The neurological basis of religious experience

and implications for teaching higher order thinking

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I want to put you at ease by first deconstructing that rather academic sounding title. What it means is that I'm going to briefly address the origins of religion from a brain research perspective, then describe the correlation between three areas of the brain and reports of religious experience. I then want to draw together those two topics and suggest some implications for religious educators engaged in teaching higher order thinking by demonstrating two teaching tools. But first I want to begin with a prologue that picks up on the key words in the title of this paper, and that provides a context for the reader.

The Development tof Higher Order Spiritual Thinking

It might be argued that the well intentioned ambiguity conveyed by the title of the 2006 DAN conference: '*Beyond the curriculum: Developing the whole person*' indicates both a wink to the beyond and a nod to whole brain processes associated with the teaching of

higher order thinking. The wink to the beyond reminds me that Ministry of Education curriculum planners need to be prophets, which is ironic for a secular State education system, because they need to predict the cognitive challenges students might encounter 20 or more years ahead. There is a note of irony attached to their planning because, as a secular institution, the Ministry is forced to deny a key characteristic of what makes us human – religious experience.

A wink to the beyond also suggests that religious educators need to prepare students to cope with life beyond the years of compulsory schooling. This suggests the need to graduate from our schools literate, spiritual thinkers who have thinking tools that empower them to independently make ethical decisions.

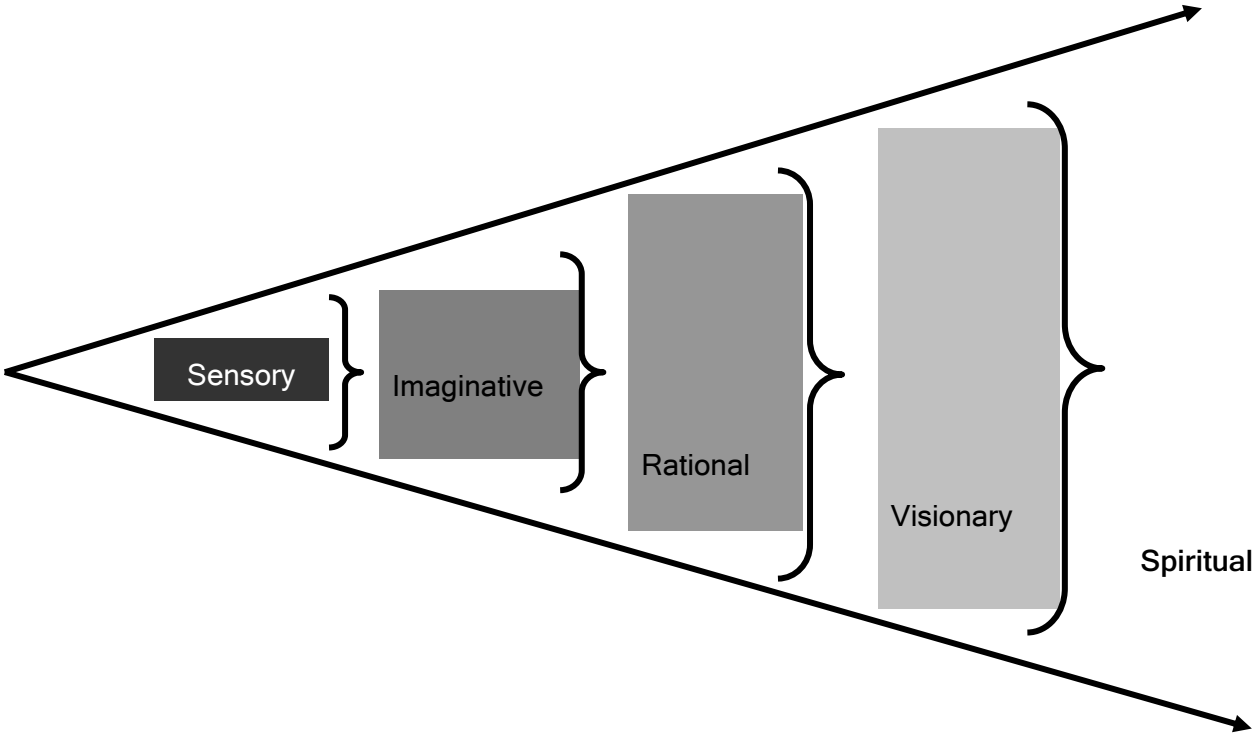


Figure 1. The development of higher order thinking

Central to this paper is the term higher order thinking. Figure 1 illustrates the development of thinking from sensual to higher forms of visionary and spiritual thinking. The gradation of shading suggests the on-going development of each type of thinking, beginning with the emergence of sensory thinking at birth and then the gradual emergence of other types of thinking as the brain matures and the environment permits. Normally, as a person develops each type of thinking will emerge but clearly some individual exhibit the higher forms of rationale, visionary and spiritual thinking to a greater degree than others.

Taxonomies of Thinking

The different types of thinking teachers attempt to evoke among their students are reflected in different taxonomies. The use of the lower levels of Blooms (1956) taxonomy (remember and understand) is by far the most common. But Blooms is a cognitive taxonomy that fails to adequately accommodate affective, ethical or spiritual thinking, and in this sense does not provide a framework for developing the whole person. Unless there is some sudden devolution of the neo-cortex, the new part of the brain, students' will continue to need a spiritual dimension to their curriculum.

As Figure 1 suggests, educating the whole person involves a development from the sensory / perceptual thinking processes epitomised by the hunger cries of young children, to imaginative thinking illustrated in children's early play with imaginary friends, to the development of rational and moral thought described by Kohlberg (1984) and epitomised by great philosophers and teachers who use *Philosophy for Children* approaches. And we need more philosophers because it is important that students rigorously examine religious and secular texts using, for example, critical literacy approaches, and it is important that students understand how our social morality is constructed, and how it is not always based on evidence.

The need for rational thinking illustrated in Figure 1 is especially important in an age when governments and others wield language, words and images, as a weapon of mass deception. For example, according to Robert Fisk (2006), the USA Defence Department deliberately uses pure euphemisms to create disconnections between words and images, and what these signs and symbols are actually describing. For example, they talk of "...pink mist collateral damage resulting from friendly fire in the form of a surgical strike by smart,

patriot or peacekeeper missiles used to pacify terrorists" ... who presumably would not relocate to a re-education camp. This language gives no hint of shredded limbs, nor does it apportion blame. Goodness who could object to a surgical strike by a smart, patriot, peacekeeper that results in the blood of a terrorist taking a form akin to candy floss? This language, this discursive act, represents the total failure of the human spirit.

Finally, Figure 1 also suggests our potential for visionary thinking epitomised in the work of great leaders such as Ghandi, and ultimately our potential for spiritual thinking as demonstrated by the Dali Lama, The Pope, Jesus Christ and others.

These higher order forms of thinking are especially important in an age when politicians suffer from chronic truth decay and irrational thinking. Consequently, through our practice we need to help students expose the false thinking of those in power. Again, Robert Fisk (Campbell, 2006) notes in respect to the American invasion of Iraq:

> We're told that things are getting better, because the insurgents are getting more desperate. Therefore things are going to get much worse before they get better and if they're getting worse, it means they are getting better. And if they are to get even better, they'll have to get even worse. It's incredible logic .... (p.16)

Perhaps religious education programmes that engage students' in rational, visionary and spiritual thinking have a place in our curriculum now like never before.

This paper suggests that the development of higher order thinking is dependent on the development of the brain, and specifically those areas of the neocortex that appear to have functional specificity when we arer aware of a rteligious experience.

The Schizophrenic Split between Science and Religion

Also central to the title of this paper are the terms 'neurological' and 'religious experience'. Given that this paper explores links between the brain and religious experience it seems appropriate to acknowledge the controversy, debate and strong feelings surrounding any discussion about science and religion, and more specifically surrounding the neurological basis of religious experience. The debate surrounding intelligent design and evolution today exemplifies this tension, but this debate has a long history. In the context of this paper 'neurological' will refer to the measurement of brain function through various imaging techniques . Consistent with that measurement, religious experience will refer to reports from subjects that are associated with changes in brain function. This restricted description of religious experience is regarded as an epiphenomenal component of spiritual thinking, that can be differentiated from the type of critical thinking associated with discussion around the nature of the Holy Spirit for instance.

Some commentators dismiss both the right of scientists to investigate religious experience and any link between religious experience and brain function. The current Vatican position stated by Bishop Sgreccia in respect to a neurological basis of religious experience is that any claim that the feeling of being in God's presence might simply be the result of the brain's activity is a mistaken and materialistic view of human actions.

In contrast, Newberg & d'Aquili (2001) seem to present a more sympathetic view from a neuropsychological perspective when they refute claims that the brain creates God. Rather they claim that the brain has mechanisms for creating religious experience. Susan

Greenfield, a neuroscientist provides a somewhat more strident scientific perspective when she claims that while respecting people's religious beliefs she presents them with the neurological facts... in effect establishing a fact (objective science) versus fiction (subjective religion) dichotomy. Like Newberg & d'Aquili, Greenfield also denies she is a reductionist by claiming she can describe the brain in terms of its components, without reducing it to those components.

Philosophy has a long history of investigating issues associated with science and religion. Paul Tillich and Pierre Teilhard de Chardin among others, have attempted to resolve some of the tension between science and religion and their writings are pertinent to any acknowledgement of the current debate around the neurological basis of religious experience.

Paul Tillich.

According to Tillich (1959) tensions between science and religion stem from the tendency of neuroscience to define nature in terms of objective physical laws, and the insistence of religion that the reality of religious experience is subjective, as exemplified by Christians who are committed to a personal God. In his attempts to resolve this impasse, Tillich (1959) described this tension as a schizophrenic split in collective consciousness. His *Theology of Culture* (1959) uses the words of perhaps the greatest scientist ever, Einstein, to exemplify and explore this schizophrenic split. Einstein identified God with the orderly laws of nature while emphatically rejecting the idea of a personal God. He argued that the notion of a personal God was not essential for religion, that it was mere superstition, self-contradictory and incompatible with science.

Tillich's response to these arguments (see Chapter IX in *Theology of Culture*, 1959) and his attempt to reconcile the tensions between science and religion was to concede that the concept of a God that intervenes in nature is incompatible with science. Further, he claimed that such a God would mean "the destruction of any meaningful idea of God" (Tillich, 1959: 130), because it would equate God with other natural objects that cause natural events.

But Einstein also spoke of the grandeur of reason incarnate in existence which is inaccessible to man; in short that some things remain beyond human understanding. Tillich regards this concession as "the first and basic element of any developed idea of God" (Tillich, 1959: 130) and uses it to explore common ground between science and religion.

Pierre Teilhard de Chardin.

Pierre Teilhard de Chardin also addressed the tense interface between science and religion, but unlike Tillich he reconstructed Christian doctrines from the perspective of science and reconstruct science from the perspectives of faith. Teilhard argued that the workings of God were most apparent when the world was seen through the eyes of science; that the primary source of religious truth was to be found in the material world rather than in the *magisterium* of the church, a position that put him at odds with the church.

Prompted by the work of quantum physicists Teilhard (1971) proposed that far from continuing to explain the material world, science was exposing still deeper mysteries at the heart of matter, that there was no clean line of demarcation between the observer and the observed, and that the scientist, like the theologian, could not take a completely "objective" position separate from the phenomenon being studied. As a means of exploring this common

ground, Teilhard described the multidimensional unity of life. This perspective stands in stark contrast to Gould's (1999) distinction between the magisterium of science and the magisterium of religion.

On balance then, the concepts of a non-secular science and a secular religion seem to be oxymoron. Perhaps some common ground between science and religion can be found by corrupting Tillich's famous aphorism that religion is the substance of science (and culture), and that science (and culture) is the form of religion. In the writings of Tillich, Einstein and Teilhard science and religion appear to be interpenetrating dimensions with philosophical elements. It is, therefore perhaps premature to dismiss the findings of neuroscientists who may inform us about associations between neurological processes and religious experience.

Finally in this prologue a necessary caution. The popular press has a tendency to trivialise the complexity of the debate surrounding associations between the brain and religious experience (Alpers, 2001).

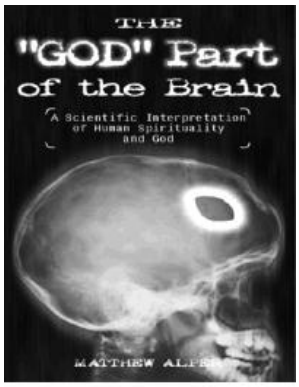


Figure 2. Book cover

Given the ongoing tensions between science and religion, their simplifications seem similar to undertaking brain surgery with blunt meat cleavers. Perhaps the discussion of any association needs to be undertaken by those who wield scalpels and have dispositions of

mystery and awe. There is no God spot as suggested by the book cover illustrated in Figure 2. This image is a trivial denial of the workings of an infinitely complex, systemic brain. Rather, religious experience can be associated with multiple brain functions, orchestrated in awesome concert. Book covers such as that illustrated in Figure 2 trivialise one of life's great mysteries.

We are, for certain, all brain surgeons. When we use stories to engage students in higher order thinking we operate on the brain as assuredly as a neurosurgeon. We develop or destroy the very fabric of the brain during every class. And operating on the brain is not simple – indeed teaching higher order thinking is as complex as the organ on which we operate.

Given that rather attenuated prologue let me outline where this paper is going. First I want to look to the past as a means of informing the future. How has the human brain, which is capable of religious experience, evolved, and what are some implications for religious educators? Then, I want to describe three areas of the brain associated with religious experience (you do not have to know much about the brain to follow this). In the following section I want to consider the implications of these understandings for what religious educators might do in the classroom, and in the final part I want to demonstrate two teaching tools capable of evoking higher order thinking and to justify their use.

The Evolution of Religious Experience

The traditional answer to the question of how come the human brain is capable of religious experience is that there seems to be a link between changes in the complexity of

the brain and our potential to appreciate religious experience (Dunbar, 2004). The complexity of the neocortex, the new thinking brain, and especially the front part of the brain, seems to correlate with three inter-related factors.

- Group size (As the brain became more complex people began living in larger communities)
- Social skills (As the brain became more complex clans were able to maintain group stability)
- Religion (As the brain became more complex we were able to engage in that type of higher order thinking we regard as spiritual thinking).

In short, the traditional answer is that as the brain became sufficiently complex in structure, the spiritual mind took shape (mind being what the brain does).

Probably, the brain was not complex enough to support these three functions until about 200 000 years ago, about the time language evolved. But perhaps a more precise indicator of the relationship between the evolving complexity of the brain and an appreciation of religious experience is evidence of grave goods in burial sites (indicative of belief in an after life). The evidence for this is especially clear about 25,000 years ago.

One implication that stems from these understandings is that we should expect our students to have a brain capable of religious experience... after all according to a recent Listener/TNS (Barnett, 2006) survey of 1000 New Zealanders, 69% of us believe in God or some higher spiritual being, 26% do not believe and 5% don't know.

A second implication based on evidence about burial rituals is that there is a universal human urge, an innate disposition, to maintain the illusion of control over uncontrollable

natural forces, through faith. Again by implication we need to assist our students develop that control, through faith.

Areas of the Brain Associated with Religious Experience

This section of the paper examines three areas of the complex brain associated with religious experience.

Frontal brain areas and the theory of mind

It was previously noted by Dunbar (2004) that the evolving complexity of the brain has been associated with a potential for religious experience. One recent and complex evolution is in an area of the frontal lobes that allows us to develop what's called a *Theory of Mind* (TOM). So what is TOM?

Most of us have an innate ability to empathize and read the body language. This ability is realized when we infer the desires and feelings of others and predict their intentions, an ability known as having a 'theory of mind' (TOM). It is a developmentally pre-wired, automatic function of a recently developed area in the front of the brain between the eyes and is, almost without exception, a human ability that develops between the ages of 3 and 5 years (Gallagher & Frith, 2003; Siegal, & Varley, 2002). Infants younger than about 2 years don't appear to have a theory of mind.

Most of us are natural born mind readers, but some including autistic people, are not. The un-self-conscious behaviour of autistic children, the fact that they seem unconcerned about what others might be thinking about them, suggests that at the heart of autism is a loss of this innate TOM ability. Autistic children appear to be mind-blind. They may not have a 'theory of mind' about anyone.

There is a neurological locus for this TOM ability. The bright white area at the intersection of the cross hairs in Figure 3 locates this area which is behind the middle of the forehead. The spindle cells in this location connect with other areas of the brain that provide information (based on face recognition for example) crucial to comprehending the intentions and feelings of others. To comprehend compassion, for example, one must have function in this area.

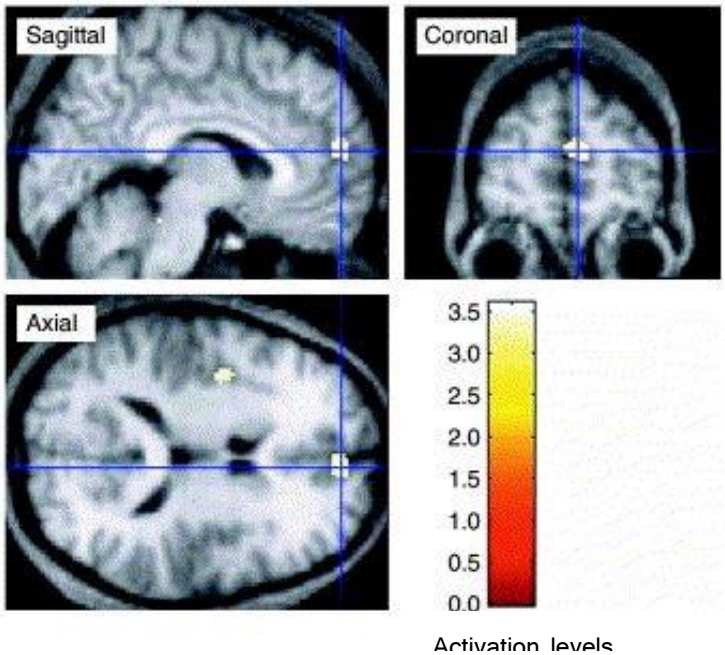


Figure 3. Location of an area implicated in 'theory of mind' ability (Gallagher & Frith, 2003)

So what has this to do with religious experience? It would seem that if we have the TOM ability we are able to comprehend the following three propositions, and thus create a necessary basis for religion (Dunbar, 2004), but not necessarily religious experience. The three theories (or inferred intentions) we would need to comprehend are:

- I believe (one theory) that God wants...(two theories)
- I believe (one theory) that God wants (two theories), us to act compassionately. (three theories)

The implication for religious educators is that even students in the junior school have an emerging ability to comprehend the feelings and predict the intentions of others, and to comprehend these three theories. These theories are quite abstract, so it may be that the use of conceptually simplistic texts in religious education classes and an avoidance of more religious abstract concepts during discussion signal an underestimation of children's theory of mind ability. Maybe our expectations are too low?

Phineas Gage.

Close by this 'theory of mind' location, again in the front part of the brain above the eyes, there seems to be an area associated with moral reasoning. Tragically, neuropsychologists are often informed about areas such as this from patients who suffer trauma. Phineas Gage was one such patient. He suffered a traumatic injury to this part of his brain and changed from a moral and respected person to an immoral, irresponsible, anti-social person. The injury, a metal rod into the skull and up through the front part of the brain (see Figure 4) seemed to have modified his ability to make social, emotional and ethical decisions.

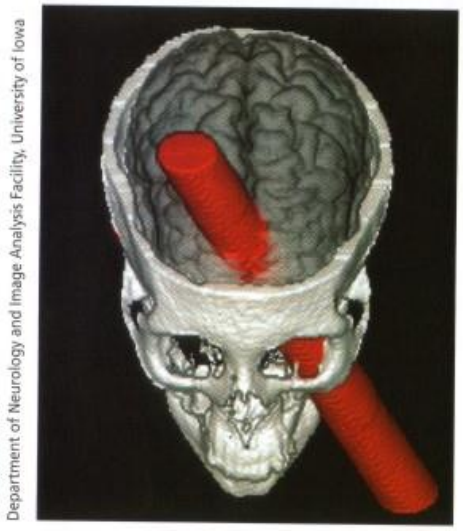


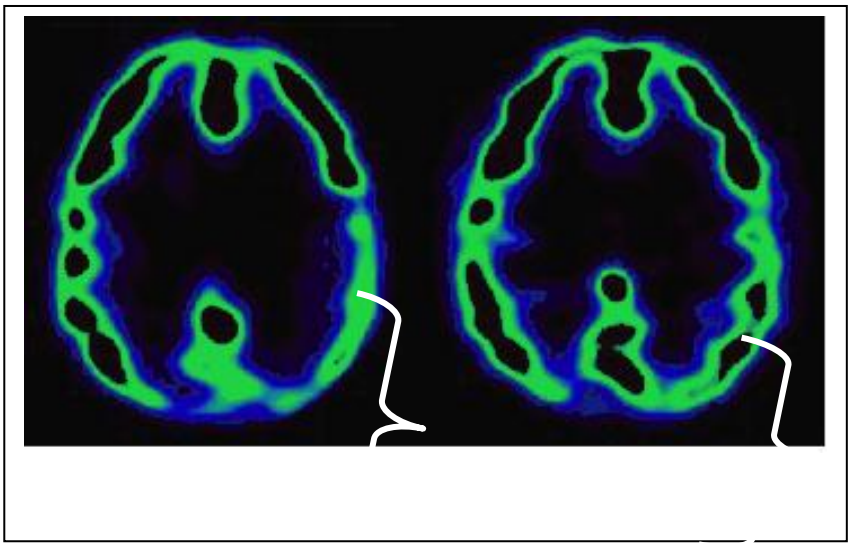
Figure 4. A reconstruction of the brain of Phineas Gage who suffered from an accident which blasted an iron bar through his orbital frontal cortex and changed his capacity for moral reasoning.(After Department of Neurology and Image Analysis Facility. University of Iowa.

In evolutionary and neurological terms, the recent development of some frontal areas of the brain has given us the potential to establish religious communities and to empathise and engage in moral reasoning... and this is good news for religious educators. But again, the function of this area may not necessarily result in religious experience.

The Parietal Lobe and Religious Experience

A second of three areas of brain that does appear to be associated with religious experience is located on the top of the head in an area called the parietal lobe. Research seems to implicate this part of the brain in religious experience in quite surprising ways (Newberg & d'Aquili, 2001). One key function of this part of the brain is to orientate us in time and space.

Newberg & d'Aquili (2001) report an experiment that involved Franciscan nuns engaged in centring prayer / mantra and Tibetan monks meditating. After obtaining a baseline brain scan (see Figure 5) the nuns and monks were invited to engage in prayer / mediation. A string had been attached to a finger so that when they were at the transcendent peak of mystical experience during their practice they could communicate this to the researchers by pulling the string. Researchers then initiated the delivery of radioactive dye through an intravenous line. Later, single photon emission computed tomography (SPECT) images of their brain were taken which provided an accurate freeze-frame of blood flow patterns. This method is based on the finding that active areas of the brain receive greater levels of blood flow and would therefore accumulate more radioactive dye.



Meditation condition Baseline condition
Meditation condition Baseline condition

Figure 5. Normal brain activity of a Buddhist (r). In meditation, (l), activity in the parietal lobe on the right decreases (Andrew Newberg, with permission)

Results from nuns engaged in Centering Prayer and from Buddhist monks observing their breath during meditation indicate decreased activity in the back / upper part of the parietal area which orients us in time and space. Specifically, as shown in Figure 5 monks engaged in meditation, decreased their activity in the back / upper part of this parietal area (see the loss of black areas described by braces from the baseline to meditation condition). This *decrease* in function seems to inhibit the flow of information to this parietal area and is associated with reports of peaceful and connected feelings that the monks interpreted as a religious experience.

It would seem from the results of this experiment that when we decrease neurological activity in this area, and we can do this deliberately through prayer, we perceive the self as endless, timeless and intimately interwoven with everyone and everything the mind senses.

The implications for religious educators are that stillness, silence, prayer and mindfulness cause this area of the brain to function in ways that are associated with religious experience. It would follow that these activities are crucial components of a religious education programme.

The Temporal Lobe and Religious Experience

A final area of the brain that seems associated with religious experience is in from the right ear. When this right temporal lobe area is stimulated by a neuromagnetic signal

generators (see www.innerworlds.50megs.com) it seems to disrupt notions of the existence of self. The left hemisphere then tries to make sense of this nonexistent entity by generating a substitute "sensed presence", sometimes by generating visions.

Neurologists have known that hyperreligiosity may be a manifestation of temporal lobe epilepsy for many years (Dewhurst & Beard, 1970; Ogata, 1998). Epilepsy in this area can have similar effects to the application of a neuromagnetic signal generator. Temporal lobe epileptics have been known to write about mystical or personally significant religious experiences and to convert to several different religions in sequence. Indeed, Ellen White (7th Day Adventist) suffered brain injury at nine years and began to have religious visions. She may have suffered from temporal lobe epilepsy.

The implication is not to fit students with magnetic devices that produce religious experiences, but rather to note that we are neurologically predisposed to appreciate religious experience in the form of a sensed presence, and innately prediposed to accept the existence of an after life and a soul.

By way of a disclaimer I need to note that the neurological research reported above is not based on a reductionistic model. The majority of researchers in this area are not reducing religious experience to the function of discrete areas of the brain, a position consistent with Teilhard's thesis. Rather, the research evidence is correlational; certain events are proposed to occur in the brain, and individuals report certain religious experiences. The research is not saying that the brain creates God; rather it is suggesting that the brain has quite naturally developed the mechanisms that are interpreted as religious experience.

I want now to take a slightly different tack and in practical sense focus on the implications of these findings for religious educators.

What Does The Religious Experience Allow Us To Do?

These neurological research findings seem consistent with the conclusions of evolutionary psychologist Robin Dunbar (1992; 2004) and others. In summary what these findings say is that religion allows us to explain and control the universe, makes us feel better about life, provides and enforces a moral code that preserves social order, and brings a sense of group membership. If we accept these claims, and some psychologists including Pinker (2004) do not, we have a basis on which to justify what we do. I want to look at each of these claims in turn.

Claim 1.

Religion allows us to explain and control the universe (through intercession).

Implication 1.

May be religious educators should provide children with a bigger picture – some metaphysical theories about the world? May be religious educators should help children see 'where they are', help them feel they are associated with / protected by a power bigger than themselves – a power who might deal in miracles? May be the role of religious education should be to help students come to terms with their mortality?

Claim 2.

Religion makes us feel better about life. May be Marx was right when he described religion as the opiate of the people? We know that praying for yourself or knowing that

friends are praying for you produces healing results. (Krucoff, et al., 2005). We also know that Parkinson's disease patients taking a placebo that they expected would help cure them secreted dopamine, exactly the neurotransmitter they were short of. (Fuente-Fernandez et al., 2001). Religion indeed makes us better.

Implication 2.

May be religious education has a place in schools because it is shown to make people happier, healthier (physically, mentally and spiritually).

Claim 3.

Religion provides and enforces a moral code that preserves social order. World religions enforce this through their bureaucracy and theology, while early religions, and indeed in some churches today, achieve this through emotionally charged singing, chanting, dancing, a common dress, reference to indigenous traditions and other mechanisms rather than solely through intellectual means.

Many agree with Steven Jay Gould (1999) who eloquently outlines in his text *Rock of Ages* why science can't tell us what our moral code should be. But others, including Pinker (2004), a professed atheist, more forcibly contend that not even the Bible can tell us what our moral code should be. He describes the Bible as a manual for rape, genocide and destruction - stoning, witch-burnings, crusades, inquisitions, jihads, fatwas, and suicide bombers. To understand the source of our moral code, contends Pinker, we don't have to look to religion. Psychologists have identified universal moral sentiments such as love and compassion.

Implication 3.

To provide and enforce a moral code that preserves social order, religious educators might ensure children sing from the same hymn sheet through the provision of predictable and clear ritual. To provide and enforce a moral code religious educators' should appeal to the intellect and the ancient emotional brain located at the top of the brain stem, in a charismatic sense.

Claim 4.

Religion brings a sense of group membership. One way it does this is through the use of rituals (some physically stressful) that release endorphins (opiates), dopamine and serotonin, which promote group bonding. Literally, we feel good when we are participating in a group ritual. In spiritual people and those predisposed to religious experience, these endorphins are probably mediated by a variant of the VMAT2 gene that controls the flow of neurotransmitters.

Implication 4.

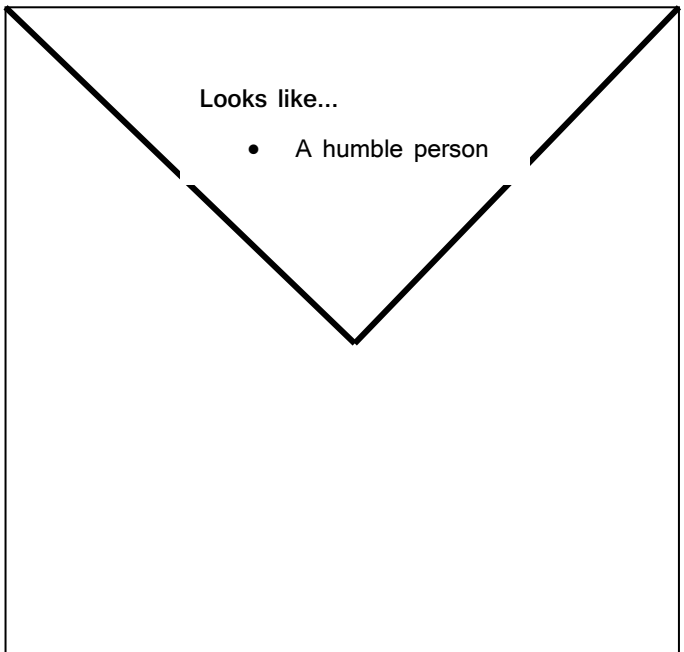
Religious education programmes should have that 'feel good' factor. Religious educators can construct their practice in ways that evoke the production of feel good endorphins (music / charismatic practice / ceremony / long periods of sitting / self flagellation?) that in turn may provide the social glue that holds society and school communities together.

Implications for Teaching Higher Order Thinking

The final section of this paper demonstrates two pedagogical tools that can be used to engage students in higher order thinking (Whitehead, 2001;2004) that may realise the claims made by Dunbar. These tools are neurologically consistent (they reflect how the brain functions naturally) and consistent with two criteria that can be applied to the design, selection and evaluation of our practice. The first criteria reminds us that in addition to teaching students, our role is to graduate them as literate, spiritual thinkers who can think rationally and use a range of thinking tools to make ethical decisions. The second criteria links to some understandings about the associations between brain function and religious experience described earlier in the paper.

Teaching and Learning Criteria

"Give a family a fish and they will eat for a day; give them a fishing line and they will eat for a lifetime". Teaching tools like worksheets and parables are like fish, but learning tools that engage students in spiritual thinking are like fishing lines.



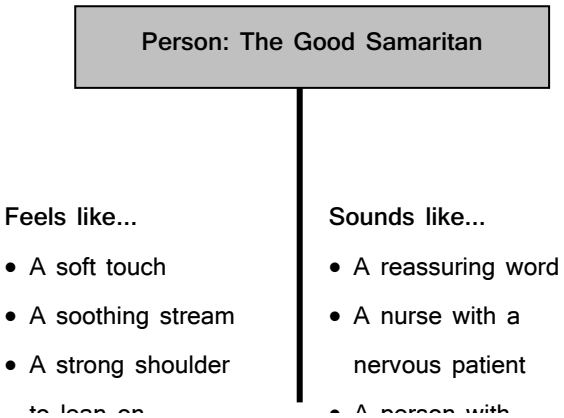


Figure 6. Y-chart tool

The Good Samaritan is a parable that teaches a value central to the Christian spirit. This value can be explored through the use of Y charts. The procedure when using the Y-chart (see Figure 6) as a teaching tool is to first 'brainstorm' and record value words associated with the person (in this case the Good Samaritan), then rank these value words and select the 'best' (in this case compassion) for inclusion as the value word in the centre of a Y-chart. Then ask students to record on the Y chart what the value word 'looks' like, 'feels' like and 'sounds' like. Later you might ask students to tick the descriptors under each of these three categories that apply to them.

Brain Friendly Criteria

Tools for religious educators consistent with the 'brain-friendly' criteria align with how the brain learns, naturally. The *Meaning Grid* (see Figure 7) is one such tool because

students are required to use their 'theory of mind' ability to infer the desires, feelings and intentions of the characters they list from a parable across the top of the grid. In short, this tool activates the area in the front of the brain associated with the 'theory of mind' ability.

Key: 1 = a little 5 = a lot ? = Don't

Person / Descriptor	Man walking	Robbers	Priest from	Levite	The Good	Summary
innocent	5	1	1	1	4	sentences Most characters not
evil	1	5	3	3	1	
uncaring	?	5	3	3		1
selfish	?	5	3	3		1
compassionate	?	1	2	2		5 One character

Summary sentences

The priest and Levite were quite similar to the robbers.

In contrast to the robbers, priest and Levite the Good Samaritan was a good, caring, unselfish and

Figure 7. Meaning Grid tool

The procedure when using the *Meaning Grid* tool (see Figure 7) is to first select the main characters (never more than five) and then ask students to suggest two descriptors for each character which they have inferred from the parable, and to list these down the left

hand column. Then teachers explain to students how to use the 1 – 5 rating scale, and then expect debate as students decide on their ratings against each descriptor for each character. You will need to assist students write summary sentences to the right and below the grid. Sentences below the grid should compare characters against each other, while summary sentences in the right hand column should describe characters in terms of the descriptors.

Conclusion

So there are a few thoughts around philosophical and neurological issues associated with the brain, religious experience and the role of religious educators in teaching higher order thinking. I believe that educational practice consistent with these brain-based understandings should be prized, not only because their application leads to the ultimate of destinations, but because the journey toward this destination will be satisfying and motivating for both you and your learners.

I want to close now and leave you to ponder this thought. Perhaps the real trick in life is not to be in the know. Clearly some neuroscientists seem to be sure they are in the know when it comes to the neurological basis of religious experience. No, I sense that the real trick in life is not to be in the know but to be in the mystery, to see life as a possibility and to see knowledge as a tendency toward understanding. Perhaps the real trick in life for a religious educator is to combine mystery with imagination and a sense of critical spiritual inquiry.

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