

Reflections on the Use of Spirituality to Privilege Religion in Scientific Discourse: Incorporating Considerations of Self

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Abstract

Many lay writers have claimed that psychologists and other scientists need to integrate something called "spirituality" into their work. This spirituality, usually undefined, is not something the truth of which may be determined by scientific means, yet it should be called upon to guide or govern our actions in certain all-important ways. This paper deconstructs two such calls that, in the end, are based on the notion of revealed, or religiously held, truth. A paradigm by which spirituality can be investigated integrating the individual self with culture is proposed, and use of this paradigm when considering modernization and supply-side theses of religious propagation is suggested.

Although 90% of the U.S. American population has a belief in a creator god or supreme being (Paul, 2005), an approximate equal percentage (93%) of the members of the U.S. National Academy of Sciences reject such belief (Larson & Witham, 1998). The modernization thesis suggests that a process of rationalization results in increasing levels of societal secularization (Te Grotenhuis & Scheepers, 2001) with scientists in the vanguard of an implied unidirectional flow of information from the rational to the non-rational. While increasing secularization in Western Europe and Japan (Paul, 2005) would tend to support this thesis, high levels of religiosity in the United States does not.

An alternative “supply-side” model has been proposed whereby increased competition between religious ideologies leads to the creation of superior religious goods, which, in turn, attract more believers. While this model would predict a high level of religious innovation in the United States, it fails to account for the decrease of god-belief in eastern Germany after the fall of Communism (Froese & Pfaff, 2005), or for the continued existence of the secular scientific community in the United States itself. The supply-side thesis predicts that scientific communities would be proselytized by increasingly sophisticated religious goods tailored to their needs, but little research has been attempted documenting such a phenomena. Indeed, such a phenomena would not necessarily occur if a tacit understanding existed between scientific and religious communities each recognizing the others’ pre-eminence in their particular sphere of influence. Such an understanding, to the extent that it exists, would be unstable in a country like Canada where theistic belief, and in particular, adherence to Christianity as a percentage of the population has been declining, but slowly as compared to the western European experience, and where the cultural influence of a more religiously fundamentalist United States is ensured by

close proximity and foreign (U.S) corporate control of sectors of the Canadian media (Adams, 1997).

It has been suggested that the spiritual transcends the scientific (Chopra, 1993; Moules, 2000; Slife, Williams, & Barlow, 2001), and it is sometimes difficult to separate this spirituality from religion. One compulsory (U.S. based) text in counselling psychology at a secular Canadian university declares, “Spiritual realism assumes that God exists, there is a spirit, [in human beings], and the inspiration of the Almighty giveth them understanding”(Barlow & Bergen, 2001, p. 81). It may be that definitions of spirituality, compatible with forms of religion, are part of the increasingly sophisticated “religious goods” that are meant to attract adherents in the scientific community.

This paper deconstructs two attempts to introduce religious forms of spirituality to the scientific community in Canada. The first such attempt involved a community-based presentation to the Institute of Neurosciences, Mental Health and Addiction (INMHA), and the second is a journal article based on graduate research aimed at introducing spirituality into the practise of psychology. While these two attempts cannot be considered as representative of all attempts to introduce spirituality into the scientific community, the first is a community-based appeal representative of the religiously influenced non-scientific community interacting in a bi-directional manner with the scientific, while the second is representative of an attempt to influence professional practice from within.

A Lay Appeal to Incorporate Spirituality Into Science

Prior its inaugural conference, the INHMA decided to network with Non-Government Organizations (NGOs) that had an interest in the mandate of the institute. The idea of linking theory and practice with organizations representing consumers of the research has the potential

to both ground that research in community needs and to increase community understanding of the scientific community. With the invitation to dialogue and with high rates of religiosity in the lay population, it was perhaps inevitable that representatives of NGOs would lobby for inclusion of spirituality into scientific research. Beverly Bourget (2002) was invited to present on behalf such a lobby to the NMHA at its inaugural conference. Since her presentation was about something other than science (but which the presenter contended scientists need to balance their work), the scientific method including the development of testable hypotheses was considered irrelevant. Scientists and mental health professionals were asked, instead, to situate their work within a 'great chain of being:'

First of all, Wilber noted, as have many scholars, that the universe seems to have organized itself into a kind of hierarchy - like a ladder, or a chain - with matter on the bottom rung, which evolves into life (bodies), which evolves into mind, which evolves into soul and then spirit (if you want to take it that far). This is known as the Great Chain of Being (Bourget, 2002).ⁱ

Such a self-organizing universe would have no need for evolution, but it is testimony to the power of Darwin's concept that Bourget finds it credible that body evolved into mind, which, in turn, evolved into soul. The driving force of Darwinian evolution is competition for survival, but no similar force driving this spiritual evolution was proposed.

How Mind May Be Said To Have Evolved From the Brain

According to Pinker (1997) the mind is what the brain does, and this connection between mind and brain reflects a modern consensus (Calvin, 1996; Dennett, 1996; Gardner, 1999; Gould, 1993; Greenfield, 1995; Wilson, 1999). From this perspective it would make as much

sense to suggest that the mind evolved out of the brain as to say walking evolved out of the foot. “Minding” is simply what the brain does when active.

In his analysis of early Greek literature, Julian Jaynes (1976) noted that pre-Homeric Greeks were not conscious of a self and were, therefore, unable to exercise self-agency. His most controversial suggestion was that when events happened, for which their culture had not developed a pre-programmed response, increasing levels of impotent distress led to right hemispheric activity with resultant visions interpreted as messages from the gods. David Martel Johnson (2003) defined the mind as a cognitive structure that allows for the notion of objectivity and reason, and he said that the early Greeks and Egyptians did not have such minds. Once the mind, so defined, evolved in a particular population, its adaptive efficacy led to its replication in other populations.

If we define mind as a particular cognitive structure that allows for objective thought, then mind is something that must have evolved out of mental activity. Since objective thought is predicated on the ability to objectify oneself, then self must have evolved either prior to or coterminous with the evolution of mind. Since purposeful transitions of self were not possible prior to its development, the process had to occur by algorithmic mutation. It matters not whether this process occurred at the time suggested by Jaynes (1976) and Johnson (2003), or whether it occurred some 50,000 years earlier (Blackmore, 1999; Donald, 2001). At some point mind evolved from brain in a process that precluded self-awareness of the event. Dawkins’ (1976) meme provides a mechanism by which we may understand this development.

Dawkins (1976) defined the meme as a small unit of culture that is self-replicating through imitation. Imitation is defined broadly to include bits of culture passed on through language. “Arch,” “free will,” and “media” are examples of memes. It is, perhaps, due to

connotative and affective qualities that memes exert attractive or repellent force on other memes. Thus, in a by-gone era, the memes for love and marriage went together like the memes for horse and carriage. This differential attractive force allows memes to become grouped together within the cultural “soup.” Groups of memes, memeplexi, compete with each other for a finite resource – mind space (Blackmore, 1999; Dennett, 1995).

Jaynes’ (1976) pre-Homeric Greeks had an elaborate menu of cultural responses to specific stimuli. Each response was made up of smaller units, memes that could combine in unique patterns. Before the development of self and mind, such re-combinations and the development of novel memes, would have to occur by way of algorithmic mutation. Successful mutations would then be retained and passed on within the culture. The self was initially such a memetic mutation. Its adaptive efficacy led to its proliferation within cultures. The further development of self-referencing pronouns led to the young being taught to have selves almost as soon as they are capable of speech (Harre, 1991).

In summation, if we define mind not simply as brain activity but as a culturally determined cognitive structure, then the Dawkins’ meme provides a mechanism by which mind could be said to have evolved out of the brain. A hominid evolved with the capacity to retain cultural memes learned through imitation. Memeplexi evolved governing complex behavior. Eventually a memeplex evolved representing the self and this allowed individuals to objectify themselves within a larger context. This, in turn, allowed for an even more complex cognitive structure – mind. There exist, at any given time, a finite number of available minds within which memeplexi may propagate while there are, potentially, an infinite number of memeplexi, thus we have the conditions whereby evolution driven by competition may occur in a non-material “mind-sphere.”

The Evolution of Soul and Spirit

With a self I can look at myself both in relation to others and in relation to my past and future. Instead of being my body, I have a body that I may examine critically. It is as though some other entity is looking at the outside world using my eyes. The idea that we are dualistic beings with a physical body and a non-material mind or soul that may exist independent of that body dates back to the Platonic Greeks. 'Soul' and 'mind' remained as interchangeable terms with Descartes (1643/1990). After modern science debunked Descartes' homunculus and the idea that the mind has an existence separate from the brain (Damasio, 1999; Dennett, 1991; Hutcheon, 1996), our understanding of mind changed while the word 'soul' retained much of its original meaning.

Bourget (personal communication, October 8, 2004) shared a concern that some failing of hers may have led me to misunderstand the memeplex she had presented. An equally plausible explanation would be that it is some failing of my own that led me to reject her message. Unquestioned in both of these alternatives is the assumption that the message somehow represents 'truth'. If we accept the view that memeplexi gain mind-space by connecting emotively to core memes within individual selves then the Wilber memeplex connected to some core part of Bourget's self, and this connection resulted in the production of peptides that, in turn, gave Bourget the feeling that this body of knowledge is true. We could test this hypothesis by examining memetic maps of peoples' selves and of a sample of ideologies, looking for signs of co-attachment while measuring resultant levels of commitment.

If we define soul, not as a homunculus that lives on after we die, but as that part of the self that is felt to be essential to its existence, then it could be said, that soul evolved out of mind. Memeplexi that are embedded in or attached to the "soul" of the self would appear, to the

organism, to be essential to his or her self-definition. Those memplexi that succeed in incorporating a set of memes that so attach to individual selves will have increased replicating power.

So, where does Spirit come into the picture? Well, you might say that it is the whole picture. It is the ladder, it is the rungs, it is the highest rung and it is the wood the ladder is made of. It is All That Is, in all of its patterns and manifestations; it is the driving force behind evolution, and it is the glue that holds it all together. By the way, these are not simply my conclusions, or Wilber's for that matter. These are the findings of people who have pursued investigation of the interiors, of human consciousness, to the highest levels - the spiritual pioneers of the ages: Buddha, Jesus, Saint Theresa of Avila, Zen Masters and so on. (Bourget, 2002)

Bourget's use of irregular capitalization (as in 'All That Is') implies that she means more, connotatively and affectively, than the words ordinarily convey. 'Universe' in its original meaning of everything that is, is not big enough. 'Spirit' is bigger than that. Further, founders of religions think the same way that she does. It does not matter that the Jesus portrayed in the Biblical Gospels believed in a god that was his actual father, a god that had human emotions such as jealousy and was separate from that which he claimed to have created. Bourget (2002) has superior knowledge that Jesus believed as she does now. It is true for Bourget because it feels as though it must be true. With that certainty Bourget (2002) advises scientists and mental health practitioners to bring spirituality into their work. She warns mental health professionals to avoid judging mental health by clients' "adaptation to reality" because "Adaptation to being a happy Nazi is not mental health at all. If we use Spirit as our measure, however, then better will mean more attuned with Spirit" (p. 6).

Bourget seems to be using the term Spirit to refer to some self-evident truth that transcends reality. She believes that some 'Everything' is more than everything, and should somehow influence or guide scientists in ways in which she is privy. She is attempting to communicate a feeling that is bigger than words can convey. Buddhist Alan Watts (1963) called this feeling 'cosmic consciousness'. Persinger (2003) found that his subjects reported similar feelings when he stimulated their right temporal lobes with electro-magnetic pulses. Such feelings may lead to absolute certainty in the truth of a related memplex.

This spirituality is, first and foremost, an emotion that can be generated in a variety of ways, but is connected with cognitions of oneness, wholeness, and rightness. There appears to be a psychological need to communicate these feelings and cognitions to others. To the extent that the core being or "soul" of the self now feels interconnected with humanity, life, the universe, or something even larger, this "spirituality" could be said to have evolved from soul. Memplexi tapping into this powerful emotive force would have an army of souls dedicated to furthering their cause.

Tempering Objective Reality: The Post-modernist Turn

While mind evolved a capacity for objective thought, such capacity would potentially threaten the survival of memplexi whose replication is powered by emotive and subjective means. The long-term survival of such memplexi would be dependent on their ability to mutate in ways that put limits on the ability of objectivists, such as scientists, to influence actual and potential meme-hosts. One such method is to picture science as just another belief system accepted on faith. Counselling psychologist Tom Strong (2002) declared science to be a "white, male way of constructing knowledge" (p. 3). He received support from biophysicist Candace Pert (1997) who declared that there is no such thing as objective reality. Pert, whose pioneering

research in the 1970s helped establish the role of peptides in emotions, provided the following example:

When the tall European ships approached early Native Americans, it was such an 'impossible' vision in their reality that their highly filtered perceptions couldn't register what was happening and they literally failed to see the ships (p. 148).

Pert did not say 'When early Native Americans saw the ships they did not know what they were'; she suggested something more profound, that they could not investigate what the ships were because they did not literally see them. Since we each construct our reality, what is true, according to Strong (2002), depends on the consensus of those who are knowledgeable. Of course, if there is no objective reality then we have no way of ascertaining who is knowledgeable and who is not. In practice then, who is knowledgeable will vary depending on one's sub-cultural group.

How does one investigate a subject like spirituality in such a subjective world? Strong recommends building discourse to arrive at truth. He and graduate student Margaret Fuller, co-authored an article based on Fuller's research in which she invited five clients of other psychologists to discuss with her 'alive moments' in counselling and their spiritual significance (Fuller & Strong, 2001). After jointly reviewing a video of a counselling session between each of the 'co-researchers' and their therapist, Fuller asked a series of questions related to spirituality such as: "Can you describe how you understand this moment and its spiritual aspects or not?" "How does this feeling of being 'alive' for you, in that moment, relate to your views of spirituality?" and, "Would you say in that moment, that there was something spiritual about that moment?" (p. 205).

No criteria was given defining moments that are 'alive' and differentiating them from moments that are 'not alive'. Since Fuller was tying these 'alive' moments to a spiritual experience, it may be that she was looking for moments of deeply felt transcendental understanding akin to Watt's (1963) 'cosmic consciousness' in which people experience a feeling of oneness with the universe that they are unable to quite put into words. According to Watts, who was given to self-experimentation, these moments can be obtained through years of dedicated meditation or through the judicious use of hallucinogens. None of Fuller's subjects reported this feeling of cosmic consciousness. In fact, Fuller (2001) reports that they had trouble applying the term to the moment. Part of the problem may have been that she was working from her own definition of the term:

- 2) Spirituality is something bigger, or greater, than our selves and,
- 3) Spirituality is a meaningful or sacred sense of connectedness in diverse relationships, comparable to Buber's "I-thou" relationship (p. 202).

Although her 'co-researcher' subjects tended to a more secular definition of spiritual, Fuller admits that she was uncomfortable with that development, and that she "made them feel as though pre-existing meanings were inadequate" (p. 209). It would appear that the 'co-researchers', in an effort to please the primary researcher, fell back on what Dennett (1991) called an 'aha' moment. The co-researchers were left with the task of deeply felt relating to a moment that was not necessarily 'deeply felt' (at least in a cosmic consciousness sense), but was none-the-less, 'alive'. Further, they were expected to accomplish this while using a quasi-religious (but transcendent) definition of spirituality.

Fuller and Strong (2001) interpreted the co-researchers' stumbling difficulties as evidence of their attempts to develop understanding about unfamiliar terms. A alternative

explanation is that Fuller constructed her own understanding of reality and then forced her 'co-researchers' into that frame while discussing taped sessions of their own therapy. One client said that Fuller's approach had resulted in her being "transported to a higher level". Another spoke of "moving beyond the world as we know it". Fuller wanted to do more than challenge or change her co-researchers' views of spirituality. She admitted that her objectives included introducing spirituality to psychotherapy. Strong (personal communication, January 27, 2005) admitted that his article with Fuller is "a good example of how one's research perspective and method constrain the possibilities one can realize.... Once one defines terms in particular ways, and uses a particular method one also gets the limitations that go with those definitions and method."

In a world where objective reality ceases to exist, there can be no empirical research. The world operates according to subjective mental models. Pert does not even have to cite a reference for her contention that early Amerindians could not literally see ships; she just 'knows' it is so. Pert had a hypothesis but failed to look for evidence to disprove it. The following account of first contact between Canada's Micmac and a European sailing vessel as related by a Micmac elder offers such evidence:

When they got up in the morning, they saw what seemed to be a small island that had drifted near to the land and became fixed there. There were trees on the island, and what seemed to be a number of bears were crawling about on the branches. All the Micmac men seized their bows and arrows and spears, and rushed down to the shore to shoot the bears. But they stopped in surprise when they saw that the creatures were not bears but men. And what seemed to be a small island with trees was really a large boat with long poles rising above it (Ray, 1996 pp. 39-40).

If there is no such thing as objective reality then the above account is only a "Micmac, male way of knowing." Strong (2002) suggests that truth is arrived at through the discourse of those who are knowledgeable, but who is knowledgeable in a subjective world?

A Saulteaux (Plains Ojibway) elder and healer, Albert Scott (Scott & Nippi, 2004) holds that the 'old people' (his elders) taught him that the Sun goes around the Earth while scientists teach that the Earth goes around the Sun. He has said that he chooses to believe the wisdom of the elders. His memory of people who are now dead constitutes his reference of people who are knowledgeable. How would Strong propose arriving at a consensus with that elder? Would Strong say that the elder is entitled to believe whatever he wants, and that a consensus is not necessary? What would Strong say about the school system that insults the elder by teaching his grandchildren that the earth goes around the sun? In a purely subjective world there can be no rational basis for deciding one belief is more correct than another. All discourse must logically end. So why would subjectivists bother to write books and articles to convince us of the correctness of their views?

The memetic model may provide answers to these questions. To exist memplexi must be successful replicators. From the vantage point of Fuller's memplex (Fuller & Strong, 2001), her study was an opportunity to so replicate. Her leading questions about 'alive moments' presupposed that such moments exist and that they are connected to spirituality. Had Fuller's questions successfully implanted the idea that progress in the client's counselling was connected to Fuller's definition of spirituality, then the clients in question could have experienced an 'aha' moment, a feeling that they now have a greater understanding of how the universe works. They would have then experienced the chemical rush that accompanies such 'aha' moments thus emotionally committing themselves to this new understanding. Fuller's memplex would have

replicated successfully. Fuller inadvertently acknowledges this process when she asks "Does this mean that there was some internal shift, an opening of their (her 'co-researchers') hearts and minds to spirituality?" (Fuller & Strong, 2001, p. 208).

As with Bourget (2002), a group of memes that may be labelled 'spirituality' attached themselves in Fuller's soul, and she feels a need to share these memes with others. While their definitions of spirituality may not be the same, both believe that scientists and psychologists are not using spirituality in their current work. In fact, most psychotherapies involve helping clients improve self-concept, find meaning, connect healthfully with others and have a positive attitude toward life. If spirit involves such functions of mind then psychologists could be described as spiritual workers, yet both Fuller and Bourget want something different.

The issue is not whether or not people are subjective, that much is universally accepted. The issue is whether there is such a thing as objective reality, and whether we can attain more knowledge of that reality than we presently possess. The scientific method developed as a way of reducing subjectivity in our quest for the objectively real. Rational thought is anathema to thought systems that propagate through non-rational means. Their survival depends on placing limits on rational thought, on making science just one more way of knowing.

In summation, the evolution of self allowed for both the possibility of objective thought and for individuals to become emotionally committed to belief-systems competing for survival within a cultural soup. Those memplexi that attach themselves emotively to the core selves of individuals maintain a competitive advantage. From the perspective of this model, the modernist camp has emphasized our human capacity for objective thought while the supply-side camp has emphasized memplexi algorithmically changing in a competition for survival.

Implications of Using a Memetic Model for Research Into Religion

With higher rates of god-belief, church attendance, and biblical literalism as compared to the populations in other industrialized countries (Paul, 2005) the United States represents an anomaly that cannot be explained by the modernization thesis. The continued decline in religious belief in eastern Germany during the 16 years since the fall of Communism was explained by “supply-siders”, Froese & Pfaff (2005), as the result a combination of historical and current factors that effectively withdrew large numbers of eastern Germans from the religious “marketplace.” This exceptionalism fails to explain why eastern Germans failed to re-enter that marketplace despite the importation of presumed superior religious goods from the United States. The Canadian experience, with declining rates of religiosity (Adams, 2003), but with attempts to re-proselytize the academic community with mutated forms of spirituality offers evidence for both sides. While lower rates of religiosity among university-educated populations is predicted by the modernization thesis, the attempts by Bourget (2002) and Fuller (Fuller & Strong, 2001) to introduce quasi-religious forms of spirituality to scientists and mental health professionals are better explained by the supply-side thesis. The particular goods offered were thought to be superior, at least with respect to the target market, than more traditional religious goods. The example of Fuller & Strong (2001) suggests that there is more involved than mere marketing. The suggestion that there must be an internal “shifting of hearts and minds to spirituality” (p. 208) implies the capture of a Bourgetian soul.

Missing from purely sociological approaches to the study of religious transmission is the role of the mind, and that constituent of mind called the self. The memetic model as outlined in this paper provides a method of studying the interplay between culture and self with the self viewed as a construction built on the raw materials provided by culture. A self consisting of units

of transmittable culture will reach stability if those units are internally consistent and are affectively and connotatively mutually reinforcing. Such a self is not arrived at by rational means but evolves concomitant with language acquisition through the use of such conventions as indexical pronouns (Harre, 1989, 1991) and is deeply felt to be true by the individual (Damasio, 1999). Transitions involving major changes to this ordinarily stable self are possible and such transitions may be prompted by personal crises, such as the death of a loved one, or they may be developmental such as may occur with the decision to obtain a university education (Bridges, 1980, 2001; Schlossberg, Waters, & Goodman, 1995). Thus transition theory as applied to a memetic view of the self would predict both the apparent stability of religious belief over time and the data supporting the modernization thesis.

Froese & Pfaff (2005) suggested that conditions in eastern Germany led to significant numbers of individuals being taken out of the religious “marketplace,” which, in the model I am proposing, means that religious belief was no longer felt to be essential to self-definition. This translates into two competing predictions. Consistent with the supply-side model, Froese & Pfaff (2005) predicted that eastern Germans will eventually become more religious as the impact of available “superior” religious goods is felt. The memetic self model would predict that no such change will occur unless transitional crisis re-introduces conditions whereby religious memes become essential to self-definition.

Fuller (Fuller & Strong, 2001) attempted to use psychotherapy to draw people back into the religious marketplace. She did not view this as unethical because she was not promoting a particular religion, but her definition of spirituality assumed a need that religion could fill. A memetic approach would predict that competing memplexi (religious or non-religious) would

attempt to use periods of personal transition such as those often found in psychotherapy to promote their replication.

Bourget (2002) assumed a similar spiritual need in scientists and mental health practitioners, and presented a novel form of religious spirituality with the hope of its replication within the targeted constituency. This scenario provides another opportunity for testing competing predictions. If the modernization thesis is true then Bourget's appeal would have little or no effect on the assemblage. If the supply-side thesis is viable, then a religio-spiritual appeal tailored to the scientific audience (in effect, the creation of designer religious goods) should have had some positive random effect. If the memetic self model is a closer approximation of the structure of religious cultural propagation then Bourget's appeal would have had a positive effect only on a subgroup of scientists and practising professionals who were experiencing cognitive dissonance integrating their scientific views with prior religious teaching and who were in a state of personal transition.

In conclusion, an advantage of a memetic approach is that it allows us to study the interrelationship between societal, community, and family cultures and the interplay of those cultures with the individual culture of the self. Spirituality may be researched as an evolving construct embedded within human cultures that, in various manifestations, may tie memplexi existent in societal culture to the self of the individual. By uniting sociology with psychology the memetic approach has the potential to extend existent models used in the study of religious propagation.

References

- Adams, M. (1997). *Sex in the Snow: Canadian social values at the end of the millennium*. Toronto: Viking.
- Adams, M. (2003). *Fire and ice: The United States, Canada, and the myth of converging values*. Toronto: Penguin.
- Barlow, S. H., & Bergen, D. E. (2001). The phenomenon of spirit in a secular psychotherapy. In B. D. Slife, R. N. Williams & S. H. Barlow (Eds.), *Critical issues in psychotherapy: Translating new ideas into practice* (pp. 77-92). Thousand Oakes, CA, US: Sage Publications.
- Blackmore, S. (1999). *The meme machine*. Oxford, UK: Oxford University Press.
- Bourget, B. (2002). Toward integration: Spirituality, science and mental health, *Institute of Neurosciences, Mental Health, and Addictions*. Montreal.
- Bridges, W. (1980). *Transitions: Making sense of life's changes*. Reading, CA, US: Addison-Wesley Publishing.
- Bridges, W. (2001). *The way of transition: Embracing life's most difficult moments*. Cambridge, MA, US: Da Capo.
- Calvin, W. H. (1996). *How brains think: Evolving intelligence then and now*. New York: Harper Collins.
- Chopra, D. (1993). *Ageless body, timeless mind*. New York: Harmony Books.
- Damasio, A. (1999). *The feeling of what happens: Body and emotion in the making of consciousness*. New York: Harcourt.
- Dawkins, R. (1976). *The selfish gene*. Oxford, UK: Oxford University Press.
- Dennett, D. C. (1991). *Consciousness explained*. Boston: Little, Brown.

- Dennett, D. C. (1995). *Darwin's dangerous idea: Evolution and the meanings of life*. New York: Simon and Schuster.
- Dennett, D. C. (1996). *Kinds of minds: Toward an understanding of consciousness*. New York: Harper Collins.
- Descartes, R. (1643/1990). Meditations on the first philosophy and the principles of philosophy. In J. Pickering & M. Skinner (Eds.), *From sentience to symbols: Readings on consciousness* (pp. 10-20). Toronto: University of Toronto Press.
- Donald, M. (2001). *A mind so rare: The evolution of human consciousness*. New York: Norton.
- Froese, P., & Pfaff, S. (2005). Explaining a religious anomaly: A historical analysis of secularization in Eastern Germany. *Journal for the Scientific Study of Religion*, 44(4), 397-422.
- Fuller, M., & Strong, T. (2001). Inviting passage to new discourse: 'Alive moments' and their spiritual significance. *Counselling and Psychotherapy Research*, 1(3), 200-214.
- Gardner, H. (1999). *The disciplined mind: Beyond facts and standardized tests, the K-12 education that every child deserves*. New York: Penguin.
- Gould, S. J. (1993). *The book of life*. New York: Norton.
- Greenfield, S. (1995). *Journey to the center of the mind*. New York: W.H. Freeman & Co.
- Harre, R. (1989). Language games and texts of identity. In J. Shotter & K. J. Gergen (Eds.), *Texts of identity* (pp. 20-35). London: Sage.

- Harre, R. (1991). The discursive production of selves. *Theory and Psychology*, 1(1), 51-63.
- Hutcheon, P. D. (1996). *Leaving the cave: Evolutionary naturalism in social-scientific thought*. Waterloo, ON: Wilfred Laurier University Press.
- Jaynes, J. (1976). *The origins of consciousness in the breakdown of the bicameral mind*. Boston: Houghton Mifflin.
- Johnson, D. M. (2003). *How history made mind: The cultural origins of objective thinking*. Chicago: Open Court Books.
- Larson, E. J., & Witham, L. (1998, July 23). Leading scientists still reject God. *Nature Magazine*, 394.
- Moules, N. J. (2000). Postmodernism and the sacred: Reclaiming connection in our greater-than-human worlds. *Journal of Marital and Family Therapy*, 26(2), 229-240.
- Paul, G. S. (2005). Cross-national correlations of quantifiable societal health with popular religiosity and secularism in the prosperous democracies: A first look, *Journal of Religion and Society* (Vol. 7): The Kripke Center.
- Persinger, M. A. (2003). The god of mind - or the mind of god? *Humanist in Canada*, 36, 4, 8-19.
- Pert, C. B. (1997). *Molecules of emotion: The science behind mind-body medicine*. New York: Simon and Schuster.
- Pinker, S. (1997). *How the mind works*. New York: Norton.
- Ray, A. J. (1996). *I have lived here since the world began: An illustrated history of Canada's native people*. Toronto: Lester Publishing.

- Schlossberg, N. K., Waters, E. B., & Goodman, J. (1995). *Counselling adults in transition: Linking practice with theory* (2nd ed.). New York: Springer.
- Scott, A., & Nippi, D. (2004, May 27). *Walking in harmony: A workshop for healing within*, La Ronge, SK.
- Slife, B. D., Williams, R. N., & Barlow, S. H. (2001). *Critical issues in psychotherapy: Translating new ideas into practice*. Thousand Oakes, CA, US: Sage.
- Strong, T. (2002). Collaborative 'expertise' after the discursive turn. *Journal of Psychotherapy Integration*, 12(2), 218-232.
- Te Grotenhuis, M., & Scheepers, P. (2001). Churches in Dutch: Causes of religious disaffiliation in The Netherlands, 1937–1995. *Journal for the Scientific Study of Religion*, 40(4), 591-606.
- Watts, A. W. (1963). *This is It: and other essays on Zen and spiritual experience*. Toronto: MacMillan.
- Wilson, E. O. (1999). *Consilience: The unity of knowledge*. New York: Vintage Books.

Endnotes

ⁱ Bourget's reference to "Wilber" refers to Ken Wilber to whom she credits the idea of this "great chain of being" elevating the idea to the level of "theory". "Spirit" is the "highest level" of this chain and is understood through mysticism. "Soul" is the next level on the chain and is understood thru theology. The third link in the chain is "mind" and this is understood thru psychology. "Life" is next on the chain, and this is understood through biology. The bottom of the link is "matter", and this is understood through physics.