is put into further context by Hay's (2011) magisterial biography of Hardy, *God's biologist: A life of Alister Hardy*.

The first real work of analysis on the archive appeared in Hardy's (1979) book, *The spiritual nature of man*. In this book Hardy examined the first 3,000 accounts collected by the Religious Experience Research Unit in Oxford and classified these experiences in a variety of ways. He defined 22 descriptions of religious experience: a sense of security, protection, peace; a sense of joy, happiness, wellbeing; a sense of (non-human) presence; a sense of certainty, clarity and enlightenment; a sense of guidance, vocation, inspiration; a sense of prayer answered in events; a sense of purpose behind events; a sense of awe, reverence, wonder; a sense of new strength in oneself; a feeling of love, affection; a sense of exaltation, excitement, ecstasy; a sense of forgiveness, restoration, renewal; a sense of timelessness; a sense of release from fear of death; a sense of being at a loss for words; a sense of hope, optimism; a sense of yearning, desire, nostalgia; a sense of integration, wholeness, fulfilment; a sense of indifference, detachment; sense of harmony, order, unity; sense of fear, horror; sense of guilt, remorse. He defined 21 triggers of religious experience: despair or depression; prayer, meditation; natural beauty; participation in religious worship; literature, film, drama; illness; music; crises in personal relations; the death of others; sacred places; visual art; creative work; prospect of death; silence, solitude; physical activity; relaxation; childbirth; happiness; sexual relations; drugs (anaesthetic); drugs (psychedelic). He distinguished between the senses affected: sight, sound, touch, and smell.

Alister Hardy's quest rightly continues across the work of the Alister Hardy Research Centres in the University of Wales, Trinity St David, and in Glyndŵr University. The Alister Hardy Archive continues to attract a great deal of attention from researchers in the field of transcendent, religious and spiritual experience, ranging from individuals working on masters programmes and learning to become independent researchers to post-doctoral and well-established senior academics. Among those currently exploring the archive Dr Mark Fox stands out as particularly well acquainted with the resources offered by the accounts collected there and is well informed about the further potential awaiting excavation. Drawing on the archive, Fox has produced three important books:

*Religion, spirituality and near-death experience* (2003), *Spiritual encounters with unusual light phenomena: Lightforms* (2008), and *The fifth love* (2014).

## Scientific analysis of mystical experience

Within the wider international context of empirical research concerned with religious and spiritual experience, the greatest effort and great advance (so far) has been located within the discoveries of mystical orientation, mystical experience, and mysticism. Mysticism has been a topic of central interests to the psychology of religion from the very early days of the discipline. In his foundational study, *The varieties of religious experience*, James (1982, p. 301) referred to mysticism as ‘the root and centre’ of religion. Subsequently (and independently) two philosophically-based approaches have analysed, identified and discussed the recognised components of mysticism: one by Stace (1960) and one by Happold (1963). Stace’s framework was adopted by Hood (1975) to form the theoretical basis for the Hood Mysticism scale (M Scale). Happold’s framework was adopted by Francis & Loudon (2000a) to form the basis of the Francis-Louden Mystical Orientation Scale (MOS) and the subsequent Short Index of Mystical Orientation (SIMO) reported by Francis and Loudon (2004).

While the approaches offered by Stace (1960) and Happold (1963) are in many ways compatible and complementary, it is sensible to base scientific investigation and operationalisation on one or the other. Currently the practical advantages offered by Happold’s model concerns the clarity with which the seven identified characteristics of mysticism have been set out in Happold’s own work and in the subsequent approach taken by Francis and Loudon (2000a) to operationalise each of these seven characteristics separately. In effect this clarity offers a check list against which the claim of any specific account of religious or spiritual experience to qualify for classification as mystical experience can be checked. The aim of the present paper is now for clarifying the Happold model as amplified by Francis and Loudon and to test whether Kenneth Grahame’s account of the experience of Ratty and Mole meets the criteria of these seven characteristics.

## Working with Happold’s model

Happold’s definition of mysticism embraces seven key characteristics, the first four of which were taken directly from James (1982): ineffability, noesis, transiency, passivity, consciousness of the oneness of everything, sense of timelessness, and true ego (or self). The Francis-Louden Mystical Orientation Scale (MOS) proposes three indicators of each of these seven characteristics in order to construct a 21-item measure. In their foundation paper, Francis and Loudon (2000a) reported an alpha coefficient of internal consistency reliability of .94 for this instrument (Cronbach, 1951).

*Ineffability* is a negative description emphasising the private or incommunicable quality of mystical experience. According to James (1982, p. 380), those who have this kind of experience report that ‘it defies expression, that no adequate report of its content can be given in words’. The MOS accesses ineffability with the following three items:

- experiencing something I could not put into words;
- feeling moved by a power beyond description;
- being aware of more than I could ever describe.

*Noesis* emphasises how mystical experiences carry states of insight into levels of truth inaccessible to the discursive intellect. According to James (1982, pp. 380-381), those who have this kind of experiences regard them 'to be also states of knowledge ... They are illuminations, revelations, full of significance and importance, all inarticulate though they remain.' The MOS accesses noesis with the following three items:

- sensing meaning in the beauty of nature;
- knowing I was surrounded by a presence;
- hearing an inner voice speak to me.

*Transiency* emphasises how mystical experience is brief, inconstant, passing, and intermittent. According to James (1982, p. 381), mystical states do not endure for long though they may recur 'and from one recurrence to another it is susceptible of continuous development in what is felt as an inner richness and importance.' The MOS accesses transiency with the following three items:

- seeing brief glimpses into the heart of things;
- having transient visions of the transcendental;
- experiencing passing moments of deep insight.

*Passivity* emphasises both the experience of being controlled by a superior power, and the undeserved, gratuitous nature of the mystical experience. According to James (1982, p. 381), mystical states are 'not passive interruptions, an invasion of the subject's inner life with no residual recollection of significance, and this distinguishes them from phenomenon like prophetic speech, automatic writing, and mediumistic trance'. The MOS accesses passivity with the following three items:

- being overwhelmed by a sense of wonder;
- being in a state of mystery outside my body;
- being grasped by a power beyond my control.

*Consciousness of the oneness of everything* emphasises how mystical experience conveys the sense in which existence is perceived as a unity. According to Happold (1963, p. 47), although it may be expressed in different ways by Hindu, Buddhist, Sufi and Christian contemplatives, the resolution of the dilemma of duality through this sense of the oneness of everything 'is at the heart of the most highly developed mystical consciousness'. The MOS accesses consciousness of the oneness of everything with the following three items:

- feeling at one with the universe;
- feeling at one with all living beings;
- sensing the unity in all things.

*Sense of timelessness* emphasises how mystical experiences appear to have a timeless quality and to occupy an entirely different dimension from that of any known sense of time and to be wholly unrelated to anything that can be measured by what is known as clock-time. According to Happold (1963, p. 48), 'the mystic feels himself to be in a dimension where time is not, where "all is always now".' The MOS accesses sense of timelessness with the following three items:

- sensing the merging of past, present and future;
- being conscious only of timelessness and eternity;
- losing a sense of time, place and person.

*True ego* (or self) emphasises how mystical experience speaks to the deep, the true inner-self, and how such experience addresses the soul or the inner spirit. According to Happold (1963, p. 48) mystical experience gives rise to 'the conviction that the familiar phenomenal *ego* is not the real *I*.' The MOS accesses this notion of the true ego with the following three items:

- being absorbed within a greater being;
- losing my everyday self in a greater being;
- feeling my everyday self absorbed in the depths of being.

## Testing Happold's model of mysticism

The development of the Francis-Louden Mystical Orientation Scale (Francis & Loudon, 2000a) provided an ideal opportunity to test the internal coherence and construct validity of Happold's seven component conceptualisation of mysticism. Within the science of psychometric assessment, the internal coherence of an instrument is tested by the alpha coefficient (Cronbach, 1951) as an index of internal consistency reliability; the construct validity of an instrument is tested by the way in which the measure functions within the context of a network of theories about the way in which the construct is expected to behave.

In the foundation paper for the Mystical Orientation Scale, Francis and Loudon (2000a) draw on data provided by a sample of 1,468 Roman Catholic Priests in England and Wales. All 21 items loaded highly (between .46 and .79) on the first factor of the unrotated solution proposed by principal component analysis, and generated an alpha coefficient of internal consistency reliability of .94 (Cronbach, 1951). In a second study, Bourke, Francis, and Robbins (2004) checked the internal consistency reliability of the MOS among a sample of 168 church musicians (130 men and 38 women). In this new study, the 21 items also generated an alpha coefficient of .94, with the item rest-of-scale correlations ranging between .45 and .78. In addition to these two studies, the Mystical Orientation Scale (Francis & Loudon, 2000a) and the Short Index of Mystical Orientation (Francis & Loudon, 2004) have been used in a range of studies, including Francis and Thomas (1996), Francis and Loudon (2000b), Francis (2002), Francis, Village, Robbins, and Ineson (2007), Edwards and Lowis (2008a, 2008b), Francis, Littler, and Robbins (2012), and Francis, Robbins, and Cargas (2012). While the Mystical Orientation Scale was originally constructed to identify mystical orientation within a Christian context, a modified form of the instrument is currently being tested in Hindu, Islamic, Jewish, and secular contexts. Cumulatively these studies provide good evidence that the 21 indicators of the seven components of Happold's conceptualisations of mysticism cohere to define a reliable unitary construct.

The construct validity of the Mystical Orientation Scale has been tested by a network of theories that locate individual differences in openness to mystical orientation within the context of normal personality. One set of studies that has addressed this questions has drawn on the model of personality initially advanced by Carl Jung (1971) in his study of psychological types, and developed and operationalised by instruments like the Myers Briggs Type Indicator (Myers & McCaulley, 1985), the Keirsey Temperament Sorter (Keirsey, 1998), and the Francis Psychological Type Scales (Francis, 2005). These instruments are designed to distinguish between two perceiving functions (sensing and intuition), two judging functions (thinking and feeling), two orientations (introversion and extraversion) and two attitudes toward the

outer world (judging and perceiving). These instruments are designed primarily to categorise individuals within dichotomous psychological types, not to locate individuals along dimensions of personality.

The two perceiving processes are defined as sensing (S) and intuition (N). Sensors perceive their environment through their senses and focus on the details of the here and now, while intuitives perceive their environment by making use of the imagination and inspiration. Sensors are distrustful of jumping to conclusions and of envisioning the future, while intuitives are overloaded by too many details and long to try out new approaches.

The two judging processes are defined as thinking (T) and feeling (F). Thinkers reach their judgements by relying on objective logic, while feelers reach their judgements by relying on subjective appreciation of the personal and interpersonal factors involved. Thinkers strive for truth, fairness, and justice, while feelers strive for harmony, peace, and reconciliation.

The two orientations are defined as introversion (I) and extraversion (E). Introverts draw their energy from the inner world of ideas, while extraverts draw their energy from the outer world of people and things. Extraverts are energised by people and drained by too much solitude, while introverts are energised by solitude and drained by too many people.

The two attitudes toward the outer world are defined as judging (J) and perceiving (P). Judges use their preferred judging process (either thinking or feeling) to deal with the outside world. Their outside world is organised, scheduled, and planned. Perceivers use their preferred perceiving process (either sensing or intuition) to deal with the outside world. Their outside world is flexible, spontaneous, and unplanned.

The set of studies concerned with the connection between Jungian psychological type and mysticism was motivated by Christopher Ross' thesis regarding the centrality of the perceiving process (the sensing function and the intuitive function) in shaping individual differences in religious experience, expression and belief (Ross, 1992). In his initial empirical examinations of this thesis, Ross began to chart the distinctive profiles of religiosity among sensing types and among intuitive types. For example, Ross, Weiss and Jackson (1996) found intuitives contrasted to sensors in terms of greater comfort with regard to complexity of religious belief, while sensors tended to be more definite in regard to what counted as religious to them. Sensors evidenced firmer boundaries between what was secular and what was sacred. Intuitives showed a more welcoming attitude toward religious change, viewing new insights as essential for a healthy religious life and narrow minded religion as a significant problem. Sensing types by contrast saw religious change as a problem, and change in personal faith as an indication of weakness. Ross and Jackson (1993) concluded in their study of Catholics that the pattern of responses to individual items suggested that religion functioned in different ways for sensing and for intuitive types. According to this study religion tended to function as a guide to right living for sensors, and as a source of insight for intuitives. Studies of college students by Burris and Ross (1996) confirmed the relevance of the perceiving preference of sensing or intuition for orientation to religion, even among less religiously committed groups.

In a subsequent paper, Francis and Ross (1997, p. 95) set out to examine differences between sensing types and intuitive types with regard to preferences in Christian spirituality, and confirmed the hypothesis that intuitive types display a greater openness to the experiential aspects of spirituality. Ross' general theory that the perceiving process (sensing or intuition) plays a central role in predicting preferred ways of being religious or expressing religiosity, together with the findings presented by Francis and Ross (1997) that intuitives show a higher appreciation than sensors of experiential spirituality, leads to the clear hypothesis that intuitives will record higher scores than sensors on the indices of mystical orientation.

So far seven studies have examined the association between scores recorded on the MOS or the SIMO and individual differences recorded on the Jungian perceiving process. Two of these studies employed the SIMO. Francis and Loudon (2000b) administered the SIMO together with the Keirsey Temperament Sorter (Keirsey, 1998) to a sample of 100 student and adult churchgoers. These data supported Ross' hypothesis with significantly higher scores of mystical orientation reported among intuitive types ( $M = 30.6$ ,  $SD = 7.5$ ) than among sensing types ( $M = 25.6$ ,  $SD = 8.7$ ). Francis (2002) administered the SIMO together with the Myers-Briggs Type Indicator (Myers & McCaulley, 1985) to a sample of 543 participants attending workshops concerned with personality and spirituality. These data did not support Ross' hypothesis with no significant differences reported between intuitive types ( $M = 30.2$ ,  $SD = 7.6$ ) and sensing types ( $M = 29.0$ ,  $SD = 7.7$ ).

The other five studies employed the MOS. Francis, Village, Robbins, and Ineson (2007) administered the MOS together with the Francis Psychological Type Scales (Francis, 2005) to a sample of 318 guests who had stayed at a Benedictine Abbey. These data supported Ross' hypothesis with significantly higher scores of mystical orientation reported among intuitive types ( $M = 77.9$ ,  $SD = 17.4$ ) than among sensing types ( $M = 71.4$ ,  $SD = 18.3$ ). Francis, Robbins, and Cargas (2012) administered the MOS together with the Francis Psychological Type Scales (Francis, 2005) to a sample of 580 participants from a range of religious and spiritual traditions attending the Parliament of the World's Religions in Barcelona, 2004. Again these data supported Ross' hypothesis with significantly higher scores of mystical orientation reported among intuitive types ( $M = 78.7$ ,  $SD = 18.5$ ) than among sensing types ( $M = 71.3$ ,  $SD = 15.8$ ). Francis, Littler, and Robbins (2012) administered the MOS together with the Francis Psychological Type Scales (Francis, 2005) to a sample of 232 Anglican clergymen serving in the Church in Wales. Again, these data supported Ross' hypothesis with significantly higher scores of mystical orientation reported among intuitive types ( $M = 65.1$ ,  $SD = 15.8$ ) than among sensing types ( $M = 59.9$ ,  $SD = 15.1$ ). Ross and Francis (2015) administered the MOS and the FPTs to a sample of 149 adolescents between the ages of 16 and 18 years. These data supported Ross' hypothesis with significantly higher scores of mystical orientation among intuitive types ( $M = 49.7$ ,  $SD = 18.6$ ) than among sensing types ( $M = 42.7$ ,  $SD = 15.3$ ). Francis and Crea (in press) administered the Italian translation of the MOS and the FPTs to a sample of 1,155 Italians between the ages of 14 and 80 years. Again these data supported Ross' hypothesis with significantly higher scores of mystical orientation among intuitive types ( $M = 70.6$ ,  $SD = 13.1$ ) than among sensing types ( $M = 67.1$ ,  $SD = 13.0$ ). Cumulatively these studies provide good evidence that the 21 item index that combines indicators of the seven components of Happold's conceptualisation of mysticism cohere to generate a valid operationalisation of mysticism.

## Looking for signs of mystical experience

Alongside providing a basis for the development of a measure of mystical orientation, like the Mystical Orientation Scale, Happold's model may also offer an analytic framework through which individual accounts of religious and spiritual experiences can be assessed to test the extent to which they may qualify as mystical experiences. Clearly the Alister Hardy Archive could provide an almost inexhaustible source of accounts of religious and spiritual experiences that could be evaluated in that way. Now it is reasonable to treat the account offered by Ratty and Mole as if they had lodged that account within that Archive.

Having defined the seven characteristics of mystical experience as identified by Happold (1963) and operationalised by Francis and Loudon (2000a), the next step is to look closely again at the extended extract from Kenneth Grahame's narrative to see how many of these seven characteristics are present in that narrative. My contention is that there is some evidence for all seven of these characteristics: ineffability, noesis, transiency, passivity, consciousness of the oneness of everything, sense of timelessness, and true ego.

I found evidence for *ineffability*, for experience that defies expression. Mole and Rat are not able to give a coherent account of what they are experiencing. They can only allude to what they are experiencing in symbolic or poetic form; but the poetry is so powerful.

*'This is the place of my song-dream, the place the music played to me', whispered the Rat, as if in a trance.*

I found evidence for *noesis*, for experience that gives insight into a level of truth inaccessible to the discursive intellect, for experience that conveys revelations full of significance and importance. For Mole:

*Without seeing, he knew it could only mean that some august Presence was very, very near.*

I found evidence for *transiency*, for experience that is brief and that does not last for long. For Mole that experience was so intense and yet so short:

*All this he saw, for one moment breathless and intense, vivid on the morning sky; and still, as he looked, he lived.*

I found evidence for *passivity*, for experience that is wholly gratuitous and where the subject remains passively controlled by a higher power. For Mole it felt as if the experience fell upon him.

*Then suddenly the Mole felt a great awe fall upon him, an awe that turned his muscles into water, bowed his head, and rooted his feet to the ground.*

I found evidence for *consciousness of the oneness of everything*, for experience of the oneness of everything that resolve the dilemma of duality. Mole felt entirely possessed by the experience and absorbed into it.

*Breathless and transfixed the Mole stopped rowing as the liquid run of that glad piping broke on him like a wave, caught him up, and possessed him utterly.*

I found evidence of a *sense of timelessness*, for experience that stands outside clock time, as past, present and future lose their significance, and the present moment takes

over. For Mole this sense of timelessness took over as they glided onwards in the morning light and as they experienced the world around them as if for the first time.

*On either side of them, as they glided onwards, the rich meadow-grass seemed that morning of a freshness and a greenness unsurpassable. Never had they noticed the roses so vivid.*

I found evidence of the *true ego*, where experience puts the normal everyday self into perspective, absorbed within a greater power. It was at the very moment when Mole looked into the eyes of the friend and helper that he recognised his true self.

*Mole looked in the very eyes of the Friend and Helper; saw the stern, hooked nose between the kindly eyes that were looking down on them humorously.*

## Conclusion

The present study began by introducing the profound and significant account of the spiritual or religious experience recorded in chapter seven of Kenneth Grahame's classic masterpiece, *The wind in the willows*. Here is an account that Alister Hardy would have been pleased to receive and to treasure within his growing archive of religious and spiritual experiences.

The present study moved on to introduce the scientific study of mysticism and did so by giving special weight to the seven component conceptualisation of mysticism proposed by Happold (1963) and operationalised by the Francis-Louden Mystical Orientation Scale (Francis & Loudon, 2000a). Here is a model of mysticism that has been shown to be reliable and valid by the conventions of psychometric assessment.

Finally, the present study employed Happold's seven component model as an analytic framework through which to test whether the reported experience of Ratty and Mole properly qualify those two creatures as having had a mystical experience. The analysis confirmed that all seven of the characteristics identified by Happold (1965) and as operationalised by Francis and Loudon (2000a) were clearly visible within the account. In one sense, at least, Ratty and Mole deserve the claim of being mystics, as they went about their everyday life living alongside the river bank and messing about on the river. Others following in their footsteps or drifting in their slip stream should be encouraged to follow the example so well set out by Ratty and Mole, by recording a full and coherent account of their experience and by lodging it within the Alister Hardy Archive of Religious and Spiritual Experience as further data to inform the developing empirical science of religious and spiritual experience.

## Acknowledgement

This paper is a revision and development of the 2013 Alister Hardy Memorial Lecture delivered in Oxford. I am grateful to The Alister Hardy Society for the Study of Spiritual Experiences for extending to me the invitation to deliver that lecture.

## References

- Bourke, R., Francis, L. J., & Robbins, M. (2004). Mystical orientation among church musicians. *Transpersonal Psychology Review*, 2, 14-19.
- Burris, C., & Ross, C. F. J. (1996). Jungian type and religious orientation: Extrinsic, intrinsic, quest or immanence. (Unpublished paper presented to American Psychological Association Convention, Toronto).
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334.
- Edwards, A. C., & Lewis, M. J. (2008a). Construction and validation of a scale to assess attitudes to mysticism: The need for a new scale for research in the psychology of religion. *Spirituality and Health International*, 9, 16-21.
- Edwards, A. C., & Lewis, M. J. (2008b). Attitudes to mysticism: Relationship with personality in Western and Eastern mystical traditions. *Spirituality and Health International*, 9, 145-160.
- Fox, M. (2003). *Religion, spirituality, and the near-death experience*. London: Routledge.
- Fox, M. (2008). *Spiritual encounters with unusual light phenomena: Lightforms*. Cardiff: University of Wales Press.
- Fox, M. (2014). *The fifth love: Explaining accounts of the extraordinary*. Kidderminster: Spirit and Sage Ltd.
- Francis, L. J. (2002). Psychological type and mystical orientation: Anticipating individual differences within congregational life. *Pastoral Sciences*, 21, 77-99.
- Francis, L. J. (2005). *Faith and psychology: Personality, religion and the individual*. London: Darton, Longman and Todd.
- Francis, L. J., & Crea, G. (in press). Openness to mystical experience and psychological type: A study among Italians.
- Francis, L. J., Littler, K., & Robbins, M. (2012). Mystical orientation and the perceiving process: A study among Anglican clergymen. *Mental Health, Religion and Culture*, 15, 945-953.
- Francis, L. J., & Loudon, S. H. (2000a). The Francis-Louden Mystical Orientation Scale (MOS): A study among Roman Catholic priests. *Research in the Social Scientific Study of Religion*, 11, 99-116.
- Francis, L. J., & Loudon, S. H. (2000b). Mystical orientation and psychological type: A study among student and adult churchgoers. *Transpersonal Psychology Review*, 4 (1), 36-42.
- Francis, L. J., & Loudon, S. H. (2004). A short index of mystical orientation (SIMO): A study among Roman Catholic priests. *Pastoral Psychology*, 53, 49-51.
- Francis, L. J., Robbins, M., & Cargas, S. (2012). The perceiving process and mystical orientation: An empirical study in psychological type theory among participants at the Parliament of the World's Religions. *Studies in Spirituality*, 22, 341-352.
- Francis, L. J., & Ross, C. F. J. (1997). The perceiving function and Christian spirituality: Distinguishing between sensing and intuition. *Pastoral Sciences*, 16, 93-103.
- Francis, L. J., & Thomas, T. H. (1996). Mystical orientation and personality among Anglican clergy. *Pastoral Psychology*, 45, 99-105.
- Francis, L. J., Village, A., Robbins, M., & Ineson, K. (2007). Mystical orientation and psychological type: An empirical study among guests staying at a Benedictine Abbey. *Studies in Spirituality*, 17, 207-223.
- Happold, F. C. (1963). *Mysticism: A study and an anthology*. Harmondsworth: Penguin.
- Hardy, A. (1965). *The living stream*. London: Collins.
- Hardy, A. (1966). *The divine flame*. London: Collins.
- Hardy, A. (1975). *The biology of God*. London: Jonathan Cape.
- Hardy, A. (1979). *The spiritual nature of man*. Oxford: Clarendon Press.
- Hardy, A. (1984). *Darwin and the spirit of man*. London: Collins.
- Hardy, A. (1985). *The significance of religious experience*. Nassau, Bahamas: Lissmore Press.
- Hay, D. (2011). *God's biologist: A life of Alister Hardy*. London: Darton, Longman and Todd.

- Hood, R. W. (1975). The construction and preliminary validation of a measure of reported mystical experience. *Journal for the Scientific Study of Religion*, 14, 29-41.
- James, W. (1982). *The varieties of religious experience*. Harmondsworth: Penguin.
- Jung, C. G. (1971). *Psychological types: The collected works, volume 6*. London: Routledge and Kegan Paul.
- Keirse, D. (1998). *Please understand me: 2*. Del Mar, CA: Prometheus Nemesis.
- Myers, I. B., & McCaulley, M. H. (1985). *Manual: A guide to the development and use of the Myers-Briggs Type Indicator*. Palo Alto, CA: Consulting Psychologists Press.
- Ross, C. F. J. (1992). The intuitive function and religious orientation. *Journal of Analytical Psychology*, 37, 83-103.
- Ross, C. F. J., & Francis, L. J. (2015). The perceiving process and mystical orientation: A study in psychological type theory among 16- to 18-year-old students. *Mental Health, Religion and Culture* (volume and pages not yet known).
- Ross, C. F. J., & Jackson, L. M. (1993). Orientation to religion and Jungian type preference among Canadian Catholics. Unpublished paper presented to American Psychological Association Convention, Toronto.
- Ross, C. F. J., Weiss, D., & Jackson, L. M. (1996). The relation of Jungian psychological type to religious attitudes and practices. *International Journal for the Psychology of Religion*, 6, 263-279.
- Stace, W. T. (1960). *Mysticism and philosophy*. Philadelphia, PA: Lippincott.