The Discovery of the "Transcendental Man": An Introduction to the Age of Knowledge by S. Raynaud de la Ferrière and its application in Education

by

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Abstract

I apply R. de la Ferrière's theory of the Age of Knowledge to explore the current educational terrain. The theory is based on the celestial precession of equinoxes. Civilizations go through great cycles of radical transformation in the religious, cultural, sociological, and psychological aspects of humankind. The new cycle began on March 21, 1948. Currently, humanity is situated in a transitional period moving from a state of *believing* to a state of *knowing*. Analysis into monumental societal transformations yields deeper understanding of humanity and can inspire changes in education that incorporate a long-term vision. His pedagogical thought rests on the belief that the most important event in the Age of Knowledge would be the discovery of the transcendent man. He claims that teaching something to a child is not the only important objective; teaching is also to shape a child's spirit to develop that child's capacity to observe and reflect, to apply critical thinking in their research, and to love the truth.

Keywords: Age of Knowledge; precessional age, transcendental; spirituality, dogma, *Yoghism and jnana* yoga*.*

Dedication

To Dr. Juan David Ferriz Olivares (1921- 1992), apostle of Knowledge, with eternal gratitude.

To educators, thinkers, scientists, humanists, and all researchers who broach and delve into the literature of Serge Raynaud de la Ferrière, thereby revealing the union and interaction between his thought and the world' thought in the Age of Knowledge.

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Preamble

To introduce the subject of my thesis, I will relate an autobiographical tale of my encounter with the Age of Knowledge as theorized by Dr. Serge Raynaud de la Ferrière [henceforth, R. de la Ferrière], a French sage, thinker, scientist, artist, and philosopher.

Ever since I was a little girl, my love of knowledge persistently eclipsed my love of candy. In the town where I grew up, opportunities for obtaining a quality education were limited. During the time I was going to school in Peru, societal norms related to, and understandings of, education and schooling were vastly different from those of today. After graduating from high school, I intended to study at university. Despite all my efforts to succeed in the entrance examination, I did not pass. I was sad, but not surprised because I knew that in the 1980s more than 80 per cent of applicants to Peru's public universities were rejected (Diaz, 2008). I could attempt the examination again, but I realized my personal situation required me to put my university dreams on hold. In the meantime, I was working and studying interior design at a technical school where I was pleasantly engaged in the history of art. During this interlude, I fine-tuned my perception skills while learning about the psychological effect of light and colour.

While looking for a way to relax, I came across the Institute of Yoga of the Universal Great Brotherhood Foundation of Dr. Serge Raynaud de la Ferrière [henceforth UGB or the Foundation] in Lima, Peru. This yoga institute was one of the several organizations affiliated with UGB. I enrolled in the regular psychophysical exercise course known as pre-yoga. I expected to be practising relaxation exercises but soon became aware of my own misconceptions about yoga. The yoga I practised was part of a complete body of work related to the ontological, dialectical, and theoretical discourse of thought and science itself. It was part of a life system. Within a short time, I noticed the great effect this practice had on my fragile health. Seasoned practitioners had similar and even more profound benefits as a result of their practices. About 30 years have passed since my initial introduction to R. de la Ferrière' system of yoga, and my body and mind are still benefiting from it as I continue to practise.

Impressed by the benefits from the exercises and the knowledge I was acquiring, I was curious to know more about the work of R. de la Ferrière. My inquiry led me to an extensive body of work: 99 works that comprise more than 4,000 pages of complex literature with over 100 themes from science to philosophy, and from arts to didactics. It was obvious that it would take me decades to study them all. Undaunted, I began with a concept that strongly aroused my interest: the Age of Knowledge (Age of Aquarius). This is based on the astronomical precession of the equinoxes. Precession of the equinoxes is one of the earth's various motions. The three most important motions are rotation (on its axis in 24 hours), revolution (around the sun in 365.25 days), and the precession of equinoxes, which has been used in disciplines like geochronology to determine the age of rocks, fossils, and sediments. The precession motion is similar to a spinning top. The earth wobbles on its axis within a period of 25,920 years. Due to this motion the equinoxes also experience a motion at the same time.

In ancient Greece, Plato discussed these great cycles of the equinoxes around the ecliptic, which is known as *Platonic Year* or *Great Year*. Dividing those 25,920 years by 12 constellations (groups of bright stars observed in earlier times that form prominent patterns) that are located around the ecliptic results in 2160 years for the Age associated with each constellation (an average as the constellations are not equal). According to the mathematical calculations of R. de la Ferrière, March 21, 1948 marked the beginning of a new age, the Age of Aquarius, which he termed the Age of Knowledge because Aquarius's adage is *I know*. This vastly differs from the previous cycle of the Age of Pisces (0-1948), whose adage is *I believe.*

My full understanding of these great cycles was not immediate, but took some time to develop and unfolded progressively. Certainly, it was pivotal first to grasp the premise of the *transitional period*. This refers to the period of change that takes place as one lengthy cycle with specific characteristics gives way to another with very different characteristics. Such change does not happen abruptly, as it is evident that the history of humanity is not cut into equal fragments. It was deep analysis of the decline and fall of Roman Empire that provided me with some insights into what a transitional period implies. This does not mean that only the Romans were affected by the transition, since the phenomenon is global. Rather, it was by focusing on this important historical transition that I was better able to understand the concept and to offer interpretations based on it. It is no coincidence that after 2,000 years of developing an identity and

masculine heroic ego, a new impulse has entered into the collective psyche. The teaching of the Age of Pisces required that the ego must be yoked to something greater through sacrifice and non-attachment, and that the mortal hero had to give up that which he fought so hard to obtain. Jesus came to be seen as an archetype of this Age.[1] In brief, the change from the preceding Age of Aries to that of Pisces is revealed by the fact that the seat of the Roman Empire became, in the early centuries of the new Age, the centre of the Catholic Church, the Vatican. By examining this shift, I gained a more complete understanding of the possible meanings and difficulties associated with a transitional period and wondered how long we would have to wait to witness the Age of Knowledge, of peace. Certainly, the legacy of 2000 years cannot easily be erased in one fell swoop.

My passionate inquiry aside, I was faced with living through the utter horror of an internal war between terrorists and the government of Peru, which resulted in around 60,000 people being killed or disappearing, and countless other economic, sociological, and psychological problems. I persisted with more dedication than ever in my studies and work at the Foundation of R. de la Ferrière. I was astonished by everything I was learning. I observed that regular cultural topics were historically supported and analyzed from various perspectives, that is to say, epistemologically. The courses and the training approached yoga, vegetarianism, astrology, and comparative religions from a serious philosophical and scientific perspective, and as a result I discovered a whole new world! I doubt that university studies could have provided me with learning as vast and deep as the literature of R. de la Ferrière at the UGB. I felt fulfilled in my intellectual and spiritual aspirations and needs. Soon, I decided to become an active member of the Foundation, the first article of whose statutes reads: "…the purpose is to unite Science, Art and Religion for intellectual improvement and spiritual re-education…"; "To unite in a single body all persons whatever their creed, nationality, sex, social and cultural condition who strive for the supremacy of the Spirit and who agree to establish in the world PEACE FOR ALL HUMAN BEINGS…" Certainly, studying and working in the service of such an enormous project had an empowering and focusing effect on me.

While engaged in various activities at the UGB (conferences, yoga classes, medical services, social events, etc.), I noticed how some members, including some

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[1] There are a lot of interesting resonances here with the work of people like Jung. Constraints of space preclude further discussion of these associations here.

dignitaries, displayed sectarian religious attitudes, which indeed perplexed me. Sectarianism went against the founder's core teachings as expressed throughout his literature. Indeed, decades earlier, R. de la Ferrière wrote several letters plainly stating that the UGB was not a sect, and that the kind of fanaticism and dogmatism displayed by some UGB members could be interpreted as sectarianism. Of these many letters, one caught my particular attention. It was written in 1954 to the all the Foundation members. In it, he states, "If, as an anonymous person I entered the Foundation today, I would not be interested in becoming a member … It is of the highest moment that a founder would not recognize his own foundation, and yet that is so" (R. de la Ferrière, 1988 p. 84. *This is my translation and interpretation.*). Two years before he died, in a letter to Dr. Eduardo Alfonso he wrote that his mission (UGB) that began in 1948 was being deformed by well-intentioned people who lacked fundamental preparation. They espoused concepts that were far from what he wanted to instill in the minds of a humankind that truly needed re-education.

Disturbed by these corrupt influences undermining the Foundation, I focused my attention on the programs developed by Dr. Juan David Ferriz Olivares [henceforth Guru Ferriz or Ferriz] as a means to accurately and thoroughly describe and reveal the work of Serge Raynaud de la Ferrière. Ferriz was R. de la Ferrière's last direct disciple. Under the latter's supervision, Ferriz translated some of the most important of R. de la Ferrière's books into Spanish. As well, he is the author of several exegetical books. I was deeply impressed by Ferriz's intellectuality, knowledge, spirituality, and vision. Not surprisingly, Ferriz was awarded the well-deserved title "Apostle of Knowledge." Inspired by him, I travelled to the Foundation's headquarters in Caracas, Venezuela, to support his work and to draw more deeply on his wisdom.

During my work at the UGB headquarters in Venezuela, the internal challenges, ideological in nature, were clearly apparent to me. Fanaticism was feverish and rampant, and unfortunately infected even those leading the UGB's Supreme Council. They did not acknowledge the writings and efforts of Ferriz and his followers to thoroughly study and faithfully follow the thoughts of his founder, R. de la Ferrière. Out of ignorance, they acted with malice to impede our work and affected the physical and psychological state of the members who were supporting the efforts of Ferriz. I was denied not only a place to sleep but also food. I worked hard and lived in precarious circumstances. I could not understand how the Great Foundation, an institution based on principles of tolerance,

truth, peace, and spiritual brotherhood, could act in such a cruel, inhuman way! However, Perkins' (1977) definition of a fanatic perfectly captures what I observed:

> A fanatic is dogmatic. He insists that his theories, his ideology, his situations are the correct ones. A fanatic is an obscurantist. He ignores (or cannot perceive) arguments, facts, or consequences that refute his solutions. Finally, a fanatic is authoritarian. When he has power he tries to impose his answers on others. Dogmatism, obscurantism, and authoritarianism are all out of keeping with the human condition of fallibility. And when people become fanatics, when they try to become God, *they frequently make life a hell for other people*. (p. 56). [Italics, mine].

I witnessed several instances of severe dogmatism. I even remember some of the dogmatists' pale faces, numb and violent at the same time. Perhaps this extreme dogmatism was both cause of and response to the sense of insecurity and anxiety among members. Perhaps it also arose from the poor educational background of certain leaders and their followers. From this perspective, I consider my firsthand experience of dogmatism in the UGB as one of my most valuable learning experiences in relation to spiritual issues.

After several painful years of witnessing Raynaud de la Ferrière's thought being misunderstood and distorted at the hands of dogmatic and fanatical members, Ferriz decided to embody the principles of UGB and safeguard de la Ferrière's authentic thinking in a new institution entitled "Magna Fraternitas Universalis Foundation Dr. Serge Raynaud de la Ferrière." In this action, Ferriz was supported and followed by several former UGB members around the world, a phenomenon that he described as "the Exodus of Knowledge."

A year after this event, I travelled to the United States to pursue my dreams of studying at university. Immediately after learning English, I officially began my teaching career. Previously, I had worked on various educational projects at the UGB. Perhaps, the most relevant was that directed by Guru Ferriz relating to his innovative Learning Objectives. With the purpose of instituting better teaching methods, he sought to create objectives related to identity and transcendence and to add to the hierarchy of objectives. I was part of a well-qualified team of professionals, mostly in the field of education and psychology, that worked on the development of these two sets of

objectives. Furthermore, I was inspired by this experience to develop the objectives of transcendence that I discuss in Chapter 5 of this thesis.

I did my Bachelors and Masters studies in the field of education. Whenever time allowed, I would seek out topics in R. de la Ferrière's literature that somehow related to what I was studying. Moreover, the university provided guidance and created a larger sense of life's meaning and purpose. Perhaps because of my association with Guru Ferriz, I perceived in some of my university peers and professors an absence of meaning and a sense of being lost and rootless in their studies, although they would not necessarily have agreed with me in this assessment! Gradually, as my learning continued, I encountered academic dogmatism not unlike the dogmatic attitudes I faced in UGB. Nonetheless, it was a great advantage to be simultaneously both student and teacher. This permitted me to not only examine the theoretical but also to apply the theoretical to real life situations, and to reflect on the validity of theories and on how to facilitate their application.

As I continued my triple duty of studying at university, teaching, and trying to keep up with the literature of R. del Ferrière and Ferriz, it became increasingly apparent to me how the Age of Knowledge and the transitional period that I studied manifests itself. Our civilization is undergoing radical transformation at an unprecedented rate, and our generally conservative educational systems are failing to keep pace with the rapid changes occurring at the global level. Indeed, these changes are so numerous and fast-paced that it's impossible to keep track or analyze them in any systematic, theoretical way. However, as my familiarity with the Age of Knowledge has grown, I have become convinced that it provides something of an interpretive framework or a panoramic looking glass for understanding the radical transformations that our current civilization is exhibiting. The Age of Knowledge is not a simple belief system that coincides with the time we are living in. Rather, it needs to be studied thoroughly if it is to help us understand our current situation and avoid making more mistakes whose consequences could be detrimental to the world and future generations. R. de la Ferrière (1972) reminds us that "we are formed in a civilization that is not tailored to our measure, which makes us perish and perishes with us" (p. 120). It seems that we have been swimming, nearly drowning, in a lost ocean without an idea as to where we are going. It is necessary to study and see the world around us afresh by stepping outside our

accustomed mindset. What was true yesterday may be—almost certainly is--no longer true today and will be much less so tomorrow.

Almost 30 years ago, I began studying, observing, and analyzing the Age of Knowledge. Progressively, I gained some insights into how people were transitioning psychologically from an age of 'believing' to an age of 'knowing.' Certain students and most people act because they *believe* in something rather than because they *know* something and without much thinking involved. Furthermore, Festinger and Carlsmith (1959) in a laboratory experiment tested Festinger's theory of cognitive dissonance. It was strongly supported that if a person is induced to do or say something which is contrary to his or her private opinion, there will be a tendency to change his or her opinion so as to bring it into correspondence with what he or she has previously done or said (p.209). Changing our belief structures is not an easy task. We are accustomed to act in this way, we do not 'think' as we should: we 'look but fail to see' the paradoxes and conflicts of the times in which we are living.

In Chapter 1, I introduce the topics discussed in this thesis, including an exploration of the educational terrain associated with the Age of Knowledge. In Chapter 2, I introduce R. de la Ferrière's life and some relevant aspects of his work, including his perspective on the Age of Knowledge, his new concept of divinity, and *Yoghism*. In Chapter 3, I conceptualize transcendence as a construct and analyze the epistemology of life, the New Age vs. Age of Aquarius, and dogmatism in a larger contemporary educational context. In Chapter 4, I analyze R. de la Ferrière's perspective of education, which has at its core the pedagogy of transcendence. R. de la Ferrière states: "Teaching something to a child is not the only important objective; teaching is also to shape a child's spirit to develop that child's capacity to observe and reflect, to apply critical thinking in their research, and to love the truth." To conclude, in Chapter 5, I propose a *pedagogy of transcendence* based on the teaching of R. de la Ferrière and D. Ferriz to aim the discovery of the transcendental man.

NOTE: All the translations and interpretations of the literature of R. de la Ferrière and D. Ferriz are of my own. They are paraphrased. I quote some of them to highlight their importance into the context.

Chapter 1.   Introduction

In this thesis, I apply Dr. Serge Raynaud de la Ferrière's (1916-1962) ancient understandings of the celestial precession of the equinoxes (related to the Age of Knowledge) to explore the current educational terrain. According to zeitgeist theory, the Age of Knowledge is the prevailing spirit of our time. R. de la Ferrière remarked that in this age, "the most important event ... will be the discovery of transcendental man." Discovery should be understood here in heuristic terms, as Gigerenzer (1991) proposes, moving beyond mere inductive generalization or lucky guesswork. He asserts that scientists' tools "are not neutral … the mind has been recreated in their image" (p. 264). Incidentally, the novelist Marcel Proust made a similar point in that the real voyage of discovery consists not in seeking new landscapes but in having new eyes. Based on the perspective of the Age of Knowledge as well in the teaching of R. de la Ferrière and Ferriz, I propose a *pedagogy of transcendence* to apply the principles that aim to shape the spirit to achieve the discovery of the transcendental man. I will briefly touch upon on three basic aspects of this pedagogy: adding objectives of transcendence to the already established; a pedagogical communication model (to inform, to illustrate, to teach and to form); creativity and analytical methods.

I endeavour to merely touch on such an immense and complex body of work, which has not yet been explored academically. The underlying theory is twofold: (i) culture and civilizations go through great cycles based on *cyclical law* and the cyclical parameters are based on the *precession of equinoxes*. The process of going from one cycle to another implies *dramatic transformations* marked by precessional zodiacal signs and is manifested throughout religious and sociocultural ideas in the leading civilizations of the world. (R. de la Ferrière, 1949/1972; G. Jung 1959; 1972, Santillana & von Deckened, 1969). (ii) According to R. de la Ferrière, the new precessional cycle, Aquarius, began on March 21, 1948, thereby giving rise to the Age of Aquarius (Knowledge). Currently, humankind is situated in a transitional period, moving from a state of *believing* (Age of Pisces) to a state of *knowing* (Age of Aquarius). Analysis of such monumental societal transformation yields deeper understanding of changes in humanity and can inspire changes in education that incorporate a long-term vision.

I argue that even though the consideration of the above theories and apprehension of their value may be difficult, R. de la Ferrière's call to discover the transcendental man, along with the suggested methods and systems I introduce in this thesis, will contribute significantly to addressing current educational needs.

I divide the chapter into two: the first part relates to the great cycles: precession of equinox and the transitional period; and the second relates to the discovery of the transcendental man: pedagogy, *Yoghism* and the New Concept of Divinity.

1.1. The Great Cycles

From a Darwinian perspective, civilizations are brief interludes in the story of mankind. According to the cosmology of many ancient civilizations, life on earth goes through cycles of destruction and rebirth. For instance, in 'The Rise of Fall of Greece', Ober (2015) considers the illustrious era of ancient Greece (variously influenced by ancient Egypt) when Greek wealth produced a stunning cultural efflorescence that lasted hundreds of years. Ancient Greece was the cradle of modern Western culture and its influence is still apparent today. Thus, we could infer that the success of a culture has its roots in its thoughts, visions and transcendence.

Drawing on ancient traditional teachings (esoteric knowledge), R. de la Ferrière (1972) explains that great (religious) cycles last approximately 2000 years, during which a new *religious form* emerges. Nonetheless, he argues that what has been termed radical transformation is just a *form* that naturally fits the current intellectual and spiritual needs, but the essence remains the same. The *form* (e.g. deities) correlate to the symbol of the prevalent astrological sign. R. de la Ferrière explains how these cycles are determined by the astronomical precession of equinoxes. The precession of equinox and the great cycles are also discussed by other authors that include Santillana and von Deckened (1969) and G. Jung (1959). In their respective works, they discuss how historically religious ideas and beliefs have deeply influenced the *self* and *expression* of humankind. Nonetheless, they differ on the beginning dates of the new cycle (R. de la Ferrière on 1948, Santillana & von Deckened on 1962 and G. Jung on 2000).

The evidence for evolution seems indisputable. Researches show that human beings and their hominid predecessors have existed for millions of years over the earth.

Accordingly, there have been several complete cycles of 25,920 years (Platonic Year). From here it emerges each precessional age lasts 2160 years (25,920÷12 constellations) and that each age is associated with a specific zodiacal sign. Briefly, looking back to the last three precessional cycles, we can find the Age of Taurus (the Bull), approximately from 4320 to 2160 BC, with Bull-Gods of various sorts in the ascendant. Some examples include the Egyptian Apis and Hathoor, the Hebrew Golden Calf, and the bullheaded Minotaur of Crete. During the Age of Aries (Ram), spanning 2000 BC to the time of Christ, religion became tribal monotheism. The worship of the bull was supplanted by the worship of the ram. It has been remarked that the Age of Aries is associated with the story of Moses coming down from Mount Sinai as "Two horned" or crowned with the ram's horn, while his flock disobediently insist on dancing around the golden calf. In Egypt, the king of the Gods, Amon-Ra, was depicted with a ram's head. The Piscean Age from the birth of Jesus to 1948 AD saw the Christian motif of the fishes. As a water sign, the fish and water are predominant in the associated religious dispensation (e.g. baptism in a river) and fish was considered holy food. One of Jesus' miracles was the multiplication of fishes and bread that is reported in the all four Gospels of the New Testament. Among Catholics, it remains common to abstain from eating meat and instead eat fish on Fridays during lent. Jung (1959) identified this practice with the psychological archetype of Christ's wholeness.

On the other hand, additional authors (such as Mircea Eliade, 1978; Emile Durkheim, 1915) argue that fundamental changes in the evolution of collective consciousness are cyclical and mainly related to religion. They support their theories with evidence from several scientific disciplines (e.g. anthropology sociology, history of religion). These theories do not conflict with the precessional Ages theory, but rather complement it. Seeley (1904) in "History of Education" quotes Karl Schmidt:

> The history of the individual reflects and repeats the history of humanity, just as the history of the Cosmos, and the history of the Cosmos is an image of the life of God; all history, be it of humanity, or the individual, or the starry heaven, or the earth, is a development of life toward God (p.15).

Durkheim (1915) affirms that all religion is founded on some form of cosmology. He observes: "For a long time it has been known that the first system of representations with which men have pictured to themselves the world and themselves were of religious origin." (p.21). Durkheim claims that religion acted as a proxy for philosophy and

science, thereby contributing to cultural expressions of humankind. However, it has been less frequently noted that religion does not only confine itself to enriching the pre-existing human intellect with a certain number of new ideas; it has also contributed to forming the intellect itself (pp. 117-118). Durkheim alleges that men owe to religion not only the substance of their knowledge but also the form in which their knowledge has been elaborated. Further, he claims that the fundamental categories of thought, and consequently of science, are of religious origin (p. 466).

Biologist and philosopher Julian Huxley (1957) asserts that religion, even without the revelation of God, is a natural and vital part of human experience; and through the process of evolution, if a person's body has evolved, so has his mind. He posits that "religions, like sciences or philosophies, are creations of man, and gods are products of the human mind just as much as scientific 'laws of nature'." (p.187). Furthermore, he posits that religions are noetic organs of the evolving man. By noetic, Huxley means all psycho-social mechanisms in which communicable mental activities play a predominant role. As Peter Berger once put it: "Those who neglect religion in their analysis of contemporary affairs do so at their great peril" (p. 182).

1.1.1. The precession of the equinox

The precession of equinox entails two related motions. On one hand, "the axis of the Earth moves in a conical path about the ecliptic pole and completes it in about 25800[2] years... Due to this precessional motion, the equinoctial points experience a westward motion and hence the cardinal points shift their positions with the passage of time." (Mukhopadhyay, 2003 p. 44). Simply stated, Astronomer, K. Tapping (2014), council officer at National Research Canada, explains the precession as follows:

> If you have ever played with 'spinning tops', you will have found that although it is possible to get the top spinning absolutely vertically and unmoving, most of the time the top wobbles, or precesses, where the axis of the top describes a circle. The same thing applies to the Earth. Since the Earth is not absolutely round and there are other objects such as the Sun and Moon pulling at it, the spinning Earth precesses too, with a complete wobble taking 25,800 years. Precession makes the intersections of the celestial equator with the ecliptic change, so that

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[2] The dates may vary a little.

compared with the calendar the zodiac slides backwards one sign every 2150 years or so. (n.d.)

According to Ferriz (1985), the precession of equinox equals the Platonic Year or Great Year. Bushee (1876) states that this was known as a scientific fact for centuries. Plato's *Timaeus*, dating back to c.360 BCE, mentions the recurrent world ages and how cycles of men were shorter than the cycles of nature. Although he did not assign a specific duration to the cycles of nature, others have calculated the estimated average time for each cycle at 26,000 years (Mann, 2012). Ferriz (1976, 1977) argues that R. de la Ferrière verified the average index or constant mean of precession from "the point of observer" as 25,920 years or 72 years per degree, similar to Plato's cycle (p.116). According to R. de la Ferrière's calculation, the vernal equinox (ecliptic intersection with the celestial equator yearly on March 20th or 21st) appeared in the sign of Aquarius on March 21, 1948. Therefore, based on the pure astronomical positioning – the new cycle of Aquarius has begun. R. de la Ferrière (1973) compares the cycles with the seasons as their astronomical effects are not mathematically delineated. In other words, days could be lighter and warmer at the beginning of the astronomical spring and snowy, icy spells could occur in the middle of them. Due to the axiom 'I know' associated with the sign of Aquarius, he dubs the current cycle as the Age of Knowledge.

The new cycle, beginning in 1948 and continuing for the next 2,000 years, will bring considerable changes in the religious, cultural, sociological, and psychological circumstances of humankind. These transformations are marked by Aquarian characteristics and by Aquarius's ruler planet, Uranus. The name Uranus derives from *Ouranos*, the father of *Kronos* in Greek mythology, and is associated with the myth of Prometheus. Since the outset of the 20th century, there has been consensus that Uranus is empirically associated with the principles of change, rebellion, freedom, liberation, reform, and revolution. The unexpected break-up of structures, sudden surprises, revelations, and awakenings; lightning flashes of insight and the acceleration of thoughts and events; births and beginnings of all kinds; and intellectual brilliance, cultural innovation, technological invention, experiment, creativity, and originality, are some aspects of Uranus's power. Uranus is linked to unpredictable and disruptive changes within science and esoteric knowledge. It is also associated with space, travel, and aviation (Tarnas, 2006 p. 90). The inventions falling under the force of Uranus include the development of spaceships, the exploration of space and other planets,

moon landings, the discovery of 'dark matter' and dark 'energy', and modern mass communications operating through air and space such as TV, the Internet, and mobile telephones. Uranus also represents higher intelligence and the expansion of consciousness. Ferriz (1994) describes the influence of Uranus as seemingly sudden and incalculable, like an abrupt flame that dramatically rends the sky. Uranus also corresponds with intuition, genius, and the superhuman. Surely, not in the sense of the fictional Hollywood character, Uranus is associated with a man or woman who looks for his or her *perfection*.

The knowledge brought by Aquarius arouses, awakens, and bestows life in its most profound sense. Jung (1959) acknowledges that this age pushes humanity towards brotherhood and the integration of knowledge. He explains that the energy generated from worldly desires is transmuted into a search for gnosis or Soul-Wisdom. R. de la Ferrière expands on this by stating that the Age of Aquarius is an age of knowledge, of synthesis, of cooperation among individuals and groups, and an age of peace. Naturally, however, the legacy of the preceding 2,000 year cycle cannot be erased in one fell swoop.

Preceding the Age of Knowledge was the Age of Pisces (the Fishes). Pisces's axiom is, "I believe", and this age was the *age of belief*. The ruler of the Fishes is the planet Neptune, predominantly symbolizing mysticism and religion. According to R. Tarnas (2006), the planet Neptune is associated with the spiritual, idealistic, symbolic, and imaginative dimensions of life. With the subtle, formless, intangible, invisible; the unitive, timeless, immaterial, and infinite; with myth and religion, art and inspiration, ideals and aspirations, images and reflections, symbols and metaphors, dreams and visions, mysticism, and religious devotion. Therefore, its attributes tend towards illusion and disillusion, deception and self-deception, escapism, intoxication, psychosis, perceptual and cognitive distortion, conflation and confusion, and projection of fantasy (p. 95).

After the end of the Second World War almost seven decades ago, R. de la Ferrière (1973) noticed scholars contemplating spiritual and ethical concerns relating to some the most serious and acute human problems. They were examining the meaning of life, the value of human dignity, interpersonal relationships, the awakening of intelligence, and the role of ethics, religion, and mysticism in social conflict (p.385).

Wright (2000) recalls that the philosophy of Logical Positivism was no longer dominating popular culture. The advent of the postmodern world and its rejection of pseudo-rational dogma has contributed to a revival of spirituality. Nowadays, in the 21st century, the importance of spirituality has elicited renewed academic interest. In Sheldrake's view, (2007) "spirituality … defines our era." (p. x). This is not surprising as renewed interest in spirituality (i.e. the growing of popularity of SBNR, meaning spirituality but not religious) in contemporary Western culture fits into the postulates of the Age of Knowledge. As we advance into this Age of Knowledge, spirituality with a very different perspective could become increasingly manifest. Yet, we remain in this transitional period where various forms of calamity -- although decreasing -- still occur.

This is to be expected as we enter a new cycle, for as R. de la Ferrière (1973) writes the social and religious form of our current civilization is in the process of "wrapping itself in a dress in a cut and colour unknown until now." (p. 386). Meanwhile, Jung (1959) attempts to understand the mind and develops terms such as: *synchronicity, individuation,* and *archetype.* He suggests the unconscious dwells in the collective subconscious before it is manifested in the collective conscious mind (p.194).

1.1.2. The transitional period

The *transitional period* refers to the gradual shift from the Age of Pisces to the Age of Aquarius. It is the adaptation period or acclimation from an older to a newer age. Amao (2016) refers to this period of time as an orb of influence. David Ferriz (1976, 1985, 1994) has analyzed this topic in several of his books, and understands the transitional period as the "end of *a* world", (not the "end of *the* world"). Ferriz (1994) argues that although 1948 marks the beginning of the Age of Aquarius, the first rays of dawn of the Age of Knowledge are observable at a very slow pace as if from a *previous cosmic radiation.* Among such early harbingers are the invention of the press, the Reformation, the nautical discoveries of the 16th century, the thought of Rousseau, the invention of new musical instruments and the French Revolution. He points out that in the 19th century there was an increase in knowledge and also a confrontation between the closed world of faith, dogma, and absolutism and the positivism of Comte, the psychoanalysis of Freud, the industrial revolution and the emergence of esoteric societies. Nonetheless, Ferriz claims that it is in the 20th century that the transitional period is triggered (p. 73).

C. Jung (1959) perceives the transitional period as a "transition between the aeons" that may represent calamitous change. In a letter to Adolf Keller on February 25, 1955 he describes transition in the following terms:

> Transition between the aeons [ages] always seems to have been melancholy and despairing times, as for instance the collapse of the Old Kingdom in Egypt between Taurus and Aries, or the melancholy of the Augustinian age between Aries and Pisces. And now we are moving into Aquarius… And we are only at the beginning of this apocalyptic development (p.229).

The transition from Pisces to Aquarius in the middle of the 20th century was characterised by periods of barbarism, two world wars (20 million dead in the First World War and 50 million in the Second), dictatorships, concentration camps, terrorism, deep shifts in values, and general conceptual and ideological confusion. Although barbarism has decreased in the 21st century, it continues to lurk like a wolf in a sheep's clothing.

In reviewing the preceding transitional period from Aries to Pisces, several catastrophes are evident (e.g. Cimbrian War 113-101 BCE, the crises in the Roman Republic 134-44 BCE, Roman civil wars [the most famous from 40 to 30 BCE], and the infamous emperorship of Nero from 54 A.D until his death). There was also the tectonic shift from the Roman Empire to the *Holy* Roman Empire, from "I am" to "I believe." Some 2,000 years later, we are in the process (transitional period) of shifting from "I believe" to "I know." The period of transition and adaptation, marked by chaos and confusion, represents one of the most crucial times in human history. Since the beginning of the current Age there have been considerable advances in science, technology, communications, research, etc. There has also been a growing reaction in support of the values of the preceding Age of Pisces (e.g. seeking spirituality as an abstract component, lacking in intellectuality).

The Industrial Revolution, with its narrative equating the huge economic changes of the past 200 years with continuous progress, systematically ignored the related social and ecological costs (Barca, 2011). Notoriously, there was a widespread *belief* that the Industrial Revolution could be a social and existential panacea. Yet it was undertaken with little knowledge and less foresight, and we are still living with its harmful legacies, especially as regards the environment. Beyond the damaging of the planet, another critical point was the psychological effect, what Erich Fromm (1975) identified as the "pseudo-self" based on a false need for possessions and an endless desire to consume

while losing focus on fundamental existential questions. Hence, rather than searching for their true, fundamental selves, people define themselves in terms of their material possessions (e.g. ''I am an owner of a sport car'') -- in other words, an identity based in what "I have" rather than who "I am." That misconception seems to have deeply invaded the unconscious of most people.

When society is immersed in rapid change without a clear vision or direction, new ideologies and worldviews emerge, which may or may not be compatible with the cosmic imperatives of knowledge, synthesis, or peace inherent in the new Age of Knowledge. For instance, in his "Immediate Man" (1977), C. Nystrom recounts the emergence in our age of the person who is immersed in the present (the past is so much deadwood) and is intolerant of complex or long-term solutions; has a mystical faith in the power of technique and technology to resolve problems; has a deep distrust of reason (p.178); and favours ideologies that promote individualism rather than *collective realization*. There is confusion between values of the previous cycle and those of the new cycle. Ferriz (1994) conceptualizes the overlapping Piscean values (believing) and Aquarian values (knowing) as *transitional ideologies;* when old values are prolonged before lapsing in the new age, creating confusion in the process. In the process of transformation, the ego survives by favouring the materialist life over spiritual evolution, rather than by seeking balance between the two.

1.1.3. The Invisible Gorilla in our midst

As a way to further evoke the transitional phase of the Age of Knowledge, I turn to the 'invisible gorilla' experiment by Daniel Simmons to explore perception, attention, and memory. Simmons (1999), a neuroscientist at the University of Illinois, asked participants to watch a video of two three-member basketball teams, one team wearing white shirts and the other wearing black. In the video, each team randomly passes the ball among its members. Participants were asked to count the number of times the white shirt members passed the basketball to one another. Simmons asked viewers how many of them counted 16, 17, or 18 passes, then asked who saw the gorilla. Seventy to 80 per cent of viewers had failed to notice the man in the gorilla suit who stops in the middle of the passing teams, turns to face the camera, beats his chest, and then walks to the other side. When shown the scene again, the viewers could not believe they missed it.

Participants were confused, irritated, and at times, absolutely convinced there were two-separate videos.

There are several psychological interpretations of this experiment. Milliron (2007) argues the gorilla video suggests perceptual blindness; the concept explaining how we turn blind to objects that do not fit into our created cognitive structures. Pappusetty and Kalva (2014) argue that the phenomenon does not stem from defective vision (the light rays emitted to reach the visual sphere of the cerebral cortex), but from a psychological lack of attention that prohibits us from restructuring our world from the inside outwards during transitional periods. Chabris and Simons (2010) claim the results of the experiment are similar to *illusions* that potentially deceive us. Illusions are distorted beliefs we hold about our minds that are not just wrong, but wrong in dangerous ways (p.X). Institutions are resistant to change even when faced with fraud and such resistance can affect our daily behaviour. More than a decade after the original test, subsequent studies have yielded similar results with similar interpretations: unexpected events, even distinctive ones, do not automatically grab attention. People do not notice changes in their surroundings when they are preoccupied with other concerns. According to Simons (2017), the *inattentional blindness* affects what we see and what we *think* we will see.

This experiment demonstrates the need to examine our assumptions. By doing so, we give ourselves the opportunity to spot the 'invisible gorilla' in our midst. One of the most intriguing aspects of the gorilla experiment is the belief among participants that they have been tricked. R. de la Ferrière once said that the *strength of a genius is sometimes needed to change our established thoughts.* Also, the unexpectedness of *new* things can be likened to a *black swan*, "an outlier, … outside the realm of regular expectations, because nothing in the past can convincingly point to its possibility" (Aven, 2015 p. 84). Is the inability to *see* the inability to expect the unexpected? Is it the product of lack of confidence or a dogmatic mind? Indeed, dogmatism is a problematic state of mind similar to lack of confidence. It prevents people from modifying their opinions even when faced with obvious contradictions. Further, Pietrasiński (2016) states, "*dogmatism* may result either from vested group interests and personal engagement, or from *mental* routine and dullness, which confine the *mind* to habitual trains of thought" (p, 62).

The *transitional period* is upon us. We are experiencing tumultuous shifts and the unveiling of a new reality. Our ways of thinking, sensing, and behaving are being transformed. The framework of the Age of Knowledge offers a way to thoroughly understand this new world.

1.1.4. The transitional period in education

Issues surfacing in the transitional period can be contextualized in various ways. However, as a way to introduce these issues, I will broadly review two aspects: values and technologies. Cuban and Shipps (2000) argue that for nearly two centuries, North Americans have expected their public schools to cultivate the personal, moral, and social development of students. The problems plaguing schools are rooted in the organization of society (e.g. glorification of violence, need for instant gratification). As noted by Singer and Pezone (2008), in order to legitimize society's current organizational pattern, schools promote competitive behaviour and social inequality as if they were fundamental laws of nature.

The subject of spirituality is now emerging in the academic field. Literature on transformative learning, spirituality, morality and ethics, and aesthetic education has been expanding. However, the epistemological ramifications of these topics remain unclear and there is a persisting gap between theory and practice. Furthermore, the field of spirituality may be under-theorized and the ideological framework is not clearly stated. Undoubtedly, the promotion of compassion, love, and caring for others are greatly beneficial to education, but sometimes, with the aim of bringing clarity, these ideas are associated with orthodox values that do not meet current needs. These ideas are anchored in Piscean axiology and jurisprudence, in short, in *dogmatic belief*.

For about two decades, as Hanuka (2000) and other scholars have observed, technology has been adopted at all levels with only minimal oversight and regulation. For instance, the creation of new apps designed to improve teaching are released without reference to educators' philosophy or learning theories. The strategies adopted by unbridled, uninformed, yet enthusiastic technological advocates lead to incongruence and inconsistency in action.

Heidegger (1977) in "Questions Concerning Technology" describes the conflict between human values and technology. He says: "The threat to man does not come in the first instance from the potentially lethal machines and apparatus of technology. The actual threat has already affected man in his essence" (p.29). He then remarks that "human activity can never directly counter this danger … But human reflection can ponder the fact that all saving power must be of a higher essence" (p.33-34). By comparison, McLuhan (1964) accredited technology with disrupting the linearity of human lives and thinking. He asserts: "All technologies are extensions of our physical and nervous systems to increase power and speed" (p.90). Bobbitt (2011) explained the essence of the McLuhan theory thus: just as the wheel extends our feet, the phone extends our voice, television extends our eyes and ears, so the computer extends our brain, and electronic media in general extend our central nervous system.

McLuhan was concerned with our ability to cope with the speed and scope of the changes brought about by the new electronic milieu. The swirling vortex of change threatens previous identities to such degree that people -- even entire nations -- could violently lash out to retrieve what they once were. "When our identities are in danger, we feel certain that we have a mandate for war. The old image must be recovered at any cost" (p.8).

Overall, Heidegger and McLuhan conclude that the tools we use to think change the foundational structures of our thinking. In her article "*How computers change the way we think,"* Sherry Turkle (2004) hypothesizes the invention of written language brought about a radical shift in how we process, organize, store, and transmit representations of the world. Although writing remains our primary information technology, computers have had the most impact on the habits of our minds.

Neuroscientists and psychologists have continuously debated the effects of computers and whether they do more harm than good. For instance, the Organisation for Economic Cooperation and Development (OECD) observed classrooms in more than 30 countries. It was found that computers lowered student reading-comprehension levels significantly (Peña-Lopez, 2015). Emphasis should be placed on reconstructing previous pedagogical assumptions opposed to strategic planning for technological change. Prensky (2016) argues that "what we need is educational technology for the new paradigm of Bettering the World" (p. 76), not technology that supports the traditional

educational paradigm. We utilize technology to save cognitive energy, and consequently, our cognitive abilities are actually degenerating. With our usage of technology, it is not the loss of skills that is the challenge; rather, the challenge is the loss of the development of certain skills.

All educators and learners are submerged in a complex tsunami of data that threatens the possibilities of intelligibility. The difficulty of understanding our current conditions is aggravated by our atrophying mode of thought. R. de la Ferrière (1980) asserts the main problem lies within the inability to think properly. He argues that:

> We get lost repeating platitudes, out-dated theories, conceptions known to be erroneous for a long time, but there is little appreciation for that which is right for man, and the effort it entails: **to THINK**, which for centuries has been regarded as a waste of energy (p. 335). [emphasis and translation mine]

In agreement, Jacobs (2017) claims the desire to think has diminished because its action tires us, troubles us, and can force us out of familiar habits, complicating our lives. Williams (2010) in his article, "The New Barbarism? Learning in the Twenty-First Century Schools" claims that today young students in school more closely resemble the illiterate peasants of the Middle Ages. Teachers are increasingly moving towards teaching students with a barrage of visual stimuli that mirror their leisure activities on their growing array of technological gadgets. The need for concentration, rigour, reflective thought when grappling with primary sources is losing out to power points, bullet points, streaming videos, and other technologies.

1.2. Discovery of the Transcendental Man

Discovery implies a learner moving beyond mere inductive generalization or guesses. Bruner (1964) compares discovery to a surprise and entailing the well-prepared mind. He uses the law of probabilities to demonstrate how science is founded on the history of men *finding something, not knowing it.* Discovery for him "is in essence a matter of rearranging or transforming evidence in such way that one is enabled to go beyond the evidence so reassembled to new insides" (pp. 82-83).

The word *transcend* has numerous meanings and interpretations. I will explore it under the umbrella of two broad meanings: *to go beyond* and overcome difficult

situations; and to *learn and transform* such situations into meaningfulness. Transcendence is no longer encapsulated in metaphysical ideas but rather *in motion*. I am referring to the body and its physical constituents and circumstances. As MacKinnon (2013) explains: "Knowledge is not only in our minds, but also embedded in our actions, activities, mediated social practices and rituals" (p.18). Additionally, human biology, emotion, and the unconscious also play a role in transcendence. According to Du Toit (2011), perceptions of transcendence and self-transcendence are changing radically. He states:

> Every generation finds transcendence within the interpretative horizons permitted by their culture, science and world view. There are biological constants (neocortex, lymphatic system) and mental constants (desire, infinity, unfulfillment), but they manifest themselves differently in every era. (p.11)

For philosophers like Heidegger, Jasper, and Sheler, existence is also tied to transcendence. Heidegger (1996) believes that *being* should be thought of in terms of transcendence. For him, transcendent is a new way of thinking about human existence in a non-subjectivist manner. Common in the phenomenology of Husserl, transcendental is distinguished from *transcendent*. Maintenay (2011) highlights "that 'transcendence' is 'beyond', rather than 'enclosed', while 'transcendental' means "of a higher level, on which the intelligibility of the lower level is contingent." (p. 277). He comments that Husserl's notion of transcendental subjectivity "acknowledges a process (nature) larger than us, beyond the borders of human subjectivity, whose otherness we can encounter in different ways but is not, on the whole, culturally or individually relative" (p. 280). Maintenay claims that philosophically *immanent transcendence* is based on a phenomenology of robust otherness (p. 286). Lilla (2010) asserts that immanence is a concept that can only be understood in dialectical tension with transcendence. Immanence is "the state of being within." The word derives from the Latin root *en maneo* (the present infinitive is *manere)*, meaning: "to stay, wait, or remain within", or, "I remain within". The word transcendence is derived from the Latin roots *trans-* "from or beyond", and *scander-* "to climb." These two concepts form a dialectic unity, expressing a shifting perspective on our relationship with the divine.

Transcendentalism implies living in an existence beyond apparent reality. By transcending 'intelligence' (a normal human capability), we would become wise; converting passions into *ideals* and altering vice forces into subtle powers. We would

transcend not only our skills and abilities but also our limitations and frustrations, thereby overcoming difficult challenges, learning from experiences, and improving our life conditions. With the help of science, art, and philosophy, learners of all ages are capable of overcoming their limitations. They could attain deeper consciousness of their own mission in life, by clarifying their responsibilities, identities, and their role in the community. The new cultural and spiritual dynamic replaces pure science, counteracts the attractions of the material world, and entrenches the spiritual world as concrete fact.

1.2.1. Pedagogy

About 70 years ago, R. de la Ferrière (1972) wrote: "teaching something to a child is not the only important objective; teaching is also to shape a child's spirit to develop its capacity to observe and reflect, to apply critical thinking in its research, and to love the truth" (p. 120). This was a revolutionary thought about pedagogy and continues to have innovative components, not so much in relation to discursive and rhetorical theories, but in their practical application. Here, it is important to recognize teaching as way of shaping a learner's spirit. The understanding of spirit becomes pivotal in this matter. De Souza (2016) demonstrates the burgeoning literature in the field of spirituality and its increasing presence in academic circles. Despite its expanding popularity, spirituality may remain under-theorized and may be massively misunderstood. The inadequacy of existing definitions leads Tisdell (2003) to see spirituality as defying definition; and there is a tendency to see soul and spirit as similar entities. Regardless of R. de la Ferrière's (1978) admiration of Plato and the Greek school, he disagrees with their treatment of soul and spirit as interchangeable (p.22). R. de la Ferrière agrees with the theory, established by most religions doctrines, that humans possess three interrelated bodies: physical, astral, and spiritual. The soul is the plastic mediator between the physical and spiritual body.

Also, R. de la Ferrière (1978) indicates how the *science of spirit* could form one entity comprised of natural science, metaphysics, epistemology, ethics, and morals (p. 86). Furthermore, he believes the spirit is subdivided into thoughts, imagination, intuition, and intellect; and implies that shaping a learners' spirit does not occur through religion or dogma, but through the development of such thoughts, imagination, intuition, and intellect. The development of these four elements helps learners develop their capacities for observation and reflection, critical thinking in research, and a love of truth. Shaping

the learner's spirit generates in them responsible thoughts, imagination that leads to creativity, intuition that is the product of their studies and experiences, and an intellect capable of informed conclusions.

The first three elements that R. de la Ferrière points out (observation, reflection, and critical analysis) are seen as desirable skills in learners of all ages. The abundant literature on these topics focuses on modern learning theories including integral and spiritual education (e.g., Transformative Learning Theory, Pedagogy of the Oppressed). However, there is also a wide gap between educational theories and reality. For example, in teaching undergraduate courses, I noticed the difficulty some students have when asked to observe and reflect on their learning. It is interesting how some students lack improvement in observing and reflecting compared to other cognitive skills (e.g. memorization). Sometimes, the lack of skillful reflection shows up in the judgmental attitudes in their critical thinking. Yet, "a love of truth" without association with any moral code or special spirituality or religion is not included in learning objectives. Bingham (2010) asserts that there are three dominant orientations in towards truth that is educationally grounded. They are traditional, progressive, and critical. He points out that all of the three come from Enlightenment and objective thinking (p. 650). He continues, "describing truth in relation to education neglects the fact that explanatory education itself establishes the practices that underwrite such a description" (p. 660). Furthermore, the *universal morality* that benefits all and harms none proposed by R. de la Ferrière could be an aspect of the discovery of transcendental man. He claims that truth should not be limited to any dogma. Haidt (2007) argues that morality is both universal and culturally variable.

R. de la Ferrière establishes 'truth' as one of the three great principles, along with tolerance and peace. All three fit perfectly into current educational needs. Tolerance implies openness in acquiring new knowledge, a willingness to understand others, and cooperation with them. He also sees tolerance as an opportunity for self-development. Truth, not as an absolute, holds many relative truths. Lastly, the principle of peace does not mean the absence of conflict. Conflict is intrinsic in all human relationships. The goal is to resolve differences without violence, physical or psychological. The goal of the peacemaker, as explained by Cortright (2008), is to develop effective ways of resolving disputes without violence and to identify and transform the underlying conditions. Interestingly, in these three principles Ferriz (1985) observes the special position of

'truth' as regulating tolerance and peace. To clarify, we cannot speak of tolerance or peace without truth; the limits of tolerance are set by truth and peace is not possible without truth.

1.2.2. Yoghism and Jnana Yoga

Based on traditional yoga, R. de la Ferrière develops *Yoghism* with the purpose of making yoga understandable for Western minds. He begins his treatise in the book *Yug Yoga Yoghism: A Mathesis of Psychology* by acknowledging the complexity of yoga both in relation to ontological self-realization as well as to dialectical and theoretical discourses about life and science itself (R. de la Ferrière, 1978 p.17).

In his treatise, he explains yoga, (from the Sanskrit *yug,* meaning 'union') as a system of life that rests upon the union of the individual and the universal being. It also offers a means to achieve this union (p. 36). This realization gave rise to the concept of *Yoghism* as a sort of integrated explanation of Yoga: a concrete form of study and as a method for spiritual and intellectual development. By no means is *Yoghism* a new philosophical school or brand of yoga. Rather, it is a 'synthesis' of practice. Furthermore, he relates *Yoghism* to the Sanskrit term *Jnana* yoga, meaning knowledge.

In "The Superiority of the Jnana Yoga in the Age of Knowledge" Ferriz (1994), conceptualizes Jnana as the union of various modes of thinking, but mainly as *brahman consciousness* (different from Brahmanism). Gill (2006) describes *Brahman* as the ultimate reality, a reality that includes the whole universe with its multiplicity of gods and goddesses. It is understood as an invisible reality within and around everything. For Ferriz, the knowledge of *Jnana* is not exclusively intellectual but also contemplative. It is more than study and action: it entails *bhumis* (existential states of consciousness), *dhathus* (elements), and *naggasidhis* (faculties)*. **Jnana** has seven *bhumis*: (1) *shubha-ich'hâ*: Goodwill. Goodwill encourages the human consciousness to achieve the highest goals of peace, tolerance, fraternity, and harmony. (2) *Vichârana*: Reflection. As a virtue, reflection regulates *Shubha- ich'hâ* to impede ingenuity and prevents the consequences of actions. (3) *Tanu-mânâsa*: Subtlety of mind, which is necessary for real understanding. (4) *Sattva-âpatti*: Perception of reality. This allows an engagement with reality with proper understanding. The remaining states of consciousness are (5)

Asansakti: Freedom from leaning toward the world, (6) *Padartha-Abvani*: The disappearance of visible forms, and (7) *Turyaga*: The unmanifest.

The most salient characteristic of *Jnana* is that in order to truly perceive reality, we first must act with goodwill, reflection, and subtlety of mind. Without the proper development of these three *bhumis,* we risk misunderstanding situations and perceiving a false reality. The *Jnana* also draws attention to four <u>obstacles</u>: (1) *Laia* (inactivity, uselessness, laziness, lack of initiative and responsibility); (2) *Vikshepa*: distraction; (3) *Kashaya*: dullness; and (4) *Rasvadana*: enjoyment of practice. Overcoming these obstacles improves motivation and counters demotivation.

Jnana yoga*,* the path of yoga, has its own *bhumis*. (1) *Vikshipta*: the distracted state in thought and communication; (2) *Gatayata*: an approach to the past that traces the origins of life or things; (3) *Shlishtata*: a state of astonishment and constantly renewed recognition and interest in research; lastly, (4) *Sulinata*: the merging state which implies the dissolution of or detachment from fixed ideas and preconceived judgments and attitudes towards new learning.

1.2.3. New Concept of Divinity – New Spirituality

The new concept of divinity put forward by R. de la Ferrière (1972) is one of the most revolutionary aspects of his thinking and integrates all related concepts. With its corresponding causal and scientific base, divinity is fundamental to the profound vision of the Age of Knowledge. In his words: "The Supreme Cause contains two Divisions: (a) the Non-Manifest effect and (b) the Manifestation itself' (p. 283). This logical distinction is an aid to more precise understanding yet should not be taken to imply that the Manifest and the non-Manifest are two distinct but joined parts. Rather, they are a single, conjoined entity. He points out:

> God, in its infinite essence, naturally escapes analysis, but different manifestations of God can be analyzed with the purpose of leading the spirit to a better understanding of sacred matters. For this to be achieved, it is necessary to focus on a basic *epistemology of life* (p.414). [italics and translation mine]

He relates sacredness to an *epistemology of life*, an epistemology of universal application, of existence that is both integrated and diversified; and life to sacredness. R.

de la Ferrière (1978) states, "life in its deepest sense is a dominion of precious investigations that should be appreciated for its true value. Those things we call sacred are exactly those that contain the most life" (p. 503). The new concept of divinity includes an understanding of the sacred and forges a new and illuminating path for thinking, thereby implying for humanity a new way of life and a new way of feeling. This new subjective realization of universal existence also resides in scientific thought. In short, the new concept of divinity represents spirituality based on science.

1.3. Concluding Thoughts

I suggest that the current process of the transformation of education is aligned with the Age of Knowledge as theorized by R. de la Ferrière. To be part of the changing landscape of education, Robinson (2015) encourages an awareness of three forms of understanding: a critique of how things are; a vision of how things should be; and a theory of how to change. Overall, on how things are, positivism remains one of the main problems within education. The lack of recognition or misunderstanding of *spirit* as an essential part of every human being has led to aggressive and dogmatic ideologies. Spirituality has been reduced to an individualistic, egocentric fashion statement that serves an individual's needs and wishes. The vision of the Age of Knowledge provides a framework for a different world, a peaceful one that follows a cosmic imperative that is not subject to man's caprice. Science is understood as an unlimited sense of knowledge, and religion as a union of all conceptions. Additionally, science is aligned with all humanistic minds that witness the birth of a new consciousness. R. de la Ferrière presents *Yoghism*, a theory of change that includes *jnana* yoga, as a method for spiritual and intellectual development. This will lead to discovering the transcendental man who understands the world and transforms it with his transcendence.

Chapter 2.   Life and work of S. Raynaud de la Ferrière

R. de la Ferrière has produced an extensive and complex literature of synthesis and wisdom for the Age of Knowledge (Aquarius), ranging from science to art and from philosophy to didactics. I review relevant aspects of his literature in order to cast light on his perspective on the Age of Knowledge. For this study, it is impossible to exclude the work of his disciple David Ferriz Olivares. Under R. de la Ferrière's supervision, Ferriz translated some of his books from French into Spanish, and was also his exegete and biographer. There was a dual-relationship between R. de la Ferrière and Ferriz: the former wrote an extensive literature of *synthesis* and the latter extracted more than 100 themes and developed some of them from the perspective of the Age of Knowledge.

Apart from gaining several academic degrees, he was recognized by spiritual and initiation institutions as a High Initiate. Jardine (2006) posits *initiation* as equivalent to the ontological mutation of an existential condition (p.279). In this chapter, besides a short biography (with data from his writings and from the book, "The Retirement of Master Dr. Serge Raynaud de la Ferrière" by David Ferriz), I include his perspectives on science and religion; the Great Cycles and the Age of Knowledge; his approach to developing *Yoghism* as a sort of integrated explanation of yoga. I conclude with an analysis of his revolutionary new concept of divinity and its potential to integrate all religions.

2.1. Life of Serge Raynaud de la Ferrière

"I confessed having launched a movement with a new thought throughout the world, but I do not want this movement to proclaim the personage over his message." (YYY 506)

Serge Raynaud was born in Paris, France, in 1916. Early in his childhood, he exhibited high intellectual giftedness and innate abilities in science and art (painting). At 12 years-old, competing against participants from 15 European countries, he was selected to receive the "Ernest Rousille" award as Europe's best student. In addition to his academic studies, Ferrière also showed an interest in esoterism, occultism and yoga.

He recalled his teenage years in his book *Yug Yoga Yoghismo, a Mathesis of Psychology*, as follows:

> *At the age of twelve* I had already engaged in fasting. I had practised the insertion of needles in my flesh and the swallowing of knife-blade fragments and other sharp-edged objects, etc., etc. … I hid these interests from my family, who were ignorant of my experiments. I attain such success in my exercises of willpower with cats and caged birds that I could easily put my little friends to sleep in a few minutes. Rapidly, I abandoned feats of this sort because I realized that they were not correct. Even, at that time the difference between a YOGI and FAKIR was not clear to me. (p.18) [italics and translation mine]

Ramacharaka (1905) asserts that a yogi 'gets into harness' by controlling the body and mind through willpower in order to achieve spiritual realization, while a fakir is a mendicant, an exhibitionist who falsely claims the title of yogi.

At the age of 14, Serge Raynaud attended the University of Brussels and became absorbed in his university studies, for a while abandoning his other interests. Years later, he travelled to North Africa and the Middle East to deepen his studies of the esoteric. He achieved his first recognition as an Initiate in Egypt, and was recognized as a prestigious scientist upon his return to Europe. His *curriculum vitae*, published in 'His Circular III', lists his accomplishments in both schooling and spiritual matters. He gained several university degrees in about 15 years of schooling, including his first degree in mining engineering and several doctoral degrees, including in philosophy, medicine, science, and in psychology and theology. He also taught biological sciences at the university level. He was a well-known scientist worldwide, especially in the cities of Europe and the US. His theories and scientific previsions were proven and supported over time (e.g. the date of the disappearance of Atlantis). Relying on astronomy and geomagnetism, he ascertained that the new Age of Knowledge had its beginnings in 1948. He also asserted that over the course of the 20th twenty century the earth's magnetic pole was in the process of flipping from North to South. Furthermore, all of his astrological predictions regarding the Second World War were confirmed. In Paris on February 18, 1947, he established the International Group of Cosmobiology, which later became the *Fédération Internationale des Sociétés Scientifiques* (F.I.S.S). International Federation of Scientific Societies).

In this same year, he left his prestigious career as a scientist and writer to travel with his wife to the Americas. In Guatemala, he presented at a conference at the

University of San Carlos and conducted researched on Mayan culture. On January 17, 1948, he arrived in Venezuela and spent about a year and a half there. In Caracas, he founded another institution, the Universal Great Brotherhood: Foundation of Serge R. de la Ferrière [henceforth UGB or Foundation], which main purpose was to unite as one: religious sects, scientific, cultural, artistic institutions, humanitarian association and esoteric movements for intellectual improvement and spiritual re-education. He established an ashram, a spiritual colony, in El Limon, Maracay. He provided spiritual and intellectual activities to his first disciples and the community.

In June of 1949, he travelled from Venezuela to New York for the International Congress of Peace. He returned to his painting activity and wrote his Fourth Message: Science and Religion. On his 34th birthday, he left New York and travelled to Asia. He abandoned his regular white vestment and became a *sannyasi*, a mendicant, in India, with just two pieces of saffron fabric and a *lotha* (container to receive food as well as having other uses). He completed a pilgrimage to the Kumbha Mela in Haridward, India, on the banks of the Ganges in April 1950. He entered the waters there as a bather of a Supreme Category. From there, he journeyed over the Himalayas to the frontier of Nepal and continued his pilgrimage to Tibet. He went through Burma, Siam, and other countries in the Far East before settling in Western Australia for two years. In addition to various public activities, he focused on his doctrinal readjustment. He wrote the Fifth Message: Mysticism in the XX and also began writing *Yug Yoga Yoghism: A Mathesis of Psychology* and *Art in the New Age*.

After six years of travelling across five continents, visiting 43 countries, and delivering more than 2,000 conference addresses and undertaking countless cultural and spiritual activities to re-educate humanity, he returned to Europe on December 3, 1953. Ferriz (1985) states that this date marks the beginning of "His Retirement" that lasted nine years until his death in 1962. He did not cease working on his mission to re-educate humanity during this period. Rather, he withdrew from public activities and devoted his time to writing and revising his work. He cut his hair and removed his more spectacular spiritual adornments, opting instead for an elegant, contemporary, scientific look. For about six years he donned special cloths, including a complete cape. His outfit followed Initiation traditions (see illustrations in Appendix). In Paris, he registered his foundation with UNESCO and located the headquarters in Venezuela.

During this nine-year retirement in Europe, he dedicated himself mainly to his writing, consolidating and readjusting his thoughts. He finished writing *Yug Yoga Yohism: A Mathesis of Psychology*, *Art in the New Era*, and a series of 36 Psychological Purposes on various topics, in the process consulting more than 2,000 authors. He kept in contact with his followers by means of letters. He wrote 61 circular letters (published in three volumes) and a mass of private letters, in addition to other texts and articles. Of all the literature Ferrière produced, about 80 per cent was written during this period of his life. Furthermore, he renewed the bylaws of the F.I.S.S. and moved the headquarters from Paris to *Club l'Artistique* in Nice — a famous art center in the 1950s. In Nice, he was appointed to the board of directors at the Institute of Archaeology and Prehistory. A few months before his death, he was nominated for the Nobel Peace prize. He died on December 27, 1962. The government of France inaugurated an obelisk in his honour in Nice on May 23, 1981. It is located in the East Cemetery (Cimetière de l'Est de Nice).

2.2. An approach to his thought

The literature of R. de la Ferrière is complex, and was written for both an esoteric and an exoteric audience. Bryant (1994) explains the main distinction between eso- and exoteric knowledge is that only those initiated in a particular tradition or having achieved a certain level of spiritual development have access to esoteric or higher teaching. Urban (1997) writes: "Derived from the Greek term *esoteros*, *esoteri-cism* refers to what is 'inner' or hidden, what is known only to the initiated few, and closed to the majority of mankind in the exoteric world." (p.1). By contrast, exoteric knowledge is accessible to all and a part of the religious life of humankind. As Dumsday (2017) puts it: An exoteric religion is one of the doctrines and practices which are generally known to adherents and to outside inquirers. Esoteric religion is one whose doctrine and practice is to some degree kept hidden, reserved for a select group of adherents, and kept away from outside inquirers.

R. de la Ferrière (1973) explains that exoterism is nothing more than an *image* and relies on figurative means (e.g. parables) to enable the profane to understand the great problems. As to esoterism, he thinks that it is open to everyone: "Seek and you shall find." Thus, according to him, the common idea that esoterism is reserved for the privileged few (instructors, masters and initiates) is false. He asserts that in order for a

person to have access to esoteric knowledge, it is necessary for him or her to make an effort to understand the meaning hidden in the great teachings. Not all great truths can be fully disclosed. An old adage states: "Do not cast pearls before swine". Indeed, the good judgment of people is often missing (p.37).

2.3. A view to Science and Religion

Science and religion have reached a point of separation. R. de la Ferrière (1973) posits that regardless of religion's efforts to follow scientific norms, science continues to reject religion, since faith cannot be interrogated with reasoning or analysis. He believes the strength of religion resides in its immutability but that it cannot ignore scientific discoveries (e.g. the age of the earth). Accordingly, religion needs to vary its teachings to accommodate new discoveries, for instance, the transformation of species. The laws of metamorphosis are the principle of life. Is not religion life itself manifested in its higher form, that of the spirit? In the past, religion has undergone dramatic transformations. However, when men adopt new rites or conceive of new religious forms, they do not realize that the religion in essence remains the same, only with new trappings better suited to people's spiritual and intellectual needs. In essence, the underlying Great Traditional Religion is continuous and united under the same esotericism. In practical terms, there is more than one religion, but all of them rest on the same basis and principles. The difference between one and the other is in accordance with external conceptions of time and place (p.55-56).

We evolve through the complexity of our contemporaneous ideas about science and religion. There are tensions between the radical positions rooted in concrete data and the materialistic basis of science and the traditional and spiritual approaches of religion. In other words, objectivity and subjectivity have produced atheists and religious fanatics. The need for a balance between analysis and faith is urged. This was a major concern of R. de la Ferrière, who reminds us that the synthesis of science and religions has produced great civilizations in the past (e.g. Roman Empire, Ancient Egypt, etc.). As a result, human decadence becomes more marked. However, the inversion of this situation has not yielded superior results. Accordingly, synthesis is the ideal.

2.4. The Great Cycles, the Precession of Equinoxes and the Age of Knowledge (Aquarius)

The great religious cycles, those lasting approximately 2000 years, are determined by the precession of equinoxes and interpreted in terms of the premises of religious astrology. R. de la Ferrière (1973) emphasizes that this type of interpretation differs vastly from regular astrology and horoscopy. All astrological expertise is based on two factors: one on mathematics (depending on astronomy); and the second on the interpretation of data. Astrology works like all other sciences. For instance, in medicine — right after a medicine is proved to be effective — many people obtain prescriptions. This type of social behavior affects traditional medical practice. However, it has taken centuries to arrive at the current interpretation of astrological signs. R. de la Ferrière states that "the sky is a book open to the intelligence of man." Likewise, de Santillana and von Dechend (1969) state that astrology has provided man with a continuing *lingua franca* over the centuries. Among esoteric schools of thought, astrology postulates an inextricable relationship between macrocosm and microcosm, which is also discussed in the literature of R. de la Ferrière. He hypothesizes that humans have not always been as insulated from their surroundings as they are today; and compared to the great civilizations (e.g. Incas, Mayas, Egyptians), we are far from an awareness of the correlations between celestial and terrestrial phenomena.

In the history of humanity, we find several great thinkers who were astrologers (e.g. Aristotle, Galen, Plutarch, Kepler, Saint Thomas Aquinas, Albert Magnus). The science of the planets is fundamental to institutional systems. R. de la Ferrière (1973) stresses that all hermetic philosophies, sects, and religions are based on planetary symbols (p.67). For instance, in the cycle of Taurus (4320 BCE to 2160 BCE), people worshipped a number of bull deities. Primarily they worshipped Apis. A horned tiara indicative of divinity was predominant in the Middle East. Diana of Ephesus was adorned with a bull's testicle to demonstrate her divine spirit. This was also the age of the Minotaur and the bull's dances of Crete. Bull cults were pervasive throughout most of Eurasia. In India, the god Govinda was the Lord of the Cows and Parjanya was the Bull god of the Vedas. In Egypt, Memphis was the centre of a powerful bull cult, and the Egyptian city of Heliopolis was identified with Hathor. Hathor is depicted as a cow goddess with a sun disc in the middle of her horns.

The great cycles and the precession of equinoxes seem to have been known for a long time. The transformation of religious expression, and our deeply held beliefs, coincide with ancient traditions. A major characteristic in preceding ages was the *living symbol or* archetype: an instructor for the current age. Several esoteric institutions recognized R. de la Ferrière as instructor for the Age of Aquarius and as a *Maestre* (guru of gurus). Amao (2016) disagrees and recognizes Carl G. Jung as the prophet of Aquarius. There are others who refuse recognition of R. de la Ferrière in this capacity, but I leave this topic for other researchers.

R. de la Ferrière (1973) explains that the symbol of Aquarius is found on an exceptionally handsome young man called Ganymede who resides in heaven. He pours a pitcher of water that flows in two parallel streams and eventually diffuses throughout the sky. He interprets this image as the ideal of justice that each soul aspires to obtain and should expect in the age of Universality, in which each value is available to all. In Greek mythology, the Trojan prince Ganymede is pouring a bright current into the sky, symbolic of the Milky Way. The overall condition of the cycle of Aquarius is abundance. R. de la Ferrière states the two wave-like lines in the glyph of Aquarius represent the two polarities necessary in all things fecund: science and religion. The two distinct and separate waves indicate that faith is not explained by scientific positivism and subjectivity does not have to intervene. Each wave can exist simultaneously as two parallel bands (p. 388). After all, Aquarius is an age of knowledge, true research, understanding, tolerance and peace.

However, the history of humanity is not divided into equal fragments, and astronomical seasons do not always begin on their expected dates (it is well known that winter begins in the spring as summer gets extended into the fall); passing from one age into another is not a *sudden renovation*. As with anything organic, it emerges through a process, or the *transitional period* I discussed in chapter one.

R. de la Ferrière (1998) attempts to explain what it means to be living in the Age of Aquarius. In several cases, he attempts to demonstrate the dramatic changes occurring in society through his Circulars to all members of his foundation. He also presents the tendency to employ new methods in all fields of human activity as a strategy to homogenize systems. For instance, he wrote that British weather forecasts replaced the Fahrenheit scale with the Celsius in October 1962. The switch allowed for

greater international co-operation because the weather forecasts became more accessible to the general public. The spontaneous and altruistic nature of the switch (from a synthetic perspective) led R. de la Ferrière to attribute the event to Uranus (p. 247). He repeatedly emphasizes the need to observe the breakthroughs in all fields of human thought, as these will guide people to live up to the expectations of the conditions we are living in. Careful investigation of the continuous transformations of the past 70 years leads to predictions about further Aquarian innovations, which will be avant-garde expressions of the human race.

R. de la Ferrière suggests creating a "Third Front" or a "Spiritual Line" to be aligned with the cosmic imperative of the Age of Knowledge. A "spiritual line" is a force stronger than all the conventional forces of abject materialism, in which both scientific and spiritual principles emerge as solutions to a problem. Science should not be understood as the domain of the privileged in the world or for supporting personal interests; and spirituality is not to be equated with income for religious sects or with fanatical dogma and doctrine. It is necessary to eliminate religious and scientific dogmatism in order to forge a new path for holistic collaboration in this Age of Knowledge.

To sum up, it is undeniable that astrology has lost the value it once had in medieval times (i.e. with Paracelsus and later Kepler). However, Campion (2016) theorizes that the current popularity of astrology constitutes its second revival. In 2001, astrology was rehabilitated at the Sorbonne in Paris when astrologer Elizabeth Teissier was awarded a doctorate in sociology for her work in demonstrating the scientific qualities of astrology (Hoock, 2004). Campion (2016) warns, though, that in spite of the lack of research in the area most sociologists consider astrology a matter of 'belief', and astrologers as 'faith-driven.'

Regardless of these reservations, R. de la Ferrière was a recognized scientist worldwide as well as an astrologer. Yet astrology was not the central theme in R. de la Ferrière's work.

2.5. Yug, Yoga, *Yoghism*

The science of yoga is central in the literature of R. de la Ferrière. He begins one of his most important books, *Yug Yoga Yoghism: A Mathesis of Psychology*, by stating:

> It may be useful, before undertaking any discussions of Yoga and due to the complexity of this subject, to make an essential remark: This work will examine a matter which relates to ontological **self-realization** as well as to the employment of dialectics, theoretical discourses of thought and Science itself (p. 17). [This is my translation and R. de la Ferrière's emphasis]

He shows that yoga has not been satisfactorily researched, despite the large volume of studies on the subject. Ferrière opines that the inaccessibility of the classic treatises on yoga is one reason for the lack of inquiry. The texts are written in Sanskrit and popular writings frequently emphasize the technical details or are so simplistic as to repel intellectual and well-balance readers. In order to provide the most precise explanation of yoga, he develops the concept of *yoghism,* based on yoga's traditional basis in the active and *thinking* world. Yoga means 'union' and *yoghism* serves as a proper explanation of yoga. Some yogis strongly discourage students from asking theoretical questions. Guru K. Pattabhi Jois famously states: "yoga is 99% practice, 1% theory" (Helberg, Heyes and Rohel, 2009). The risk that yoga might become a divisive sect or religion also prompted R. de la Ferrière to develop *yoghism*. Yoga is already divided (Hatha, Karma, Bhakti, Jnana, etc.), but he argued that each form is indispensable and there is no reason to separate them. Consequently, the concept of *yoghism* contains no subdivisions. It is SYNTHESIS. His purpose in developing *yoghism* was far from creating a new philosophical school. He says:

> I call my study *Yogism*, and this may displease many students who prejudge in the same way I did in former times, because of another ism. I choose this name precisely because, although much has been written on yoga, I was not satisfied with many of the explanations that partially presented ideas … I wish to present a doctrine that is neither new nor renewed and is systematically expounded (p. 22). [italics and translation mine]

Yoghism is a doctrine: a system of personal realization, spiritual perfection, and spiritual elevation that is necessary to document yoga as a system. It allows for the realization of *yug*, or identification. He claims that *yoghism* is about something logical,

tangible, efficient, and complete. Yoga renews an organism through physical and psychic exercises relating to our existence. It is also a mental discipline that directs our spirit towards a well-balanced mysticism that is based on personal experience in the total realization of the Self (both in the incarnated and the eternal and universal form). Furthermore, R. de la Ferrière (1978) connects *Yoghism* to Jnana Yoga. Jnana Yoga is the path of knowledge, work, and study and betokens a life based on the rational study of scripture, science, etc. (p. 475). The Upanishad (ancient Veds sacred texts) proclaimed the superiority of the jnana yoga.

In order to practice any type of yoga, it is necessary to observe eight elements (known as limbs), and any person who wishes to rise above an animal condition should do so. Each of these limbs reinforces the others. They are: (1) *Yama,* abstinence (2) *Niyama*, rules of life (3) *Âsana,* body postures (4) *Pranâyâmâ,* breath control (5) *Pratyâhâra,* control of organic sensory perception (6) *Dhârana,* meditation (7) *Dhyâna,* concentration; and (8) *Samâdhi,* identification. There are various interpretations of these limbs. The first two are known as the *yamas,* and are mainly concerned with universal morality (Showkeir and Showkeir, 2013). The practice of yoga requires a great deal of discipline and commitment to improve the human intellectual and spiritual condition. I will briefly discuss the eight limbs in light of Raynaud de la Ferrière's interpretations:

(1) *YAMA*: Abstinence. Everyone practises abstinence in some form (from killing, stealing, lust, etc.), Nonetheless, R. de la Ferrière's points out that people's consciousness seems to be too elastic, and rather provides reasons to allow satisfaction of vices and passions. As a science, Yoga should be observed rigorously. For instance, abstinence from killing includes humans and animals. The simple act of accepting the meat of sacrificed animals is the same as being an accomplice in a crime. The act of buying and eating meat also involves a sense of responsibility.

Most people haven't adapted to the first step of wisdom, either in the spiritual or material sense. *Yama* is just a precaution against degeneration of human faculties. It is the starting point of the evolution towards self-improvement. R. de la Ferrière emphasizes the well-established nature of the cosmic laws and that the violation of such a perfect order means humanity is heading towards loss. It is interesting to note the number of people who label themselves as serious and disciplined yoga practitioners and yet who say that they eat only 'organic' meat and are just social drinkers.

(2) *NIYAMA*: Rules of life. These rules begin with inner and external purification. R. de la Ferrière claims that the spirit of unity that exists in the world vibrates in different tonalities and generates animal, vegetal, mineral, human, and superhuman kingdoms. If one of these kingdoms is distracted, it will provoke disequilibrium at a higher level. In other words, if human beings focused on constructing as opposed to deconstructing, we would be living in a different world.

He points out that the consumption of tea, coffee, nicotine, marijuana, etc. reveals a man's inferiority complex. This is expressed in a loss of control that is unfortunately interpreted as human rights and supported by medical doctors. R. de la Ferrière hypothesizes that humans replicate the stupid actions of their contemporaries by reducing themselves to the status of animals by eating meat and escaping boredom through alcohol and narcotics. The purification of *niyama* is not limited to healthy nourishment. The individual should also master his/her habits. Controlling thought is difficult, but it is not possible to reach spirituality without the capacity to *think correctly*. What is *correct thinking*? The freedom of a person ends where that of another person begins. The inner and outer purification of *niyama* are a necessary discipline for followers of any philosophy.

To summarize, *niyama* consists of studying science, purity, austerity, and efforts to achieve perfection. Morality emerges naturally from these practices and manifests itself without the need for analysis of a perfect behaviour. Once an individual has achieved *yama* (abstinence), he or she continues to the rules of life, or *niyama*. As a life synthesis, one is a consequence of the other, and neither is a dogma!

(3) *ÂSANAS*: Positions of the Body. R. de la Ferrière argues that âsanas should have a *raison d'être*. Man adopts 84,000 different positions and yoga has chosen 84 of the most important. The time devoted to practising breathing and adequate concentration is necessary if effective results are to be achieved. Through the exercise of biological and psychological control the body may be possible of greater evolution. Everything related to body postures requires the action of glands, leading to perfect equilibrium that manifests itself in the body, and later the psyche. *Chakras* represent the emanation of the endocrine plexus. The medical specialization of endocrinology claims that everything proceeds from the functioning of the endocrine glands; but this

phenomenon has been known for several thousands of years. Also, the science of psychoanalysis is based in the study of the glands and their interference patterns.

(4) *PRANÂYÂMÂ*: Breath Control. R. de la Ferrière emphasizes that the various exercises that exist could be dangerous without the guidance of a well-trained practitioner. The unusual breathing rhythm may produce physical disorders and concentration on subtler points may expose the beginner to mental challenges. He recommends doing psychophysical exercises before undertaking the most elementary breath control. All things are composed of *AKASHA* and *PRANA* (ordinary and subtle body), the physical and the spiritual. For instance, when we eat a spinach salad, the visible green leaf produces matter for our physical organism, but the vitamins will be the source of supra-physical energy. The lack of *prana* manifests itself in the absence of energy.

(5) *PRATYÂHÂRA*: Withdrawal of sensorial organic control. As stated in the Yoga Sutra of Patanjali, (Sutra 2.54), *Pratyâhâra is when the senses withdraw themselves from the objects and imitate, as it were, the nature of the mind.* R. de la Ferrière argues that 'withdraw' is not a proper conception of *Pratyâhâra*. He defines it as "**control of sensory perceptions**", as there is a great difference between suppression and control. He perceives his reaction to this well-established concept as a result of his birth in the West and wonders whether the Ancient Great Masters meant a mastering of the senses and emotions rather than the radical rupture of them. I quote:

> Truly, I do not believe that it is necessary; even in the most spiritual sense to `suppress' organic functions that have been placed at the disposal of our spirit for its evolution towards perfection. Traditional yoga asks for the complete absence of emotions and even of sensations, while according to my reform principles (and this is why indeed I used the word *Yoghism*), I think it is more acceptable as well balanced to adopt exercises for controlling our senses (p. 53). [italics and translation mine]

R. de la Ferrière alludes to phrenology as one of many considerations in support of his hypothesis. Phrenology has had a major effect on the development of neuroscience. It views intellectual abilities and personality traits as localized in discrete regions of the cerebral cortex (Gross, 1999). If we supress a sensation, it is equal to 'cooling' one of these centres, particularly one that corresponds with a sense or emotion. Consequently, if a sensory perception ceases to exist, its emanative functions are promptly obstructed, the nerves atrophy, and more serious psychological effects result.

Therefore, he proposes 'to transmute', or transform and master the sensations. It is better to teach control of emotions rather than eradicating organic sensorial perception. He also remarks that 'suppression' might be an aggressive act and, hence, not within the realm of a yogi.

The idea of supressing perceptions would involve eradicating them and we may need them later as we continue to evolve. The underlying goal of controlling sensation is to avoid mental arousal from our senses. For instance, suppressing the sensation of pleasure while `touching' something eliminates part of our existence because we would be less motivated to form material objects. Also, it would be impossible to distinguish whether a plate was smooth or rough. Before undertaking sensory "suppression", R. de la Ferrière suggests seriously analyzing the causes and effects. Unconsciously suppressing senses of smell and taste compel people to naturally eat meat, drink beer, wine, and other alcohol, smoke, use drugs, etc., thereby ruining their health and progressive evolution. It is not natural for a human being to progressively kill his or her body with toxins found in animal flesh, nicotine, and other noxious products. In doing so, people are actually suppressing the entirety of their being because they are unconscious of their faculties. R. de la Ferrière concludes that people should live naturally. By that he means not solely following their instincts, but with human consciousness.

Before analysing the three last limbs: *dhārana*, *dhyāna* and *samādhi*, I wish to highlight two points: first, the practice of yoga begins with the elementary limbs (*yama, niyama), and* several years of practice with *(pranâyâmâ*, âsanas *and pratyâhâra*) are necessary before practising *dhārana, dhyāna, and samādhi*. Second, according to Patañjali, *dhārana* is concentration and *dhyāna* is meditation. By contrast, R. de la Ferrière views *dhārana* as meditation and *dhyāna* as concentration. As I am introducing *yoghism,* I will continue with R. de la Ferrière's terminology.

(6) *DHĀRANA*: Meditation. *Dhārana* is fixing the attention on an object (subjective or objective). This attention needs visualization around the object and not motionless attention. *Dhârana* prepares the concentration (*Dhyāna*) that will unite the object and the subject to become enlightened in terms of universal consciousness (*Samādhi*).

R. de la Ferrière observes that many people talk about their meditation and concentration with little understanding of the true meaning of these practices. They also

use the terms interchangeably. Mostly, they use meditation and concentration to mean a vague dream or fantasy that could become a kind of pseudo-mysticism that not only demonstrates a lack of mental balance, but could also be dangerous to practitioners and those around them.

He stresses that a pure feeling of kindness and a wonderful expression of kindness is not sufficient in the meditative process. A special state of consciousness and a deep knowledge of the laws of physics and of biological and philosophical mechanisms are required in meditation. If meditation is practised without proper intellectual knowledge, there is a danger that one's fertile imagination will produce the most unexpected phantasmagorias. R. de la Ferrière advises that meditation should be directed towards well-defined material objects. He gives the simple example of a pencil as an object of meditation. He recommends visualizing the wood that has gone into the making of the pencil. Then, visualize the tree from which this wood was obtained, and so on. Once the brain becomes accustomed to this type of exercise, it will be easier for a person to meditate on things of greater importance.

 (7) *DHYĀNA*: Concentration with no allowance for distraction. Meditation involves intense, focused thought toward an object. While concentrating, thought becomes one with the object. Once the object of concentration is chosen, there is no past, present, or future; no analysis, problem, or solution. The person becomes the object itself by means of thought. In the physical world, if we judge an object by its form, weight, smell, etc., we are limited by the five usual senses. Within the domain of meditation, however, we concentrate our spirit completely in the very essence of the object. We escape from its form, weight, smell, etc. In a way, we are incorporating ourselves within it.

Dhyāna is by no means self-suggestion. It can emit a strong vibration from the act of visualization to the point of materialization. Some receptive people put themselves in a trance and materialize, for instance, bloody stains on their bodies, similar to the those that appear on the image of Christ. The stains appear only after a long period of contemplation. Hence, *dhyāna* is not sensory illusion but the perfect contemplation of vibratory essence. It is not the purpose of *dhyāna* that practitioners incorporate themselves within a thing, but rather that they vibrate at the same universal tonality as it does in order to find the Path towards the absolute. The regular practice of concentrating

undertaken by some people in order to obtain something (get a job, date, etc.) is a very different exercise from *dhyāna*, the concentration practised by a yogi. The Yogi has a spiritual goal.

(8) *SAMĀDHI*. Identification. This is the final state among the eight limbs. It is the only genuine experience. R. de la Ferrière is clear that *Samādhi* is not a reward and cannot be compared to paradise or nirvana; nor it is a state of consciousness. In the universal sense it is the real plane of eternity. It is the identification with the Great all, with Eternity, with the Universal in the Immutable. It is **Union** of the Ego with the Present. Those who have experienced *Samādhi* do not wish to return and consequently offer their experience to others. R. de la Ferrière was one of the few who returned, despite his wish to remain in such a state of beatitude. He recalls having realized that he had a mission to re-educate humanity, but avoids answering letters to his disciples who inquire about his *samādhi* experience.

The realization of the first limbs, especially *yama* and *niyama,* can be very beneficial to everyone; especially if this is achieved with discipline and perfect balance, and without dogmatism and severity. Otherwise, such attainment can lead to spiritual dictatorship and fanaticism of the sort regularly found among people who hold fast to abstract spirituality. Given these points, I focus on R. de la Ferrière's proposed changes -- from the subjective to the objective -- in the practice of meditation. This approach runs counter to the regular practice adopted by others that lead from the dense to the subtle. If we meditate on the inside of a rose, following R. de la Ferrière approach, we first subjectively consider its beauty, its meaning, etc. The value of the rose is accumulated in our subjective thought. Then, focusing on the rose, we can identify its reality – that is, we move from the subjective notion of the rose to its objective reality. Therefore, a depersonalization arises with concentration, in which we are not the subjective center. Rather, it is the rose, the subjective centre, the centre in which we identify ourselves.

2.5.1. Psychical training – Pre-yoga

In his last book, *Physical Culture and Judo*, R. de la Ferrière (1975) develops a set of *psychophysical exercises*, mainly based on *hatha yoga*, with likely health benefits such as   balance for the entire endocrinal system, a healthy and flexible spine, increased lung capacity, and improved bodily flexibility. These exercises also awaken

the neuro-fluidic centres associated with the *chakras* that expand individual consciousness and elevate understanding and spirituality.

These exercises can be practised by persons of either sex or any age. They are active, but mildly so, and brief (30-40 minutes). In the introduction to the book, Ferriz argues that this set of exercises, besides being physical, is part of *grathasta*[3] yoga. Several researchers (including myself) have noted that the physical, mental, emotional, and spiritual benefits become apparent within a short period of time.

2.6. The New Concept of Divinity

One of the most revolutionary aspects of R. de la Ferrière's Age of Knowledge is his new concept of divinity. Vitsaxis (2009) observes that the meaning of the divine or god within a religious framework differs from its meaning within philosophical systems, but there are common features to both. The divine is conceived as a 'supreme' essence with a fundamental and determining role in the universal physical-mechanical and moral world. It is both structure and harmony.

R. de la Ferrière (1973) states: "The Supreme cause [namely, Divinity or God] consists of two Divisions:

a) The Non-Manifested Effect

b) The Manifestation."

Ferriz (1980) explains that the mentioned division R. de la Ferrière claims is a matter of didactic convenience for pedagogical purposes. We can perceive a subtle exactitude that the two divisions simultaneously form the whole. Thus, we comprehend that there are not two separates, if close, parts but one reality. The apparent division allows us to progress mentally from analysis to synthesis of one integrated vision. Ferriz points that this represents a superior form of thinking that surpasses logic, which entitles the Revelation of Truth, the conscious identification, of the only no-illusion, no-error experience, and the real life-experience (*vivencia*) of essential truth (p.163 - 164).

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[3] Method of complete perfection, which employs exercises, body training, and attitude-setting for the purpose of personal reintegration (YYY p. 455).

R. de la Ferrière's concept of divinity replaces various other conceptions of divinity. For instance, Vitsaxis (2009) claims that Aristotle observed the effects of the laws or the influence of natural causes. The divine and the natural are interwoven and commingled to become synonymous with each other (p.343). In other words, as Ferriz (1980) synthetizes, there is a first and fundamental cause, a privileged 'why' provided by a rational essence. The Cause is the principle of intelligence. Vitsaxis (2009) comments that Plato's doctrine is more complex than Platonic religiosity and nearly all forms of religion may be attributed to Plato. Plato differentiates divinity and god and makes the distinction that divinity can be shared by an infinite number of beings.

St. Thomas Aquinas (1225-74) argues that eternal truths or the universal laws within God can be internally produced by natural effects. Therefore, God is the true First Cause (Ferriz, 1980). God is eternal power through causality (Rocca, 2004). Mary Florence Fitch (1875-1959) perceives there is not a personal God, but a first, impersonal cause, or rather 'all is divinized.' In her writings, Fitch emphasizes that religion still divides us.

The patristic discussions of Scholasticism regarding the identity of God and Divinity guided interpretations based on tri-theism: God the Father, God the Son, God the Holy Spirit (Ferriz, 1989, Vitsaxis, 2009). In classical metaphysics, Divinity is defined as the cause of itself (*causa sui*). It is a necessary and self-sufficient entity. Auguste Comte (1798-1857) believes causality is a productive force or agent surpassed by science. McClellan (2001) considers Comte's understandings of the conditions of existence as a basis for a non-teleological form of explanation and a properly scientific alternative to the metaphysics of final causation. Comte claims that the doctrine of Providence or 'final causes' regards the universe as 'subordinated' to the earth; and the earth, in turn, is subordinated to humanity. This notion of 'subordination' refers primarily to the causal order, suggesting that the final causes are not informative or explanatory, but are simple *a priori* truths. Ferriz (1980) notes that Claude Bernard (1813-1878) claimed that the obscure notion of cause should be confined to the origin of things, namely when one refers to the first or Final Cause. Science should rather consider the notion of 'relations' or 'conditioning.'

Max Weber (1864-1920) likens causal components to a condition of possibilities. For Weber, causal adequacy is achieved whenever conditionality plus some small

statistical relationship can be shown, and the descriptive categories can be drawn from any source (p. 24). By contrast, Turner and Factor (1981) argue that generalized theoretical categories are essential to the proof of causal relationships. The concept of divinity in Kantian terms is reciprocal in relationship; causality is likely a game of mutual relations. Locke held the causal principle to be "a true principle of reason," a proposition with factual content but not established by external causes (Bunge, 1971).

Contemporary disciplines have not given divinity much attention in terms of cause and effect. The new concept of Divinity expressed by R. de la Ferrière leads to an *onnimodus* (of all) and unifying relationship with all systems of thought. The different thought systems depend mainly on their structure. From the Aristotelian conception belief, in a first and fundamental cause to the other extremes, that sees conditionality as causative element, and that this has implications for education and for various disciplines (Ferriz, 1980 p.168).

The primacy of relationships not only destroys former absolutes (time, space, matte, motion) but causes problems for the traditional concept of cause and effect (Smith 2016). Citing Bachelard, Smith demonstrates the accuracy of probabilities compared with the mechanistic law of cause and effect: "science teaches that there can be a convergence of probabilities, that the cause and effect relationship is probabilistic instead of deterministic" (p.29). Ferriz (1980) claims that the sense of conditionality is the most modern idea of causality. He argues that if the idea that "[t]he Supreme Cause contains the Non-manifested effect and the Manifestation" is approached by someone who has studied the modern criterion of conditionality and tries to substitute that principle of causality for the principle of conditionality (everything that happens is in function of the sum of relations) perceives that the principle of conditionality permits us to understand the principle of causality. Hence, R. de la Ferrière's 'Supreme Cause' has value even when the attempt is made to replace it with the principle of conditionality, because the latter does not deny the former. Conditionality seeks to expresses itself relationally (p. 168 - 169).

With regard to another aspect of the new concept of divinity, R. de la Ferrière (1973) expresses the essential equality of the Non-Manifested Principle and the Manifested Principle. However, for conditioned beings, there is a difference between nature and state. R. de la Ferrière acknowledges three inseparable levels that constitute

the universe: (i) the Archetypal or Divine World; (ii) the Macrocosm, corresponding with Nature; and (iii) the Microcosm corresponding with Man. These three levels are differentiated by their peculiar characteristics. The metaphysical Absolute (archetypal) takes human beings beyond the limits of explanation. To compensate, R. de la Ferrière focuses on the second principle, Macrocosm. Macrocosm defines nature as either the shrub or the galaxy, applying to both fatality and cosmic forces. The Macrocosm manifests Nature to man and serves as an ancillary to reach God (p.285). R. de la Ferrière highlights what our rationale cannot admit—that our Cosmos is a unique manifestation. He states:

> What our logic cannot admit is that our Cosmos is a unique manifestation. If nothing could substitute it [cosmos] it could be as if Naught had existed before our cosmic cycle and should reign eternally after… Thus, nothing can enter or leave from Naught because it will lose its own character. Therefore, *if the rhythm of manifestations is eternal, the same is with God;* out of which nothing can exist and in whom resides Unknowable (The Essence- One that is not vitalized) because the Spirit-Life is the Manifested God (p. 285). [italics and translation mine]

Ferriz (1980) notes that methods based on experimentation and mathematics, both formal and dialectical, are not broad or profound enough to express everything. However, mathematics and symbolism lead the spirit further than logic does. Both approach epistemological issues. Complete knowledge of evolution and involution, which are complementary, serves as an avenue for understanding the unity of the cosmos, which has no beginning or end (p.171).

R. de la Ferrière (1973) explains that the "celestial sphere mostly is recognized as the divine manifestation of nature" (p. 285) in the Nature macrocosm. The celestial sphere has consistently exercised power over human consciousness. Humans recognize (entertain) the possibility of a superior being or reality with superior possibilities, understandings, or power in the notion of the unreachable, such as the stars in the night sky. Consciousness of human material limitations is also realized in the inescapable fate of death.

With regard to the third level, the microcosm corresponding to a man, R. de la Ferrière (1972) claims that the microcosm (the small infinity) encompasses the summation of the Universe. Moreover, humanity represents complexity in terms of its potential for power even when its physical power seems so insignificant. According to

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him, occultists deeply understand the powers that overcome the understanding of 'reasonable' people. In general, depending on the capability of their physical senses, humans only perceive aspects of the inconceivable vibrations of Divine Breath, or Spirit-Life. The senses of man, unable to capture the high frequencies of the original source, detect only muffled vibratory forces, classified as Matter (p 290).

We can think of the physical senses as channels funneling fundamental information to the human brain. This information aids in constructing intellectual cognition, in understanding realities that escape our senses and our disorganized minds. Furthermore, R. de la Ferrière posits that single-principle understandings are insufficient. If a mineral has only one principle (physical), it is because *Life-included* knowledge acknowledges it; while in the Vegetable, there is the physical and astral. The Animal Kingdom holds the physical, the astral, and the mental (led by instinct). He argues that the Exterior Life (collective consciousness of the species) – exclusive of human beings — is conscious of the Principles (that is, it possesses self- and individual consciousness (p. 291).

Therefore, science and experience are necessary in educating our thoughts. They sharpen our senses, body, and mind by consolidating the organism (the body) that serves as a vehicle for superior forces shaping and expanding living-experience (*vivencia*). The three principles, archetype, microcosm, and macrocosm, are dynamic and when integrated serve as the culmination of the formation of cosmic self-consciousness. R. de la Ferrière (1973) assures us that there is a Trinity and Unity in Man, as well as in God, referring to the doctrine of the three principles (Trinity into Unity) as the basis of esoteric teaching. He concludes by emphasizing the intimate connections among all things. The indissoluble Trinity is active within all things, from the three Principles of the Universe (Archetype, Macrocosm and Microcosm) to the three levels contained within each Principle (p. 290).

The new concept of divinity can be used to compare religions in their essence. R. de la Ferrière (1978) states: "if we understand that the world does not begin with the manifested-God, then we lift the veil of superstition conjured by decadent religions, which obscure the profundity of knowledge in the Cosmic Laws, which in turn unify the real philosophical principle as the Unity of Eternal Truth" (p.22). Father, Son, and Holy Spirit correspond to Brahma, Vishnu, and Shiva in Hindu Mythology, and to Horus, Isis,

and Osiris in Egyptian legend. On page 23 of the YYY, he observes (and I quote in full, due to the importance of this statement):

> LIFE-FORM-THOUGHT! This is the converging point or the end of all investigation! The TEM-SHU-TEFNUT of the Egyptians corresponds to this tri-unity (instead of the Horus-Isis-Osiris myth) and to God the Creator, Natural and Manifested in the great mystery of:
>
> LIFE: (instead of the anthropomorphic God the Father, which limits authentic concepts) and hence to:
>
> FORM, which appears periodically in order to materialize the Divinity as a concrete emanation of Life's Essence and as a Real Avatar (Messiah):
>
> CHRIST as Master Jesu (instead of the historical Jesus who is constantly exposed to criticism) and as spiritual realization, and thence to:
>
> THOUGHT, Eternal and understood as a state of universal consciousness (instead of a hypothetical Holy Spirit) [My interpretation and translation.]

In relation to the new concept of divinity, R. de la Ferrière (1973) states:

> God in its Infinite Essence naturally escapes analysis, but different manifestations of God can be analyzed with the purpose of leading the spirit to a better understanding of sacred matters. For this to be achieved, it is necessary to focus on a basic *epistemology of life*. (p. 414) [italics and translation mine]

The innovative thoughts of. R. de la Ferrière are distinctive. By basing his analysis of God on the *epistemology of life,* he illustrates his vision of epistemological thought and analysis and indicates the progress of the spirit and knowledge of the world. He believes Eternal Thought is universal consciousness, instead of a hypothetical Holy Spirit. He views the Holy Spirit as an hypothesis derived through analysis but not yet verified.

R. de la Ferrière (1978) supports science as unique, necessary, and sufficient in the pursuit of the intelligibility of things as well as of Truth. He summarizes by stating that "to know has no other meaning than the scientific method" (p. 33-38). His understanding of science is in the "unlimited sense of Knowledge." He assumes that science is the knowledge of official and the so-called occult (p.75). In other words, science that embraces both of those subjects taught at universities and others that are not yet part of the curriculum (i.e. alchemy). Therefore, scientific development will lead to progress of the spirit and of knowledge.

In R. de la Ferrière's view, limiting God to a single word should be discouraged. Worship of an unknown should be replaced by the realization that we are an emanation of the Great All, a part of the Universal Body. To be unified with this Principle is the attainment of communion with Eternity. By way of clarification, R. de la Ferrière (1978) states that he has no intention of criticizing organized religions, and he constantly defends order and discipline. He agrees that the aspirant who seeks solace in the Supreme Being (in any religion) but does not experience an immediate state of beatitude should be free to go wherever and whenever he wishes. His conception of religion (from Latin, *religare*, reunite) cannot be understood in a theological sense but lies in the general reunion of Wisdom from all doctrines. Also, R. de la Ferrière believes in the indispensability of intellectual cognition in elevating our spirit through the universal mechanism of pure inspiration. The objective and positivistic root of science (or knowledge) is the foundation for building the subjective desire to reach God (p.75).

The new concept of divinity represents a great transformation of traditional views. The definition that "The Supreme Cause contains the Non-manifested effect and the Manifestation" dissolves the barriers between spiritualism and materialism, unifying both in an embracing concept. This concept makes possible further new concepts and a profound transformation for the Age of Knowledge. To summarize, R. de la Ferrière's new concept of divinity is certainly not a conversion: it is, as Ferriz (1980) states, his thinking about the spiritual culmination of men's experience, which latter could be likened to a stepped helix (p.179).

2.7. Concluding Thoughts

Yoga as a method of intellectual and spiritual development has a special place in the literature of R. de la Ferrière. Indeed, one of his most important books is *Yug Yoga Yoghism: A Mathesis of Psychology*. Since its first publication in Spanish in 1969 by the well-known Diana publishing house, there have been several editions (10 up to 1978).[4] Over the course of its more than 600 pages, he thoroughly discusses ancient Eastern philosophy with a view to making it accessible to Westerners. His developing these pre-

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[4] In the 1980s, UGB published later editions altering the revisions approved by R. de la Ferrière. Hence, these versions do not follow thoroughly R. de la Ferrière original ideas that were translated by D. Ferriz under his supervision.

yoga psychophysical exercises has benefited millions of people (me included) around the world, though they have not been commercialized. Generally, commercial yoga takes on only a fraction of the meaning of yoga. It is a profitable business. A comprehensive study of the yoga market in America by Ipsos (a global market research) shows that yoga practitioners have increased in number by 50 per cent to 36 million since 2012, and that spending on yoga grew from $10bn to $16bn.[5]

Khalza and Butzer (2016) found bibliometric analysis of 47 publications on school-based yoga interventions in peer-reviewed journals. Their understanding of yoga is "a holistic system of practices that, in its traditional form, includes multiple techniques, including physical postures/exercises, breathing exercises, deep relaxation techniques, and meditations" (p. 46). The authors suggest that school-based yoga interventions are a viable and potentially efficacious means of enhancing students' mental state, health, and behaviours. The research of Wheeler and Bembenek (2017) on yoga postures (*âsanas*), breathing (*pranâyâmâ*), and meditation (*Dhârana*) indicates that all three were effective in reducing anxiety and improving mood. They used scientific tools to measure anxiety, stress, and mood among participants. Nonetheless, discussion of these three limbs was limited to a few lines and is without reference.

To summarize, the Age of Knowledge is the age of *Jnana* yoga (path of knowledge, work and study). R de la Ferrière comments that long before the present era the *Upanishads* proclaimed the superiority of this path. He relates it to *Yoghism.*

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[5] https://www.yogajournal.com/page/yogainamericastudy

Chapter 3.   Analysis

To doubt everything and to believe everything are two equally convenient solutions; each saves us from thinking. (Henry Poincaré)

Emerging from the 1960's counterculture, New Age has as one of its central tenets the expectation of a coming new golden age – the Age of Aquarius (Farias Lalljee, 2008). I argue that the expected Age of Aquarius contextualized into the New Age movements has no relation with the Age of Knowledge (Age of Aquarius) by R. de la Ferrière whereas some similarities exist between both. A notable aspect of this is the *epistemology of life* - that is part of his new concept of divinity - for a better understanding of the sacred matters, a new way of spiritual realization. Epistemology implies a fundamental incursion into a discipline that studies historically the formation and transformation of scientific concepts (Smith, 2016). Conversely, drawing on a diverse array of thinkers, Heelas (2006, 2009) contextualizes the *New Age spiritualities of life*. He (2009) defines it as "all of those teaching and practices which locate within the depth of life…Spirituality is found in the depth of subjective life…" (p.25). Nonetheless, Heelas (2009) confronts arguments that new spiritualities are 'an integral tool' of capitalist culture and they encourage mindless consumption.

Depicting New Age as a quintessential spiritual market place (Redden, 2016) argues that it has not prevented the development of spirituality concerns. Marcus (2017) observes that most of the twentieth century academic commentators have seen religion as something modern, rational that would inevitably cast off the relic of a more naïve age when physical and social phenomena were understood in terms of the supernatural rather than scientific cause and effect. However, almost two decades into the twenty-first century, it is evident that the death of religion has not transpired. She argues that since the 1980s, scholars have pointed the to the vitality of fundamentalist Evangelicalism, conservative Catholicism, militant Islam and a plethora of New Age movements (p.223). Meanwhile, on the debate on spiritualities, two (of many) themes emerge, they are: transcendence and dogmas. Transcendent has been greater explored in various areas and with different perspectives. In the discussion of transcendence, self-transcendence has emerged as a measurable transpersonal concept (Garcia-Romeu, 2010). Farias and Lalljee (2008) consider that the venture to establish whether New Age ideas and

practices are oriented towards self-transcendence or if instead they reinforce secular individualistic values and behaviours, is a central point of a debate among researchers. Regarding dogma, it has been a problem that has plagued humankind for a long time. Ambrose (2012) posits that in academia, dogmatic thinking has contributed to the perpetuation of paradigm wars and ossification of theories. Likewise, Perkinson (1977) points out that education usually cultivates a propensity toward dogmatism.

3.1. The New Age vs. the Age of Aquarius

The terms "New Age" and "Age of Aquarius" have been used interchangeably since the 1900's. The assumption that both are identical is pervasive. Sociologist tend to assume that this is so. Campion (2016) assures that regardless the widespread assumption that they are one and the same, propagated by sociologists, critics of astrology and some astrologers, they do not offer identical views of the future. He states:

> The former [Age of Aquarius] depends on a value-free prediction that history is tied to the precession of the equinoxes and postulates endless change, but not necessarily an imminent breakthrough to a wonderful new blissful phase of existence, while the latter [New Age] is rooted in the Swedenborgian prophecy that the coming age is to be more spiritual than the last, and the Blavatskyan notion that it will begin the ascent to humanity's final reintegration with the cosmos.

Campion concludes his argument by stating that those who assume "that astrologers are all New Agers and that the Aquarian and New Ages are identical, are guilty of the cardinal academic sin: a failure to consult the primary sources." (p.49). To see the difference, I will first cover the academic work that influential authors have done to explore the phenomenon of the Age of Aquarius. Their books have still been the source for contemporaneous researchers. I refer to Gustav Jung and professors, Giorgio de Santillana (MIT) and Herta von Dechened (Goethe-Universität). Then, I will analyze some aspect of the complex New Age phenomenon.

Mainstream academics might not thoroughly appreciate Jung's writing regarding cosmic ages, astrology and medieval lore. Case and Phillipson (2004) provides a particularly conspicuous example regarding the most widely used psychometric testworldwide: Myers-Briggs Type Indicator® (MBTI); it is of Jungian origins, founded on astrological and alchemical cosmology. Citing Jung, the authors comment that in no

previous age was astrology as widespread and highly esteemed as it is today (p.474). Nonetheless, Jung was aware of the risk of the opinion of some dogmatic academic putting his "hard-won reputation for truthfulness, trustworthiness and scientific judgment in jeopardy." (Jung, 1959).

On the topic of precession of equinox, in 1951 Jung (1959) published his book, *Aion: Researchers into the phenomenology of the self*, in which he discusses the precessional cycles and the religious motif over time. He describes how the "collective self", or rather the image of God, has unfolded in the Western psyche. Amao (2016) observes that *aion* describes the significance of myths and legends and of zodiacal ages for the unfoldment of the God-images. And, the Greek word *aion* is also used to designate the Great Age, also known as the *Platonic year*. In Flying Saucers, Jung (1959) says:

> As we know from ancient Egyptian history, there are symptoms of psychic changes that always appear at the end of one Platonic month [Platonic Year] and at the beginning of another. They are, it seems changes in the constellation of the psychic dominants, of the archetypes, or "gods" as they use to be called, which bring about, or accompany, long-lasting transformations of the collective psyche. This transformation started within the historical tradition and left traces behind within, first in the transition of the age of Taurus to that of Aries, and then from Aries to Pisces, whose beginning coincides with the rise of Christianity. We are now nearing that great change which may be expected when the spring-point enters Aquarius.

Above, in the same letter, Jung states: "I know no one else has yet felt moved to examine and set forth the possible psyche consequences of this foreseeable change, I deem it to my duty to do what I can in this respect. To this extent, Amao (2016) argues that Jung's trio of works comprised of *The Red Book, Aion, and Answer to Job* supplemented by *Mysterioum Coniounctionis*, constitute Jung's legacy to the fields of spiritual alchemy, religion and transpersonal psychology for the age of Aquarius (p. 178).

After the publication of Jung's work (with the exception of *Red Book* that was published after his death) G. de Santillana and H. von Dechened published their book *The Hamlet's Mill*. The main argument of this book is that ancient cultures use myths as a special language to record and transmit astronomy mainly to those related to the precession of equinoxes. That is to say, the pattern of Hamlet's mill's myth explains the wobble of the Earth's axis, thus the mill is thought to resemble the Earth's axis. The

legend allegory describes the shift of the axis that generated the precession of the equinoxes. Hamlet's Mill comes from Norse mythology. While trying to identify the origin of this myth, Santillana and von Dechened (1969) found that in many ancient cultures, even those separated by an ocean, languages and customs have told stories similar to the one of Hamlet's Mill. The authors claim as well that the development of ancient knowledge was based on this primordial universal myth, that the precession of equinox has been known for a long time, and that "the origins of science had their deep roots in a particular myth, that of *invariance."* (p. vii). In the light of this, astrophysicist and archaeoastronomer, Gulio Magli (2004) who analyses the possible discovery of astronomical effects in various ancient cultures argues that even there is not clear evidence, the quantity of hints emerging from the precession of equinox is impressive and stimulating in view of further research.

Campion (2016) posits that the notions of the Age of Aquarius and the New Age share a common origin in getting disclosure into esoteric secularism in the late eighteenth century as well in the theosophical millenarianism of the 1890. Jackson (1975) argues that since 1945, Asian religious and philosophical ideas were in vogue, emerging the New Thought movement with emphasis on the universal esoteric traditions: primitive Christianism, the Kabala and oriental religions (p. 527). This movement along with the counterculture of the of the sixties produces what is known as the New Age. Hence, the roots of the New Age might be found in traditional teaching. Although this may be true, Campion argues that sometimes the ideas of New Age are located in the 'apocalyptic of the imagination' and while the Age of Aquarius is a product of the astronomically demonstrable fact of the shift of the spring equinox into Aquarius. He posits as well that the New Age assumes a millenarian force when the coming shift into Aquarius endows it with an imminent objective (p. 21).

Nowadays, in broad terms, New Age is often depicted as a quintessential spiritual marketplace (Reeden, 2016; Heelas,2006, 2009; Farias and Lalljee, 2006). Its beliefs and practices are aligned with the modern individualistic emphasis on the self with principles of "modern epistemology of capitalism and individualism" (Farias and Lalljee, 2006). Reeden (2016) posits that the belief of new agers emphasizes the right of the individual to pursue experience and determine truth. In other words, they favour 'self-spirituality' and 'epistemological individualism' (p.233). Heelas (2006) argues that it is

perfectly possible for unique selves to be autonomous while relational: sociable subjectively oriented 'individualism' is what the holistic milieu is primarily about (p.229).

In his book New Age Movements Heelas (1996) wrote that the New Age "is 'of' the self in that it facilitates <u>celebration</u> of what it is to be and to become; and is 'for' the self in that by differing from much of the mainstream, it is positioned to handle <u>identity</u> problems generated by conventional forms of life (p.173). Years later, due to New Age development Heelas (2009) posits that he is not happy with the terms *celebration* and *identity* and rather use the formulation of a "spirituality 'of' and 'for' what is to live out of life" (p.17). Furthermore, Heelas (2009) points that it has been argued that spiritualties of life are "too superficial, too unsubstantial, too vague, too inward looking, too selfish, and – of course – too consumerized, too much *'of'* and 'for' the pleasures of luxuries of secular consumption, to be other than inconsequential ineffectual." (pag.17). (Reeden) 2008 argues that New Age consumer practices shouldn't be considered trivial or socially insignificant, or turn away from reductive market models. Rather, they should examine the interdisciplinary relationship between economic, cultural and social work (p. 231). As a diffuse cultural entity, the New Age is difficult to avoid. Its ideas could be found and impacted in every dimension of contemporary culture. Furthermore, the distinctive hallmarks of the New Age are consistent with broader partners of sociocultural changes. The New Age spiritualities of life evidently are the 'massive subjective turn of modern culture' (Taylor, 1991) in which science and religion are recurrent.

3.2. Epistemology of Life

The challenge of defining the nature and source of knowledge has existed in almost all societies. The understanding of the term epistemology has evolved over time. Many ancient cultures had sophisticated methods for organizing knowledge. However, systematic, self-conscious philosophical reflection on the nature of knowledge itself appears to have originated in Greek philosophy. By that time, epistemology was understood as a *philosophy of knowledge*. Starting from Plato, epistemology has been oriented toward the past (Eckert, 2016 p. 242). Over the centuries, there have been developments and countless debates. The early decades of the twentieth century witnessed a deep crisis of positivistic thinking in every field of knowledge. Rheinberger (2010) posits that in the nineteenth century, the history of science had been dominated

by descriptive models that told a story of progressive discovery. Gradually the history of sciences developed into the philosophy of sciences: "it was by no means a process internal to philosophy alone; rather it came about in a reciprocal exchange with the concrete scientific revolution of the twentieth century" (p. 2).

In Anglo-Saxon literature, epistemology is concerned with the analysis of what is meant by the term 'knowledge' itself, and with questions about the limits and scope of knowledge, its reliability and what constitutes justification for holding knowledge (xxx). In other words, with a *theory of knowledge*. Braunstein (2012) citing Canguilhemian quotes: "The theory of knowledge, without a philosophical history of science, is only a vague ideology or a verbal dialectic" (p. 36). However, R. Audi (2003) in his book: *Epistemology: A Contemporary Introduction to the Theory of Knowledge* distinguishes scientific knowledge, moral knowledge, and religious knowledge. The word knowledge is used as synonym for epistemology. In the prologue he says:

> Epistemological problems and theories are often interconnected with problems and theories in the philosophy of mind…. There is, then, much discussion of the topics in the philosophy of mind that are crucial for epistemology, for instance the phenomenology of perception, the nature of belief, the role of imagery in memory and introspection, the variety of mental properties figuring in self-knowledge, the nature of inference, and the structure of a person's system of beliefs (p.x).

It is observable that both the theory of Knowledge and the philosophy of knowledge agree on the word *philosophy*. Probably, in essence, there is no much incompatibility between both with the exception that in Anglo- Saxon there is more emphasis on knowledge than scientific thinking. Meanwhile, Rheinberger (2010b) claims that he does not use epistemology as a synonym for a theory of knowledge that inquiries into what it is that makes knowledge scientific, as was characteristic of the classical tradition, especially in English-speaking countries. Rather, the concept he uses follows the French practice: "for reflecting the historical conditions under which, and the means with which, things are made into objects of knowledge. It focuses thus on the process of generating knowledge and the ways in which it is initiated and maintained" (p. 2f.).

Briefly, I will summarize four features of French Epistemology found in Braunstein's (2012) essay on "Historical Epistemology, Old and New". They are: (1) epistemology always consists of a posteriori reflection on the sciences. To explain it, he cites Canguilhem: "without reference to epistemology, the theory of knowledge would be

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an empty meditation; without a relation to the theory of sciences, epistemology would [be] completely superfluous" (p. 38). French epistemology expects to find answers to philosophical problems within the history of sciences. (2) The history of science is not aligned with history in the classical sense of the word. It claims to be critical or philosophical. The history of science differs from traditional history in two aspects. One is that history does judge and evaluate what it studies and the other is that history judges on the basis of recurrence or the past in light of the present. (3) epistemology seeks to address the development of reason, which can only be grasped through the development of the sciences. Bachelard (1968) explains that "since reason must obey science, the former must follow the dialectic of the latter". He states: "the traditional doctrine of an absolute and immutable reason is only a philosophy. It is an outdated philosophy". Braunstein, citing Foucault, acknowledges that he has benefited from Bachelard's idea, for instance when he writes, "reason works on itself at the very moment it constitutes its object of analysis" (p.39). In other words, rationality, notwithstanding its claims to universality, takes historically determined forms. (4) The history of science is always linked to political goals, broadly constructed. Braunstein also comments that Comte went through the history of sciences to aim the establishment of sociology and about Foucault he says that it is true "When he [Foucault] contrasts' a 'philosophy of experience with a meaning of the subject,' that of Sartre and Merleau–Ponty, with a 'philosophy of knowledge, rationality and concept",' that of Cavailles, Bachelard and Canguilheim." (p. 40).

Rheinberger (2010) argues that historicism in the human sciences gave way to a historical epistemology that found its first consistency on the work of Ludwick Fleck and Gaston Bachelard. Meanwhile, Braunstein (2012) argues that it was Abel Rey in his PhD thesis *La Théorie de la physique chez les physiciens contemporains* who introduced the historical epistemology. Citing Rey, Braunstein explains that "'the history of sciences is not a mere work of erudition' it introduces 'a crucial component of the history of civilization] which is not only 'material', but 'intellectual' and even 'spiritual'" (p.36). For Bachelard, modern epistemology is a science that appeals to philosophy and shares the dialectical properties inherent in philosophers' reasoning and mobilizes this dialectical rationalism against positivism and realism. He states that any practice or attitude that prevents dialectical abstract reasoning is an epistemological obstacle. For him, knowledge obtained solely by deduction is limited; it can be no more than a well-ordered

framework of thought as long as abstract ideas are not firmly and securely grounded in reality. He does not discard objectivity and references to science altogether, but, he does allow for unprecedented reliance on subjective experience (Smith 2016). Ferriz (1977) argues that epistemology entails the level of perception and the level of understanding in a synthesis that includes metaphysical activity and dialectical reasoning.

Somehow related to the epistemologies mentioned above, there are two other kinds that deserves analysis and for reason of space I just briefly mention them. They are: genetic epistemology (Jean Piaget) and epistemology of complexity (Edgard Morin). Piaget (1970) developed genetic epistemology that deals with both the formation and transformation of meaning, with never absolute beginnings. The relevance of genetic epistemology lies in the fact that not only reminds us that it is necessary to go back to the origins by showing the existence of undefined construction where no phase has the privilege of being the first and all the sources of information is indispensable, but also that it is interdisciplinary. Morin (1999) posits in his epistemology of complexity thinking that knowledge is neither fragmented not compartmentalized and recognized its incompletion and incompleteness. Framed in his complexity thinking, Morin proposes a new system of ideas, such as the "Seven Complex Lesson in Education for the Future." They are: Detecting Error and Illusion, Principles of Pertinent Knowledge, Teaching the Human Condition, Earth Identity, Confronting Uncertainties, Understanding Each Other, and Ethics for the Human Genre.

3.3. Transcendence

Ames (2016) acknowledges that strict philosophical or theological transcendence is to assert that an independent and superordinate principle 'A' originates, determines, and sustains 'B', where the reverse is not the case. Such transcendence renders 'B' absolutely dependent upon 'A', and thus, nothing in itself. (p.3). Ames adds that an important signature of strict transcendence is its immediate relevance to a discussion of 'apophatism'—that is, the religious belief that God as completely 'Other' cannot be known and thus must be described in negative terms—is a doctrine of *creatio ex nihilo*.

The distinction between transcendent and transcendental is the ultimate conceptual framework for Husserl's phenomenology (Caputo, 1979, Moran, 2014, Maintenay, 2011). Caputo (1979) explains the differences as follows: The transcendence is that which transcends our consciousness; "It is an inexhaustible otherness and fullness which consciousness apprehends not this way now [sic] that." (p.205). That is to say transcendence is what always manages to escape consciousness to overflow it, to be much for it at any time. "Transcendences are mundane, empirical realities which give themselves to subjectivity in a complex of presence and absence, of partly filled and partly empty intentions." (p. 206). Meanwhile, the transcendental does not belong to the world at all. It is not mundane or empirical but instead transcends the world. The transcendental does not transcend the world in the manner of metaphysics, in the sense of belonging to a second totally other, no empirical world. "It is not anything in the world, nor anything above the world but the condition of possibility *prior* to the world, which lets the world be. "(p.206). Maintenay (2011) posits 'transcendent' is simply 'beyond' rather than enclosed while 'transcendental' means 'of a higher level on which the intelligibility of the lower level is contingent." (p.277). Nonetheless, while transcendence and transcendental are sharply differentiated from one another, they belong essentially together.

On the other hand, Moran (2014) points that Husserl's phenomenology is concerned with transcendence and immanence, and Husserl explains that phenomenology proceeds in immanence and that various forms of transcendence or transcendence entities that include God, the ego and objects as part of experience should be excluded. On the point that transcendence is the physical thing, Husserl states:

> Our considerations have established that the physical thing is transcendent to the perception of it and consequently to any consciousness whatever related to it; it is transcendent not merely in the sense that the physical thing cannot be found in fact as a really inherent component of consciousness; rather the whole situation is an object of eidetic insight: With an absolutely unconditional universality and necessity it is the case that a physical thing cannot be given in any possible perception, in any possible consciousness, as something really inherently immanent. (p. 502)

Consequently, according to Husserl, the physical thing is essentially represented in profiles of all forms of perceptions, and this eidetic truth holds true even for God.

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Moran (2014) explains that Husserl distinguishes different forms of transcendence, especially 'transcendence of physical thing' and 'transcendence of persons'. He posits that transcendence in every form is within the ego of the being and it falls in the domain of transcendental subjectivity, which is the 'universe of possible sense.' (p.505).

For Jaspers, as for Heidegger and Scheler, transcendence names something essential about the human condition (Moran,2014). Jasper (1965) claims that transcendence is what completes the incomplete, it is what gives sense. He relates transcendence to existence. Heidegger (1996) points out that the 'being' should be thought of in terms of transcendence: "Being is the transcendent pure and simple." (p. 337). He argues that transcendence has to be thought of as a new way of thinking human existence in a non-subjectivist manner.

3.3.1. Self-transcendence

In his discussion on Transcendence and Self-transcendence, R. Creagan (1959) notes:

> "Self" in "Self-Transcendence" is a readiness to apprehend more, but that that which is apprehended by virtue of the new or emergent readiness is not merely a deeper quality of that "Self" (although it may include this) but that it is also a deeper stratum of the Transcendent Actual. In an almost literal sense, we live a life which is not our own. (p. 541)

Cregan points that self-transcendence remains possible only while humans accept trial-and-error as a method of encountering the transcendent matrix. Conversely, scholars have posited various definitions and theoretical underpinning to understand and explain self-transcendence. Garcia-Romeu (2014) posits that current theories in psychology conceptualize self-transcendence as a personality trait, a developmental construct, and a particular class of anomalous experience. He mentions a number of assessments as a means of measuring self-transcendence. These include: "the self-transcendence subscale of the Temperament and Character Inventory (TCI) devised by Cloninger et al. (1993), the Self-Transcendence Scale developed by Reed (1991a), the Spiritual Transcendence Scale created by Piedmont (1999), and the Adult Self-Transcendence Inventory (Levenson et al., 2005) … He continues, "However, the scarcity of widely accepted methods of quantifying self-transcendence with a single valid, reliable measure has caused some difficulty in the research arena" (p.27).

On the other hand, Du Toit (2010) argues that perceptions of self and self-transcendence are changing radically:

> Every generation finds transcendence within the interpretive horizons permitted by their culture, science and worldview. There are biological constants (neocortex, lymphatic system) and mental constants (desire, infinity, unfulfilment), but they manifest themselves differently in every era. The remarkable feature of our age is that transcendence is no longer encapsulated in metaphysical ideas, but comes to us via our techno-scientific environment that sweeps us along on its evolutionary current. We cannot artificially perpetuate the enchantment of a world we have outgrown. (p.11)

Prior to these more recent formulations of self-transcendence, early existential and humanistic psychologists Frankl (1962) and Maslow (1968) considered self-transcendence a key factor in human development and meaning making. Self-transcendence could be related to the self-actualizing (SA) within the hierarchy of needs of Maslow (1971), in which an individual seeks to enhance his being, and to expand his knowledge of self and others. He states:

> Transcendence refers to the very highest and most inclusive or holistic levels of human consciousness, behaving and relating, as ends rather than means, to oneself, to significant others, to human beings in general, to other species, to nature, and to the cosmos. (1971, p. 269)

Victor Frankl (1962) poses that "transcendence is a constitutive characteristic of being human that points and it is directed to something further, other than itself" (p.97). Interestingly, Frankl argues that this characteristic of human existence has been ignored, neglected or grasped superficially, due to motivational theories that are based in the homeostasis principles. According to the homeostasis theories, humans are basically concerned with maintaining, or restoring, inner equilibrium. The problem with homeostasis theories is the confusion of what human physiology does with humans' higher aspirations, such as meaning-making. Reduction of tension and restoring homeostasis is very helpful for human wellbeing and health but to equate that with a meaning of human life is highly problematic. Gratification of drives is not the same as satisfaction of vital needs (p. 97). Another way of looking at this situation is that 'the pursuit of happiness' is what thwarts its attainment. Frankl asserts that the more one intends to attain pleasure, the less he/she will obtain it because, pleasure rather than being a goal itself, is a side effect, and must remain so. This is in agreement with Maslow's perspective, since he admits that the "business of self actualization can be

best carried out via a commitment of an important job" (Frankl, 1962 p. 102). Therefore, the excessive concern with self-actualization may be traced to a frustration of the will to meaning (p. 99)

Frankl's work belongs to the third Viennese School: it follows after Freud's and Adler's work (Hayne, 2016). Frankl developed Logotherapy as a practical application of his psychological theory. By "logos" he meant to imply "the spiritual" or "the meaning." While seeking research on the application of Frankl's theory, I noticed several empirical studies, but very few in the educational field. Kang et al. (2013) found that logotherapy is effective in improving meaning of life and respect for life and in decreasing depression in elementary school students. In his dissertation, Fantova (2008) describes the change process contributing student resilience as experienced by a secondary school faced with a very difficult circumstance. Tate at el. (2013) also claim that the use of logotherapy as a method for addressing survivor guilt in first-generation college students yielded positive results. Over all, these studies suggest that Frankl's meaning system could be used to prevent and/or intervene in existential distress as a motif for having hope in life.

3.3.2. Transcendence and Net Generations

Holm (2011) examines the sensibilities, broad characteristics or orientation of the Net Generation (digital natives, Millennials). He analyses the AYSP (Australian Youth Spirituality)'s research. It was a study of Australian youth (13-24) between 2002 and 2006 to find how these youths *put their lives together*. The findings reveal characteristics of transcendence, such as being communicative, connected, collaborative, experiential, social, relational, and participatory, all of which are signs of being oriented toward intersubjectivity oriented toward transcendence. The Net Generations "seem to have moved [away] from a model of perfect rationality, utility-maximizing, autonomous individual," although the extent to which they have moved away is unclear (p.15). Bennett, Maton and Kervin (2008) analyse digital native literature and demonstrate that the digital native possesses sophisticated knowledge of and skills with information technologies but appear to be a significant proportion who do not have the levels of access or technology skills. Holm went further analyzing several other Net Generations. These studies reported that the levels of engagement with technology are not as high as suggested. Nonetheless, neither of the studies address spirituality issues as the AYSP.

Kalantzis and Cope (2004) explore pedagogical processes that engage the sensibilities of learners who were increasingly immersed in a digital lifestyle. They argue that learning happens when teachers create two learning conditions that optimize engagement. The first condition is belonging: learners will not learn unless they feel they belong in their own learning process and environment. The second condition is transformation: learners need to go beyond mere engagement with the curriculum given to them but to move into change of identity for true transformation to happen. The latter requires the learners to go outside their comfort zone. Learning involves development, change, and transformation. They suggested that the outcome of transformative learning is a "new world of knowledge [that] might be called the 'transcendental' – a place above and beyond the common sense assumption of the life world" (p.44).

> Transcendent in the sense that learners move beyond their previous knowledge and limits and realize that their former assumptions based on 'common sense' no longer apply. However, they know where they started: they know and affirm their former life-world. They know, too, that although the journey may have taken them through often unsettling unfamiliar terrain, they have never felt threatened, irrevocably lost, or alienated and they are comfortable in their new transformed or transcendent state.

Holm (2011) affirms that this concept has an origin on transcendental phenomenology by Husserl and discusses that Husserl ideal of knowledge is divine knowledge where knowledge is simply disclosure of the given without mediation or obstruction (p.11). He posits that the learning journey toward understanding requires the learner to step back from taken-for granted knowledge. Then learner must practice *epoqué*, which is a Husserl's term for the process of bracketing or setting aside presuppositions around the object of learning. Then it is necessary to exclude any unintended influences that prevent the object of learning from appearing on its own terms and in this way open up the possibility of transcendental knowledge. Moran (2008) notes

> For Husserl the adoption of the transcendental attitude is like a person born blind who recovers his sight as a result of an operation. The newly disclosed world looks completely new so that one cannot rely on any of the previous habits and convictions with regard on any of one previous habits and convictions with regard to this entirely new landscape. We have left behind the childhood of naïve natural existence and have entered to invoke Husserl's own frequent religious imagery, 'the kingdom of pure spirit. (p.278)

Transcendental attitude, according to Husserl is an achievement of transcendental subjectivity, which constitutes the 'sense' and 'being' It falls in the immanence (Moran, 2014). Holm (2011) posits the intersubjectivity can mean mutual understanding or shared understanding, close to empathy: the learners put themselves in the place of others. They exchange places not just with people but also with other aspects of reality (p.13). Transcendence learners reflect on their subjectivity, their intentionality and their oriented goals, "transcendental learner begin to see that 'things are more than they are' and that they 'give more than they have', and thus emerges the potential to extrapolate sacred dimensions (p.14).

Holm's (2011) study suggests that Net Generation adapts readily to the transformative (transcendence). He posits that learners tend to bring a range of natural, inherent, or native capacities for learning; however, teachers need to work to enhance or develop these native capacities. Learners also bring a range of previously learned capacities, attitudes, proclivities and sensibilities that teachers could lead to transformation and transcendence.

3.4. Dogmatism

The greater the ignorance the greater the dogmatism

The dogmatic mind is not exclusively found in the realm of religion and politics. It can be observed in other realms of realms of intellectual and cultural activity—in philosophy, the humanities and the social sciences. It is quite capable of influencing very rational intellects (Rokeach, 1959; R. de la Ferrière, 1972; Ramadan, 2010). Ramadan (2010) posits that a characterizing feature of the dogmatic mind is its tendency to see things from one exclusive angle and think in terms or absolutes, which create not only a barrier – for instance understanding a new concept, as it is the thought of the Age of Knowledge – but also an obstacle within the natural process of human evolution. Ramadan argues on the condition of binary of the dogmatic brain. He affirms:

> It would be a mistake to think that it accepts the existence of only one point of view: the dogmatic mind is a binary mind. Whilst it states that its truth is the only truth, that its Way is exclusive and that its universal is the only universal, that is because it stipulates—at the same time—that

anything that does not partake of that truth, that path and that universal is, at best, absolutely 'other' and, at worst, culpably mistaken. (p. 22)

The binary mind is increasingly devoid of complex ideas and nuances, easily convinced that the truths it is told again and again, colonized by perceptions and impressions that are as intellectually vague as the way they are used to judge others in a cut and dried manner. Dogmatic contents often do not attend to the subjective character of our experiences, but rather to the external, observable things in the world. Since these contents represent the world accurately or inaccurately (i.e., in empirical terms), experiences have conditions of accuracy (Moretti, 2015).

Albeit, the binary mind of Ramadan, Moretti (2015) argues that "dogmatism is an epistemological view worthy of attention and safeguarding: dogmatism makes sense of ordinary epistemic practices and attributions of perceptually warranted beliefs; it also seems to provide the basis for moderate foundationalism" (p. 280). He purports that dogmatism seems to offer a response to perceptual scepticism. He explains:

In ordinary circumstances we might have more or less explicit beliefs about something but our reasons for holding many of our ordinary perceptual beliefs don't seem to include the reasons we have for these additional beliefs. Instead we seem to entertain many of our perceptual beliefs just because of how things appear to us to be. … Imagine for instance you have the experience as if an apple is on the table. In that case you would normally answer the question 'Why do you have any reason for believing that there is an apple on the table?' by simply saying 'Because I see it'. The answer 'Because I see it and I have reasons to believe that my faculties are reliable' would appear quite unnatural. (p. 265)

The apparently good things have critical moments too. Ramdan (2010) writes, "The cult of Reason that emerged from the French Revolution had its moments of terror too" (p. 21) as though it confused self-doubt with open-mindedness towards others.

3.4.1. Fanaticism

The word fanatic derives from the Latin noun *fanum* meaning a place dedicated to deity, holy place, sanctuary, temple. From this derives the adjective *fanaticus* a temple devotee devotee who is orgiastic, inspired, frantic or frenzied. Consequently, Hughes and Johnson (2004) arrive at the definition that *fanatics* are "always profaning: attacking the temples, polluting the relics, defying the taboos, and cursing the gods of the "other" –

shitting in the pope's tiara, a commonplace in anti-Catholic engravings of the Reformation period.' (p.1). According to Colas (1997), in 17th century England religious visionaries were stigmatized with the terms *fanatics* and *enthusiast*, and it was philosopher John Locke (1632-1704) who understood a *fanatic* as someone who is *intolerant*, which is the meaning we hold it today. Indeed, the term has been used broadly. How to discern between fanaticism and devotion?

Furthermore, the word fanatics has also been used in the sphere of entertainment: a devotee supporter of a sport, athlete, sport club, game, musician, actor or other similar attraction are usually called fans. Marimaa (2011) calls attention to three aspects of fanaticism: (i) Fanaticism is a universal phenomenon: "It is related to human traits, so it can be found in almost any activity where people are involved" (p.34);(ii) Fanaticism is not always a negative phenomenon: "Fanaticism can be either good or bad depending and how and for what reasons someone acts fanatically" (p.34); (iii) Fanaticism is primarily a behavioral trait: "The origins of fanaticism are based in the mind, but it always manifests itself through actions" (p. 35). Perkinson (1977) looks to some meaningful historical world events and affirms that history reveals a human predilection towards fanaticism. "Had neither the Greeks nor the Romans thought themselves superior to others who were different, had they no tried to impose their ideas, their institutions, their ways on others -how evanescent Greco Roman culture might have been (p. 54)!"

I will set aside momentarily 'those apparently good aspects of fanaticism' to discuss the fanaticism related to dogma. Perkinson (1977) posits that a fanatic is dogmatic: people whose theories, ideology and proposed solutions are absolutely right in their own eyes. He or she ignores or cannot perceive arguments. In other words, fanatics avoid critical thinking. Consequently, when an individual cease to be critical toward their creation (ideas, knowledge, social arrangement) and start to take them as fallible and perfect in that way he or she turns into fanatics. Marimaa (2011) adds that the fanatic is more than narrow-minded and dogmatic person. "S/he tries zealously and by all means to impose her/his convictions on others (p.38)."

Nystrom (2002) describes fanaticism as "the triumph of reflex over reflection." Reflexive reaction to stimuli is a natural human trait from birth, the ability to reason and reflect is learned and develop later. We learn how to modify our reactions toward our

surrounding reality and critically analyze situations and defer our responses to stimuli. In her article Nystrom describes the development of the so-called *Immediate Man* and relates its behavior with fanaticism. She chooses *Immediate Man* for both, the emerging persona of our age immersed in *just* the present as his/her domain characteristic, and their addition to the role of communications technology in this emergence. The immediate Man wants everything here and now and demands fast and immediate solutions to their problems. She explains:

> The rejection to past and future grows his contempt for history, his Manichean construct of the origins of problems, his intolerance for complex and long-term solutions, his mystical faith in the solving and saving powers of technique and technology, and his deep mistrust of reason (p.178)."

From this perspective, we can deduce that a fanatic does **not reflect** but **reacts** immediately and this reaction is often irrational. She adds "out of this immediacy grows the fundamental irrationality of modern man." Paskin (2014) defines fanaticism as "misplaced simplicity (p. 7)". In various situations, he provides the example of a family that prepares to visit relatives for a weekend, but one family member resolutely announces that his favourite team has a game at the same time, meaning that he cannot go anywhere. In Paskin's opinion, this announcement is simple and clear, but at the same time misplaced because it does not fit into the context of family cooperation. In this situation we can relate as a domination of absolute reflex over analytical reflection. A fanatic is willing to sacrifice even those who are close to him/her to show devotion to a 'holy cause.'

Marimaa (2011) argues that the primacy of devotion over the object of devotion illustrates the universal nature of fanaticism. If fanatic people get disillusioned, disappointed or bored with the object of devotion, they need to find another object that they want to be associated with. Fanaticism is not limited to the religious or the political but encompasses almost every field of human activity (p. 48) that includes teaching. As to this Perkinson (1977) asserts, "Unfortunately, what we refer to as 'education' usually cultivates a propensity toward dogmatism, obscurantism, and authoritarianism. The content of "education" always consists of our [teachers] present answers and solutions to mankind's questions and problems" (p. 56). A natural question emerges: What predisposes people toward fanatical thinking and behavior?

3.4.2. Worldview / View of life

The only thing that is constant is change

Louw (1998) citing Brümmer states that worldview or view of life constitutes the total set of accepted, though not fixed or irrevocable – norms, ideals and eschatological expectations in terms of which someone directs and assesses his way of life. "In this sense, all of us adhere to some or other view of life, whether we are aware of it or not" (p.337). Ideologies are a particular kind of people's worldview. Leroy Little Bear (2000) posits that every human being has a personal worldview of the collective cultural codes, that is, the society's shared philosophy, values and customs. His argument suggests acknowledgement of the role of society in the development of an individual. Townsend, Major, Sawyer & Mendes (2010) posit that though ideologies are shaped by personal experiences and reference groups, within a given culture certain ideologies are dominant, or widely endorsed. These ideologies tend to be system justifying— legitimizing the existing status hierarchy as fair, just, good, or deserved (p.934). However, worldview shouldn't be ineradicable, immutable, abiding, for to accept this would be against transformation and learning and turn into dogmatic beliefs. In these times of dramatic changes, Tarnas (2006) asserts:

> We find ourselves at an extraordinary threshold. One need not be graced with prophetic insight to recognized that we are living in one those rare ages, like the end of classical antiquity or the beginning of the modern era that bring forth through great stress and struggle, a genuinely fundamental transformation in the underlying assumptions of and principles of the cultural world view. (p. xii)

Tarnas (2006) argues that the most concise way of defining modern world view is to focus on what distinguishes from other worldviews. In general, he points out that the fundamental tendency of the *modern mind* is to assert and experience a radical separation between subject and object, a division between a subjective human and an objective external world. This perspective is in contrast with a *primal world view,* which is a characteristic of traditional indigenous culture. While the *primal world view* does not separate humanity from nature, the *modern mind* not only maintains the separation, but it is essentially *constituted* on it. The *primal mind* engages the world more as a subject embedded in a world of subjects with no boundaries. "The *modern* human has essentially absorbed all meaning and purpose onto its own interior being emptying the

primal cosmos of what once constituted its essential nature" (p.22). Of course, the fundamental differences have evolved over thousands of years through many cultural developments. Tarnas observes that in the course of the past century, *modern worldview* has brought both its greatest ascendance and its unexpected breakdown. Every field and discipline has brought new data and arguments that have challenged long established assumptions of modern mind "Our's is an age between worldviews, creative yet disoriented, a transitional era when the old cultural vision no longer holds and the new has not yet constellated. Yet we are not without signs of what the new might look like" (p. 26). He places this *late modern world view* in the late modern post-Copernicus and post-Nietzchean cosmos, in which the human self exists as an infinitesimal and peripheral island of meaning and spiritual aspiration in a vast purposeless universe, with the exception of what the human self creates. It is obvious the rise of the spirituality, the spiritual revolution, the problem is that people experience a worldview crisis (Hiebert, 2008); there is gap between their ideals (e.g. of peace) and their experience of reality and the obstacle is the attainment to old world view or dogma.

Furthermore, Verschueren (2012) points out that ideas beliefs and opinion, as such, do not make ideologies. Simplifying a bit, they are merely 'content of thinking' whereas *ideology* is associated with underlying patterns of meaning, frames of interpretation, world views, or forms of everyday thinking and explanations (p. 6).*"* It is plausible that someone can be unaware of his or her own ideological position or to hold an ideological position incompatible with his or her world views without being aware of these contradictions. That is to say, ideologies (world views) may be embedded in our unconscious patterns or hidden identities.

3.4.3. Science and religion

Perhaps, the most common themes that hold dogmas are science and religion. The vision of synthesis on Science and Religion that accounted for great civilization has been lost. O' Brien and Noy (2015) observe that historically, many sociologists have presumed that societies developed science and reason to replace religion and faith as bases for understanding the world. And, notably, sociologists such as Comte, Marx, Weber and Durkheim have forecasted that in our modern society, positivism, rationality, and science would displace the theological, and religiously oriented perspectives held by

earlier civilizations. Nonetheless, the prediction that the modern scientifically worldview will dislocate a traditional religiously tendency has not born out (p. 92). The high-profile confrontations between leaders of religious and scientific communities still continue; for instance, in issues like current controversies surrounding research in embryonic stem cells and genetic modifications.

In a study that examines individual perspectives on science and religion in the United States. O'Brien and Noy (2015) analyzed cross-sectional data of 2901 cases from 2006, 2008 and 2010 from General Social Survey (GSS), a research institute of the University of Chicago. In this very complex topic they found that the perspective on science and religion mark epistemological and cultural divides. They commented that the latent class analysis reveals three groups based on knowledge and attitude about sciences, religiosity and preferences for certain religious interpretations of the world. These are: the traditional perspective that is marked by a preference for religion compared to science (43 percent); the modern perspective that holds the opposite (36 percent); and the post-secular perspective that shows a distinct way of using science and religion (21 percent). The authors situate these three groups under three theoretical perspectives. The first, the traditional perspective is for those who have a conflict between science and religion, contemporary accounts are framed on secularization theories. Even though there are different secularization theories, the general idea is that as societies modernized, individuals and public institutions increasingly rely on rationality rather than faith to organize daily life. The authors point out that the conflict between science and religion is localized and relies on both to the extent that they, either science or religion, do not provide contradictory explanations (p.94). The second, the modern perspective indicates compatibility between science and religion. The theories of post secular society indicate that despite institutional differentiation, individuals often view the world through religious lenses. This entails recognition of the value and utility of a multiple belief system. Its worldview rejects the strict adherence to science as characteristic of modernity. Instead it blends scientific, religious and other authorities to provide a personally compelling narrative of the world. 95). The third, the Post-secular perspective, is characterized by science and religion waning in importance. Alternatively, individuals may reject both sciences and religion as sources of understanding. The authors posit that this is framed on postmodern view of society and entails a strong relativist epistemology in which truth claims are evaluated individually, subjectively, and

without consistent reference to broader interpretative frameworks. In other words, they are a only partial explanation of reality.

On the other hand, Billingsley, Brock, Taber and Riga (2015) did a study in secondary schools in England to find out how students make sense of their experiences in science and religion education. They found that students perceived firm boundaries between science and religion. As far as they were concerned, science and religion were separate subject matters, and had little to do with each other. Some of the findings of this research include: (i) there are social and pedagogical barriers that can impede students from developing interdisciplinary insight into how science and religion relate. Most of the students (52 of 61) expressed that a science teacher presented a particular view accepted as standard in the discipline and expected the class to accept it as true, whereas a religion teacher told students that it was up to them to decide what to believe. Teachers take on the authorial stance of telling what's true or regarded as true in their disciplines. Another research finding is: (ii) Almost two thirds of students said that they expected different kinds of activities to cover the issues. The questions asked have firm boundaries and work independently. The researchers of this study observed that teaching about ideas related to origins occurred in two separate social contexts of science and religion without an attempt to integrate them. Hence, they concluded that this situation negatively affected students learning how science and religion related. To illustrate, one student affirms: "We don't do science and religion, we don't bond them together, we have two different lessons" (p. 467).

3.4.4. Empirical studies

In order to analyze how dogmatism is empirically studied, I looked for research within the education field. I was no surprised that I couldn't find much. I selected two that used Rokeach's (1954) framework to conceptualize representation of this phenomenon. For this purpose, dogmatism has been defined as: (a) relatively closed cognition system of belief and disbelief about reality; (b) organized around a central set of belief about absolute authority, which in turn; (c) provides a framework for patterns of intolerance and qualified tolerance toward others (p. 203).

The first study I referred is one carried out by Kramer-Hayon, Moore and Nevat (1985) with data from teaching training college with participants selected based on equal

numbers of low, moderate and high dogmatism scores. Kramer-Hayon & et al. focus on the problem that in the last decades, teachers have clear tendencies toward the attainment of progressive educational goals that include preparing students to encounter a world of changing values, to tolerate ambiguity, to develop an autonomous personality that is free of prejudice and ready to judge phenomena independently. Accordingly, teachers are expected to demonstrate teaching behaviours that are congruent with these goals. That is to say, foster, flexible and diverse thinking, in the cognitive area, and create a classroom climate in which students are accepted as they are and encouraged to express their opinions freely and view as unique entity, in the affective area. As result of their studies, the authors discuss that while many teachers declared that they are progressively oriented, they do not demonstrate behaviours that are congruent with their declarations. And while the characteristics of dogmatic teachers are more aligned with traditional orientation, those of low dogmatic teachers are aligned with progressive orientations. Nonetheless, teachers that are highly dogmatic express a progressive attitude, but do not behave in accord with their attitudes because of the interference of dogmatism that results in pseudo-progressivism. To conclude, the authors argue that dogmatism is primarily rooted in their personalities and highly dogmatic teachers do not change. It seems to me that this more than twenty-year-old study has relevance today. There are countless large gaps between progressive goals and the teaching behaviour intended to attain them.

The other study is about dogmatism in social media. This study was done by Fast and Horvitz (2016). They explore linguistic and behavioral features of dogmatism in social media and construct statistical models to identify dogmatic comments. This was based on a corpus of Reddit (a popular discussion community on the web) posts, collected across a diverse set of conversational topics and annotated via paid crowdsourcing. They identified various aspects of dogmatism. While using their model to analyse millions of Reddit posts, they found evidence that suggests that dogmatism is a deeper personality trait. People who are strongly dogmatic about one topic are more likely to express dogmatic views about others as well. Also, they found that one user's dogmatism tends to bring out dogmatism in their conversational partner that result in a vicious cycle. Above all, these two studies that differ in methodology, one with a computational model that allows for an analysis of millions of posts, and the other with

much less data but which observes the whole of human behaviour, suggest that some people may be dogmatic by nature.

3.5. Concluding Thoughts

There are many differences that exist between the New Age and the Age of Knowledge by R. de la Ferrière I will point out two, perhaps the most relevant. First, the New Age is a sociological phenomenon that has naturally emerged and developed as mutable and diverse set of practices from which we cannot expect ideological coherence (Sadoniva, 2014), while the Age of Knowledge is a thought developed by R. de la Ferrière based on traditional ancient teaching and adapted to the characteristics of the new era of Aquarius (Age of Knowledge). Indeed, under astrological premise, the manifestations of the New Age could be analyzed into the expected characteristics of Aquarius, the Age of Knowledge. Secondly, the persistence of *individualism* of the New Age is radically opposed to the 'collective realization' of the Age of Knowledge. The *individualism* tendency of the New Age could fit under what Ferriz calls the 'ideologies of transition' that will not last and are proper of the period of confusion, misplaced of values and what Jung relates to a calamitous time.

For this Age of Knowledge that is expected to last about two thousand years and which is part of the big cycles of humanity, R. de la Ferrière establishes a 'new concept of divinity' in which the *epistemology of life* serves to analyze God Manifestations with the objective of leading the spirit to a better understanding of sacred matters. If we analyze carefully, it is totally a new, revolutionary thought. This perspective differs greatly from that of theology in religions, in which the act of faith is an objective requisite (*fides quae*) while the new concept of spirituality is based in *epistemology* This does not imply that theology could be studied epistemologically, as Drobin (1982) argues that theology is an explicit logical system that can be studied as a mathematical proposition. In other words, the new spirituality as devised by R. de la Ferrière has no relation with beliefs, it is of universal application; it finds answers to philosophical problems with the history of science, reasons dialectically, and it does not judge, it evaluates. It has not relation at all with a vague spirituality regardless of sentimentalism.

R. de la Ferrière (1972) asserts that science and religion are two polarities necessary in everything to be fecund. Faith is not explained by scientific positivism neither subjectivity should take place in a specific analysis. One or the other can walk at the same time as two parallel bands (p.388). I don't see literally how these two could join together. They can complement each other like reason and intuition, analysis and imagination, the concrete and the abstract and the solve et coagula of the hermetic alchemy.

Dogmatism is social and historical and has left profound imprints in our unconscious and is deeply connected to our worldviews. It penetrates our psychic and somatic experience, the pattern of sensing, knowing and interacting with the world (Tarnas, 2006). There is a need to shed the dogmatic mindset that prevents us from apprehending the truth. Valk and Tosun (2016) proposes to encourage children and learners at all ages to explore the beliefs, values, world views they hold that are part of the rich traditions that have sustain culture for centuries. I argue that dogmatism along with ignorance are the main problems society holds. Dogmatism is not an easy task to overcome, it is necessary to transcend it. This involves that kind of transcendence that does not exclude immanence; rather transcendence-immanence or apply both dialectically.

Chapter 4.   Pedagogy

Some of the most compelling visionaries agree that the education we offer our students is the wrong education for the future (Robinson, 2010; Prensky, 2016; Gaudelli, 2016). Gaudelli (2016) affirms that the field of education is not developing in response to the changes brought about by globalization. Robinson (2010) claims that the current educational approach is rooted in an outdated industrial paradigm, one conceived during the Enlightenment and Industrial Revolution. Prensky (2016) states: "IT IS NOT AN EXAGGERATION to say that the world's kids today, aged roughly 6-18, are the most disrespected, underappreciated, and underestimated, and yet – potentially – the most powerful group in the world for our future" (p.12).

There are volumes of educational literature full of innovative ideas for preparing citizens for this new world. With the Age of Knowledge in mind, R. de la Ferrière (1972) proposed some 70 years ago an avant-garde approach to education. He stated that "teaching something to a child is not the only important objective; teaching is also to shape a child's spirit so as to develop that child's capacity to observe and reflect, to apply critical thinking in their research, and to love the truth". His vision for education was revolutionary. In the 1960s, it was preposterous to think that a child (infant) could develop and apply critical thinking in research. This advanced form of thinking was reserved for secondary and post-secondary students. Not only were his views of children progressive in nature, but he also viewed teaching as a way to shape a child's spirit and to develop a love for the truth. R. de la Ferrière's inclusion of "spirit" is not intended in a religious, theological, emotional, or ideological sense. He defines *spirit* as "an essential part of the being". He compares it to the electronic world. Electronics are a much more subtle kind of electricity in which tiny electrons are carefully directed around much more complex circuits to process signals or information. Furthermore, he suggests that spirit includes thought, imagination, intuition, and intellect.

To complement R. de la Ferrière's revolutionary pedagogy, I will elaborate on the principles of tolerance, truth, and peace and the four pillars of knowledge, namely science religion, art, and didactics.

4.1 Spirit

Spirare, meaning "to breathe", is the Latin antecedent of the word spirit. In its most basic sense, spirit is the essence of being alive. Traditionally, spirit was understood as the vital principle or animating force within living beings and constituted one's unseen intangible being (Scott, 1994). If the original concept of spirit referred to the vital force of life, Johnson (2008) argues that spiritual ideas do not emerge from concepts of the mind but from concepts of life and energy. Spirit does not "do" things; it impels or is the impetus for action, and action itself is a functional process. Spirit cannot be understood as part of the functional world (p. 99). It is energy.

Roazzi, Nyhof, and Johnson (2013) discuss various perspectives that differentiate immaterial identities of soul, spirit, and mind. The dominant view relates to the ontology of immaterial entities that emerges from an intuitive concept of mind. From this perspective, human beings are recognized as intuitive dualists, imagining the mind as a mental-causal organism functioning independently of the physical-causal constraints of the body (p.76). Researchers with this perspective assume that the concept of mind, soul, and spirit derives fundamentally from the concept of mind.

Richert and Harris (2006, 2008) argue that conceptualizations of the soul developed independently from the concept of mind because the mind is dominantly associated with cognitive functions and tied to the human lifecycle of conception, birth, growth, and death. Conversely, the soul is associated with spiritual functions and less with the cycles of life. The soul arises from individual essences and intuitions rather than intuitions of the mind (Richert and Harris, 2008, 2013). These two psychologists regard spirit and soul as one entity. Most spiritual researchers I have encountered treat spirit and soul as one and acknowledge this as fact. This differs with R. de la Ferrière's perspective.

Grounded in traditional spiritual teachings, R. de la Ferrière claims that soul and spirit are two separate entities. Soul, spirit, and body comprise the three, interrelated bodies each human being holds.

Attempts to understand spirit and soul as one are no longer confined to psychology, but have been taken up by almost all disciplines. R. de la Ferrière (1978)

argues that the difference between soul and spirit originates with the Greek School. Plato extensively discusses soul and spirit in his books *Timaeous, Phaedo, Phaedrus*, and in Book VII of *Republic*. He refers to soul and spirit interchangeably (p.87). R. de la Ferrière disagrees with Plato's perspective; nonetheless, he has openly expressed his admiration for the Greek school. He also adheres to traditional theories that recognize the three bodies each individual possesses: the physical body that reflects our personality; the spirit, or the real original essence; and, in-between both of these bodies, the soul, also known as the *astral body, double*. R. de la Ferrière believes the soul is the plastic mediator between spirit and body (p.113). Correspondingly, the soul emanates from the physical body and its nuances depend on the constitution of its material covering. Any mistreatment of the organism has an impact on the soul. While the spiritual body bestows the energy necessary for progress, there is an indissoluble unity between body, soul and spirit. He emphasizes that these three bodies form an ESSENTIAL UNITY, are of sole ORIGIN, and are a kind of UNITARY emanation (p.89).

The three-body theory that perceives man as ONE person but triple in essence can be found in various spiritual and religious traditions and philosophies, and in esoteric literature. These three divisions are accepted by all doctrines, although each may apply differing terminologies. For instance, Paracelsus (1493-1541) believed man had three natures: a body (animal), a spirit (or sidereal body), and an eternal, immortal, divine soul (the image of God). Both the body and the spirit were natural results of God's binding of *limus* (clay) with *astra* (stars).

Marcus Aurelius (121-180 A.D.) also distinguishes between the three bodies. He wrote in *Meditations*, Book XII, Thought III: "The things are three of which thou art composed, a little body, a little breath [life], intelligence. Of these the first two are thine, so far as it is thy duty to take care of them; but the third alone is properly thine". This is "independent of thy will, and whatever the external circumfluent vortex whirls round…" (Translated by George Longe,1872). A "little body" is related to the physical body; a "little breath" is the soul, and "intelligence" relates to the spirit.

This corpus of literature emphasizes the spiritual body as the special or most important one.

By contrast, Moreland (2014) relates soul and body to cause and effect. His ideas of body and soul are related to Leibniz's law of the Indiscernibility of the Identical, which states that for any entities ('x' and 'y'), if 'x' and 'y' are identical, then truth applying to 'x' will apply to 'y'. Therefore, any abuse of the physical organism has an impact on the soul. The abuse might be the use of alcohol, drugs, or any other harmful substance. Physical effects result in psychological consequences not of material order but on an elevated vibrational plane. Thus, soul related affairs are neither exclusively religious nor mystical, but soar high above environment influences.

The literature dealing with spirituality is burgeoning and has made its mark on academic circles. De Souza (2017) observes reluctance among scholars to agree on the definition of spirituality and a hesitation to understand it as a unifying concept. However, clarifying spirituality will decrease the ambiguity existing in research. Walton (2017) states that structure and rigorous inquiry into the ontological reality of subjective spiritual experiences are missing from the literature of spirituality. The literature I reviewed for this thesis implied that intuition is subtly related to the spiritual. Among many observations, R. de la Ferrière (1978) infers that the spirit is subdivided into **thoughts, imagination, intuition, and intellect**. Each with its own subjectivity and differing function (p. 88).

4.1.1 Thoughts

For P. Hacker (2013), the brain is not an agent of thinking, an organ, nor the locus of thinking. Hacker believes thinking is an extraordinary process of the mind; thoughts are elusive and intangible, like secret objects that pass through our minds (p. 361). In other words, thoughts are only expressed through utterances or other symbolic representations found in written documents, not in the brain of the thinker. In a general sense, thoughts are the formal object of thinking, just as dreams are the formal object of dreaming. To summarize, human beings – but not human brains – communicate thoughts, share thoughts, or keep them secret.

Modern scientists have not yet discovered the origin of thoughts. How and why do thoughts arise? Are thoughts inter-cerebral in nature; produced by 'natural' processes of the cerebral cells, rather like insulin is produced by the pancreas? Or are they pre-existing (as glucose is derived from glycogen)? Are they products of the cells in

the cortex shaped by some special energy? Do they exist beyond time and space (universe) and are somehow captured by the brain? R. de la Ferrière (1978) argues that materialist theories have great difficulty in answering the above questions. Conversely, religious spirituality believes thoughts emanate from the spirit: from outside to inside and directed by God himself (p. 496).

Post-doctoral neurologist E. Reas (2016) explains that when a thought arises it does not immediately dissipate; it often becomes the focus of reflection. During and after the onset of spontaneous thought, researchers have observed widespread activation in regions traditionally thought to support "meta-cognitive" or "elaborative" processes. This may support the conscious perception of a thought. Morewedge, Giblin, and Norton (2014) found that spontaneous thoughts constitute the majority of our mental landscape. Their five studies suggest that spontaneous thoughts are believed to provide more meaningful self-insight and exert a greater influence on judgment (p. 28). The very lack of control over and access to spontaneous thought-production leads to inquiries beyond what their content may warrant.

In laboratory tests, Katz, Epstein, and Sarason (1991) found poor constructive thinkers produce greater negative affective and cognitive responses than did higher constructive thinkers. Vaish (2008) outlines the ample empirical evidence of the negative biases displayed by adults and the propensity to attend to, learn from, and use negative information far more than positive information. A plethora of studies similar to Katz, Epstein and Sarason (1991) describe the importance of positive thinking. More recently, researchers have conducted several studies on positive spontaneous thoughts. Rice and Fredrickson (2017) suggest that infusing positive affect into daily activities causes pleasant thoughts to appear in the mind, thereby inspiring subsequent behavioural engagement. In light of this finding, they provide an alternative to the long-standing Nike slogan "Just do it". They think a more sustainable alternative is something along the lines of "Just like it" (p. 854). Their slogan may encourage renewed, ongoing support for conscious or unconscious individualism, a mindset seeking pleasure for personal satisfaction. Is it on this kind of mindset that our research needs to focus?

Another aspect we should observe is *what we think.* R. de la Ferrière (1978) suggests that the structure of thinking ought to be analyzed because 'thinking' has always been the privilege of a class. The right to classify our actions, thoughts, and

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aspirations has belonged to philosophers who have framed them within religious systems or within simple discourse, but seemingly never within transcendental dynamics that are applicable to practical life. Furthermore, in Western societies there is a tendency to only consider Western thinkers and to exclude and reject great Eastern minds, along with those who respect them. To illustrate, H. Bai (Bai and Scott, 2011) recalls one of her philosophy professors who is highly respected in the field of analytical philosophy. He was making fun of the famous *Zen koan* of one-hand clapping. "Putting up his right hand he bent and folded his hand in half presumably to say something like, 'What's the fuss' What a Dumb question'. He would have never considered a *koan* as philosophical methodology." (p. 131)

Thoughts have been explored extensively within pop psychology. Haidt (2006) states that the most important idea in such psychology is that world events only affect us through our interpretation of them. Hence, if we control our interpretations, we have the ability to control the world. Perhaps, one of the commonest conceptions in popular psychology is that: "If you change the way you look at things, the things you look at change" (Dyer, 2010). Popular psychology, argued Haidt (2006), is now an "old" conception in psychology. Popular psychologists have traditionally aimed at developing a method that guides people to realization. To illustrate his argument, Haidt describes the life of Roman philosopher Boethius (480 C E), who had to accept great misfortune without weeping or suffering. Compared to Socrates and Seneca, Boethius showed calmness, self-control, and courage while awaiting execution. He freed himself from the mental prison by applying the century-old lesson from Gautama Buddha and Aurelius: "Nothing is miserable unless you think it so, and on the other hand, nothing brings happiness unless you are content with it" (p.25). Conversely, there is a "reckless optimism" that dominates America's national mindset, as discussed by Ehrenreich (2009). She argues that "reckless optimism" is a pathological desire in the face of personal and social ills.

As noted above, spontaneous thoughts are not immediately dissipated but instead become a focus of reflection (Reas, 2016). This idea that spontaneous thought generates reflection implies that we have the ability and responsibility to accept or reject any thoughts that arise. We have a responsibility to decide what we think. To do this, we need to learn how to think. Thinking requires effort.

4.1.2 Imagination

Bromberg (2013) describes imagination as alive, creative, and spontaneous. Overall, scholars argue that if imagination is allowed to thrive, it will facilitate an enlarging connection to the sense of wholeness. The relative presence of imagination in human discourse overlaps with the relative capacity for intersubjectivity in all relationships. Fisher (1989) argues that "in the scale of human knowing, imagination lies closest to an event; it is the faculty of concrete knowing" (p. 96). According to Fettes (2014), imagination is an intermediary between the world of the senses and the world of thought. Tayaka (2004) conceives of imagination as a flexible mind and a combination of mental capacities. In a general sense, imagination is grasped as something that enables creativity, and Robinson (2015) claims that creativity is the meaningful use of imagination.

The value of imagination in education has been extensively explored. Egan et al. (2015) remind us that endorsing imaginative engagement and creativity within education is hardly new. In *Engaging Imagination and Developing Creativity in Education*, they assert:

> Plato had argued that children's learning, especially of subjects like mathematics, should be taught in the context of games and play, so that their imaginations would be caught up while gaining knowledge. In making his argument, he referred to the wise practice of the Egyptians, who had been using play in teaching and learning for hundreds of years before him. (p. 7)

In modern times, the list of advocates for engaging the imagination and developing creativity is endless. Takaya (2004) argues that Deweyean philosophy places imagination in a predominant place (p. 131). Dewey distinguishes creative imagination vs. fantasy imagination. Pope (2016) observes that creative imagination is vital to thought and inquiry while fantasy imagination is distracting and harmful. He argues that the lack of productivity implicit in Dewey's view on fantasy imagination renders it meaningless. Pope contrasts Dewey's views with the vision of J. R.R. Tolkien, best known for his epic novel *The Lord of the Rings*. Tolkien claims that fantasy is like a particular type of art that deals with a category of subjects (p.199). Dewey's "fantasy as distraction" differs from Tolkien's view of fantasy in that the latter's is full creativity and the power of reason. Pope affirms that Dewey's lack of appreciation for the potential of

fantasy rests upon the development of moral imagination and the general reconstruction of experience (p. 203). Imagination for Dewey was something possibly dangerous if misused: he related fantasy to unreal and overemotional aspects of thought (Waddington, 2010). However, imagination was potentially transformative.

Crossley (1975) supports fantasy as a renewing agent within education because it refreshes the familiar and creates an activity for a mind situated within habit. In like manner, Kelly (2002) posits that fantasy (fairy-tale) inspires an escape into the dimension of life that transcends the way things are. Morin (2000) agrees by stating that no cerebral system gives us the power to distinguish the imaginary from the real. The human being's extraordinary capacities influenced Morin to hypothesize that the entry and exit routes connecting an organism with the outside world make up only 2 per cent of the entire neuro-cerebral system, while the remaining 98 per cent is devoted to inner functions. He posits:

> The brain constructs a quite independent psychic world where fantasies, needs, images, ideas, desires and dreams ferment, and this world infiltrates our vision or conception of the outside world. Further the mind of every human being is subject to self-deception, a permanent source of errors and illusions (p. 6).

After reviewing this evidence, I believe that imagination is part of our human make-up (spirit) and fantasy is part of the imagination, or perhaps allows for its realization. The problem seems to lie in the illusions that are sensitive to our imagination. Morin (2000) argues that everything we know is subject to error and illusion, and the greatest illusion would be to underestimate the problem of illusion. How can one eliminate the thoughts that distort imagination in order to find invulnerability, stability, and equilibrium within ourselves?

4.1.3 Intuition

The concept of intuition has been harnessed within various frameworks, which usually intersect between philosophical and psychological approaches. Synthesizing Bergson's work on intuition, Lawlor (2004) creates four characteristics to define intuition. (1) Intuition is absolute knowledge: intuition coincides with and enters into what it intuits. (2) It is a 'simple act' – not perspective, analysis, nor synthesis. Intuition is automatic -- of the spirit by the spirit. (3) Intuition requires effort and is not a feeling. There may be a

connection between intuition and emotion, but intuition is not a sensation and thus not based on physical stimuli. (4) Intuition is 'consciousness enlarged'. It can be understood as the opposite of 'narrowing consciousness'. Narrowing consciousness normally occurs under the pressure of needs – we direct attention to life in the present while maintaining thoughts about future actions. Intuition consists of seeking experience at its source and effortful reflection. Bergson states that intuition is memory, and consciousness is equivalent to memory. (p. 25-28)

Neurobiologist Antonio Damasio (1994) argues that intuition, emotions, and feelings play a positive role in rational decision-making. The mind at the beginning of the decision-making process is not a 'blank slate' – it contains numerous images gleaned from experience. Depending upon the circumstances surrounding the decision, a subset of available images will be automatically activated. Even before reasoning takes place, the mind considers an option, or a 'somatic marker', that the individual experiences as an intuition. Damasio (1996) explains "that 'marker' signals influence on the processes of response to stimuli, at multiple levels of operation, some of which occur overtly (consciously, 'in mind') and some of which occur covertly (non-consciously, in a non-minded manner)". Marker signals arise in bioregulatory processes that are expressed as emotions and feelings but are not necessarily confined to those, because they are somatic: "they relate to body-state structure and regulation even when they do not arise in the body proper but rather in the brain's representation of the body" (p.1413). This somatic marker explains 'the hunch', 'the gut feeling', or 'the inner voice' attributed to intuitions.

By contrast, while looking to describe the personality characteristics and the type of environment that facilitates intuition, Tony Bastick (1982) conducted a meta-review of psychological literature on intuition. He sorted through over two million documents and reports for the term 'intuition' or its conceptions. As a result, he found that 'intuition' was addressed in fewer than 100 of these documents. He saw this "dearth" (p. 6) as the product of psychologists' reluctance to address intuition, mainly because there is a conceptual disagreement between behaviourist and gestalt psychologists. Bastick acknowledges that any number of studies about 'intuition' could have been "conducted under designations such as 'preconscious concept formation', 'preverbal concepts', 'instinctive knowledge', 'cognitive reorganization', etc." (p. 6). Sadowski (2017) supports Bastick's work, stating: "Bastick's study was published more than thirty-five years ago,

and its representation of how intuition is variably approached by different 'factions' remains valid" (p. 33).

R. de la Ferrière (1982) regards intuition as one of the highest faculties of thought (p. 52), which does not preclude intellectual work. Instead, he believes intuition completes and perfects intellectuality.

To summarize, intuition is not a presentiment, premonition, or gut feeling. It is an immediate result of the interpretation of knowledge.

4.1.4 Intellect

Roback (1930) claims that intellect and intelligence are sometimes regarded as the same. Both derive from *intelligere,* meaning 'to choose, to pick out', but they differ in the degree of complexity. Collier (2011) describes intellect as fact and intelligence as a feeling that determines the existential course of one's journey through life. To illustrate the main differences between intellect and intelligence, Roback provides the following example: "The intelligent mind lives in a shed extending over a vast area. The men of intellect dwells in a Sky-Scraper in communication with every nook and corner of the building and aware of every happening in his abode and its bearing upon every other happening" (p. 329). We can interpret an intelligent person as someone with the ability to learn fast while an intellectual is someone who holds an epistemological view of her surroundings. Roback analyzes certain characteristics of intellect: (1) Intellect is coordination on a large scale. (2) The mental integrity constitutes a prime condition for intellect. (3) Erudition has been considered the base of intellect. In the intellectual mind there appears "to be an urge toward systematization", which is not pronounced in the intelligent mind.

Maimonides, a Spanish-Judaic philosopher who wrote in the XII Century, spoke about intellect in his *Guide for the Perplexed*. He identifies four forms of perfection that all humans might seek. The first perfection is the acquisition of worldly goods. The second is of the body, its conformation and skills. The third perfection is moral perfection; and the fourth is "the true perfection of man; the possession of the highest intellectual faculties…" To justify his assertions, Maimonides states: "Examine the three kinds of perfection, you will find that if you possess them, they are not your property but

the property of others… But, the last kind of perfection [intellectual faculties] is exclusively yours, no one else owns any part of it" (Bruner, p.81).

Over several years of studying spirituality, I have observed that most approaches to education focus on spirituality and the development of intuition or on imagination and thoughts. However, there is rarely a focus on the development of intellect. R. de la Ferrière claims that the loss of intellectuality deprives human beings of their relationship with the universal.

 I argue that these four subdivisions of the spirit (thoughts, imagination, intuitions, and intellect) could shape learners' spirits and develop their spiritual capacities to observe, to reflect, to apply critical thinking in their research, and to love the truth. I briefly cover these capacities in the following section.

4.2   The four skills

The four skills that are called for in the pedagogical thinking of R. de la Ferrière are: observation, reflection, critical analysis in research, and love of the truth. When reading through the literature, one can find as many definitions of these skills as there are authors. Each individual brings her or his own perspective to it. I will provide a general idea of these skills.

4.2.4 Observation and Reflection

Many scientific discoveries (e.g. Darwinian Theory) were based upon observation. Kohlhauf, Rutke, and Neuhaus (2011) argue that observation is often regarded as mere 'looking', rather than as a basic scientific skill. For most people, the process of observing seems to be so trivial that it does not need to be taught and it is not perceived as an independent scientific research method. Even worse, the dismissal of observation as 'just looking' fails to appreciate that seeing is only one of the senses that helps us recognize our world. Sight is the most basic sense but other senses should be taken into consideration. The ability to observe also involves smells, sounds, and other sensations that are not often taken into consideration (p. 667). Martin (1972) states that observation is a ''touchstone of objectivity in science'' (p. 112). Observation is at the heart of other scientific methods (e.g. experiments or comparisons). Through

observation, children from the age of four are able to independently generate questions and hypotheses. Kohlhauf et al. (2011) argue that there is a possibility of fostering observation competency at a preschool level. Given all this, it follows that every opinion should be checked against experience without fear of the consequences. Opinion that is verified by experience and observation provides sufficient grounds to argue for its truth.

Reflection is a richly diverse topic, and appears different from one perspective to another. In *A Rhetoric of Reflection*, Blake (2016) observes the patterns in reflection. Reflection is both practice and text, unsettled and unsettling. Often located in moments of ambiguity, reflection is a process we use to make meaning and knowledge that is contingent and subject to change in a world that is also changing. The knowledge we create through reflection demands special attention. Reflection is perhaps one of the most commonly invoked terms throughout educational theories. In the theory of transformative learning, "critical reflection" is an ineradicable element that makes reflection deeper and more profound. Brookfield (2000) argues that Mezirow's (2000) 'critical reflection' borrowed from the philosophy of science does not automatically render reflection as critical (p. 126).

Within the context of *jnana,* the second *bhumi* is *vichârana* (reflection). Unlike rhetoric, reflection (*vichârana)* is an *existential state* that requires a person to use reflectional capacities in any situation, without having to think about it or be asked. It is an observable behaviour. Reflection then becomes, according to Ferriz, the mother of prudence, prevision, meditation, and concentration. More specifically, reflection becomes the mother of wisdom. The first *bhumi*, *shubha- ich'hâ* (goodwill), and the second *vichârana* (reflection) encourage the practice of the five virtues: <u>patience,</u> which allows one to endure any period in life; <u>moderation,</u> which governs passions and spreads true affection, friendships, and carefulness; <u>prudence</u> where one foresees consequences before action; <u>modesty</u> , which prevents the abuse of our talents and virtues and encourages us to not judge ourselves too favourably, which may offend our fellows; and <u>sweetness</u>, the opposite of irritation, anger, and violence. All of these predispose us to be more sociable and kinder beings.

4.2.5 Critical Thinking in Research and Love of the Truth

Critical thinking is more than perceiving research as conclusive. It is often described by educational philosophers as a process of transcendence (Handrick, 2006). John Dewey (1910) highlights that "the essence of critical thinking is suspended judgment". Foucault (1978) sees critical thinking as a challenge to the establishment and to the status quo. While exploring the history of critical thinking, Paul, Elder, and Bartell (1997) came across *Folkways*, a study of the foundations of anthropology and sociology, in which its author W.G. Sunner recognized the necessity of critical thinking in life and education. He emphasized the need for students to properly develop critical thinking skills and viewed criticism as the examination of accepted propositions in order to find out whether they correspond to reality or not. The critical faculty is a product of educational training. Men and women should be trained in critical thinking because of its centrality to human welfare. It is our only guarantee against delusion, deception, superstition, and misapprehension of ourselves and of our earthly circumstances.

Brookfield (2000) warns us that the concept of critical thinking is in real danger of losing its connection to its intellectual foundations (Frankfurt School). He objects to its being used indiscriminately, as in the case of 'critical reflection', since reflection cannot be critical. Nonetheless, he asserts that "we could learn critically about the emotional dimension of our lives when we investigate the extent to which our instinctual feelings and automatic emotional responses to certain situations are learned" (p. 127). Critical thinking is often confused with criticism, but while they intersect, their content is not the same. For instance, criticism more closely relates to judgment and is driven by emotion, while critical thinking analyzes the emotion that is part of the judgment process. Lack of reflection leads to the confusion between criticism and critical thinking.

R. de la Ferrière suggests that learners at all ages, even preschoolers apply critical thinking in their *small* research.

To begin my analysis of the love of truth, I first briefly discuss what love implies, and then I focus on approaches to truth. Love, in Erich Fromm's (1995) *The Art of Loving*, requires knowledge and effort. He claims that love has been widely misunderstood and relates it to art, in that it must be developed and practised with commitment and humility. Most people understand love as "a relatively rare

phenomenon and its place is taken by a number of forms of pseudo-love" (p.5). He also discusses "mature love", in which overcoming narcissism is the first precondition for achieving love. Le and Levenson (2004) state that "narcissism refers to experiencing one's own desires and concerns as real significance, while the wishes and concern of others have no significance in themselves but are experienced only from the viewpoint of their utility" (p. 445). Fromm identifies four basic elements of love: care, responsibility, respect, and knowledge, all of which are mutually interdependent (p. 25) and form the basis of a mature approach to love.

While exploring Rancière's perspectives on truth, Bingham (2010) asserts that Western education is commonly described in one of three ways, each roughly corresponding to traditional, progressive, and critical educational theory respectively. These three variants of educational theory view truth from an Enlightenment perspective and through objectivistic thinking. These models also differ in their understandings of how truth relates to education. From the traditional perspective, the truth is revealed to students through direct instruction. In the progressive perspective, the truth is to be pragmatically shared by all and is grounded in particular experiences. In the critical perspective, truth is not discovered by direct instruction nor can it be created through 'appealing' experiences. Rather, truth is not easily attainable because it is hidden behind a veil of ideological obfuscation. Critical theory removes the façade of traditional and progressive education, so the truth of power and oppression can be exposed. Bingham posits that each of the three models imports a version of the truth that is essentially foreign to the workings of education. Under this sort of description, the status of the truth is neglected and might be immanent rather than transcendent within education.

R. de la Ferrière discusses truth in various parts of his literature. In his *Psychological Purposes* No.3, dealing with the principles of truth and the mystery of numbers, he argues that truth is Theogony sciences, Cosmogony sciences, Andragony sciences, and Physiogony sciences (p.105). Respectively, these origins refer to god, the universe, man, and nature. Overall, to love the truth implies knowledge of and commitment to the profound situations that are present, single and multiple, and in constant renewal. Bingham (2010) states: "No form of education has a vehicular relation to the truth. Rather, education itself, as an explanatory form of social order, compels one to talk about truth in such a way" (p.660). School teaches suppositions about the truth. These suppositions become dogmas.

4.3 The Three Great Principles

R. de la Ferrière (1996) establishes three principles as necessary in all human relations: tolerance, truth, and peace. From Latin, *principium* means "a beginning, commencement, origin, first part". Principles are the starting points from which laws emanate. Unlike concepts and procedures, principles are to be discovered rather than invented.

4.3.1 Tolerance

The word tolerance, according to Van Doorn (2014), first appeared in Europe during the 2nd century in the *Meditations* by Marcus Aurelius, who expressed the idea of tolerance as, "All men are made one for another, either then teach them better, or bear with them". To date, its practice and limitations have been subject to philosophical, societal, and educational debate. Tolerance is not uncommon: people all over the world demonstrate that they are somehow willing to accept seemingly irreconcilable differences between their values, lifestyles, religious beliefs, political views, personal preferences, and those of others. Van Dorn found positive research on the association between tolerance and education: highly educated people display more adherence to civil liberties and tolerance and are less inclined than less educated people to abandon principles of tolerance in relation to a disliked group. Vogt (1997) states that "education increases tolerance and reduces prejudice and stereotyping of political, social, and moral groups" (p.102).

Tolerance has various essential features. Morin (2000) argues that scepticism or indifference to ideas is not true tolerance. Tolerance implies making ethical choices while simultaneously accepting the rights of others to express opposite choices, convictions, and ideas that could be negative or harmful. Tolerance is not valid for insults or criticism, attacks or something similar. According to Morin (2000) there are four degrees of tolerance. First, as formulated by Voltaire, tolerance allows for respecting the right of another to express opinions we may find vile; not because we respect what is vile, but because we refrain from silencing such expressions or imposing our notion of vileness upon them. The second degree of tolerance is inseparable from the notion that the encouragement of diverse, antagonistic opinions is proper to democracy. The democratic principle enjoins each individual to respect the expression of ideas

antagonistic to his own. The third degree follows Niels Bohr's notion that the opposite of a profound idea is another profound idea; meaning, there is truth in ideas antagonistic to our own and this is the truth that must be respected. The fourth degree comes from the awareness of people becoming possessed by myths, ideologies, ideas, or gods, and being carried in directions they hadn't intended to take (p. 54). In the potential to be blinded by ideology, we can locate cultural issues.

Tolerance in discourse is not always congruent with tolerance in practice. Generally, people are willing to support the idea of tolerance, but many react intolerantly when facing its practical consequences! Van Dorn (2014) lists several longitudinal studies reflecting this discrepancy. People of higher education were more tolerant over time than people who received less education, but this was only in regard to tolerance in the abstract, not in practice. Other studies reveal that self-reported intolerance does not necessarily coincide with the practice of intolerance (p.13). These studies and their evidence thus tend to focus more on the rhetoric of tolerance.

Various sociological studies have understood tolerance as 'social capital', representing positive experiences with diversity and increased political trust (von Doorn, 2014). However, tolerance as social capital may be superficial. The principle of tolerance is not merely "to accept things one abhors, disagrees with, disapproves or dislikes"; rather, tolerance is achieved in the search for truth through dialogue and goodwill. In recent years, Potgieter, van Der Walt, and Wolhuter (2014) have described the increasing attention to tolerance within education. However, this attention is characterised by considerable confusion and vagueness. R. de la Ferrière (1973) posits the following:

> To be interested in all doctrines is the most beautiful example of tolerance. Improving our mutual understanding only comes from higher tolerance. In such a way we could have the faith of a Christian, the virtues of a Hindu, the integrity of a Buddhist, the wisdom of a Taoist, the discipline and control of a Muslim, and make from all these concepts a SYNTHESIS (p.457).

Tolerance is regulated by truth. Without truth, tolerance becomes another 'social value', and its transcendence does not penetrate deeply enough to build real communities.

4.3.2 Truth

Nowak (1975) observes how the discipline of science approaches "absolute truths" through a series of relative concepts or "relative truths". Only methodological expediency differentiates the two truths. In educational philosophy, Emerson describes truth and integrity as at the heart of education. These two qualities are indispensable and essential to its core. (Williams, 1963). What is truth? The premise of a belief does not have to be scientifically true, but it can satisfy other needs, it can make sense, and provide immediate satisfaction to needs. Kashima, Walker, and O'Neill (2014) posit that people evaluate their ideas and beliefs in two ways: gnoseologically and psychologically. A *true* idea can be rejected if it is unpleasant or false, whereas an idea that may not be true can be accepted if it is framed pleasantly. A true statement must make sense to be accepted, but a meaningful statement may not be accepted as truth. Typically, people prefer the truth, but do they actually like the truth?

The vital element in the principle of truth is *seeking* truth. Ramadan (2014) believes that if we blindly accept truths outlined in theory, where in reality there are many hypotheses and many truths, there is a danger we will assume certainties and truths in practice that are exclusive, or we will pass final judgement on those who have taken a different path. It may appear logical to believe that values we discover or elaborate are natural to everyone. If we believe this, the equation becomes perfectly clear: universal reason is naturally accepted by all rational beings. Cogen-Almagor (1997) in his essay on J.S. Mill's truth principles argues that without vital argument, without the free exchange of ideas, common views are rigid, lack adaptability, and become dead dogma. The search for truth is infinite and ongoing. The quest for truth is of paramount importance. Mill regarded truth as an **ideal.** The search for truth is a search for beliefs we are confident in rather than beliefs we are absolutely certain of (p.133). Certainly, R de la Ferrière emphasises that "truth shouldn't be limited to any dogma".

4.3.3 Peace

Most authors agree with Cohrs, Christie, White, and Das (2013), that peace is an important condition of, as well as an expression of, positive human experience (p.590). Peace is "not merely the absence of wars or violence (direct, indirect, structural or cultural) or harm to others, but in a systemic way as engendering a state of integration

and positive, nurturing, respectful, and co-operative relationships" (Arya, p.243). In their analysis of the relationship between positive psychology and the psychology of peace, Cohrs et al. (2013) argue for a return to the concept of resilience that envisages a positive psychology that contributes to peace at the intrapersonal (and possibly interpersonal) level and also at levels beyond. Resilience is viewed as a positive adaptation to, and dynamic developmental process determined by, the interaction of risks and protections. Risk factors increase the probability of poor outcomes and limit people's ability to thrive and flourish; whereas protective factors increase the likelihood of resistance and recovery in the face of adversity (p. 595).

Peace is influenced by various factors, including the biological. Peace through health is an evolving academic discipline that explores how health interventions may contribute to peace. Peace is also developing into a potential human "right". The UN Convention on Rights of the Child, adopted in 1989 by all countries (except United States and Somalia), explicitly includes rights to identity, education, shelter, and safety for children. To summarize, the Rights of the Child demands an environment of peace. In the preamble to the Constitution of UNESCO, it states: "Since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed".

In studies on the ethical and philosophical foundations of peace education, Klepko (2017) observes only fragmented reasons for peace education and a lack of holistic and integral understandings of a culture of peace. He also observes a persistent gap between theory and practice. Klepko comments on the work of Nipkow (2007), who asks whether or not it is possible to teach people non-violence and to achieve a capacity for peace? There has been 500 years of discourse on "theology – violence – war". Moreover, ass Hedges' (2003) notes in his book *What every person should know about wars*, over the past 3,400 years humans have been entirely at peace for 268 years, that is 8 per cent of recorded history (p.1).

Sorokin (2002) asserts: "peace cannot be brought about by fine phrases and nice lectures, but by hard work and sacrifice". He describes four barriers we must overcome in order for peace to flourish: (i) Neglecting to find time to think about disturbing global problems; (ii) Feelings of helplessness; (iii) Fascination with war, weaponry, and violence; and (iv) A paralyzing social embarrassment about questioning authority. In a word, peace is a natural state each of us aspires to acquire.

4.4   The Four Pillars of Knowledge: Science, Philosophy, Art, and Didactics

Views about educational aims and methods diverge, sometimes widely. Case (1998) ascribes this divergence to the lack of general agreement on the nature of knowledge. Knowledge in a "knowledge-based society" transcends the range of disciplines, activities, and institutions that bind life. R. de la Ferrière discusses four pillars of knowledge: science, philosophy, art, and didactics. In researching the literature I couldn't find any author that considers all four of these pillars as components of knowledge. Different disciplines are seen as pillars, but no author (unfamiliar with the thought of R. de la Ferrière) has, to the best of my knowledge, viewed 'didactics' as one of them. Similarly, I have observed that when I have tried to explain at conferences, in forums, and in the course of academic debate that *didactics* is considered to be one of the pillars of knowledge, most people assume that I have I confused *didactics* with *dialectic*. Throughout history, didactics has been exclusively considered a means of teaching, but it is also formative of and the culmination of knowledge. It is exactly in the moment of teaching that knowledge is completed and perfected. It seems that, inspired by the words of the Roman philosopher Seneca "while we teach, we learn", Ferriz used to say: "the one who best learns and experiences a teaching is the one who practises it and who has to teach it". Scientists are only just beginning to record this type of wisdom, documenting exactly why teaching is such a fruitful way to learn — and designing innovative ways for people to engage in educational instruction.

It is no surprise that researchers have found that students who have had tutors recalled difficult material more accurately and applied it more effectively. This is what scientists have dubbed "the protégé effect". A. Murphy (2012), in her *Science of Growing Smarter,* discusses situations where a teacher inspires a student to score higher in tests compared to pupils who learn for their own sakes. She also points to the creative program at the University of Pennsylvania called the "Cascading Mentoring Program". University undergraduates teach computer science to high school students who then teach middle school students. Susan Davidson, the principal investigator in this regard, said: "This learning-by-teaching approach will improve all of the students' understanding of computational thinking and purposes by exposure to a variety of hands-on software design activities and materials" (n.p.). This cascading model phenomenon is being explored in various educational fields.

The "Principles of Pertinent Knowledge" is one of seven "Complex Lessons of Education for the Future" identified by E. Moran (1999). He posits that pertinent knowledge relative to education is: the context, the global (relationship between the whole and the parts), the multidimensional (parts should not be isolated from the whole and neither should parts be isolated from each other), and the complex (that which is woven together). Morin posits the essential problems are never fragmented and global problems are ever more essential. "Because we are taught to separate, compartmentalized, isolate learning instead of making connection, the whole of our knowledge forms an unintelligible puzzle" (p.17). Burdzy (2009), among various points he makes about science, states that "science may be defined as the most respected and most reliable knowledge that people offer to other people" (p.212). He claims to have a subjective vision of science. R. de la Ferrière asserts that science should be understood in the *unlimited sense of knowledge*. Hence, this considers objectivity and subjectivity. Burdzy demonstrates that the theory of probability is subjective. He points that what most people expect from science is not an 'objective' knowledge, but an honest account of what other people learnt (or what they think they learnt) in their research (p. 214).

As to philosophy, R. de la Ferrière (1985) posits that to philosophize is by no means to teach or learn a doctrine: it is rather a way of being, an act of faith, the act of existence par excellence. Bai and Scott (2011) discuss how the practice of philosophy reaches beyond discursive forms of conceptual analysis to include non-discursive forms of philosophical practice. They suggest that philosophers (of education) should be more pluralistic and intercultural in relation to all philosophical thought and should *do* more practice-based, experiential philosophy. The yoga system as a philosophy would be a candidate for such an approach. Jasper (1938) writes, "philosophy demands a *different thinking*, a thinking that, in knowing, reminds me, awakens me, brings me to myself, transforms me". Some authors relate existence to the development of consciousness. Keyserling (2013) affirms that "philosophy is essentially to the completion of science in the synthesis of wisdom".

Novitz (1992) argues that there are no boundaries between art and philosophy, and that the depiction of philosophy as an art is deeply enmeshed in everyday life. The human mind works symbolically with logical abstractions or aesthetic condensations of immediate expressiveness. The view of art is simultaneously attractive and disturbing. On the other hand, Murphie and Potts (2003) observe that several commentators

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(including McLuhan) regarded artists as 'antennae'. These artists foreshadow the social impact of technological change in their art. Therefore, they claim that the history of art is also the history of technology (p.39). On the *futurists,* Murphie and Potts refer to the Manifesto of Futurism by the Italian poet F. Marinetti:

> Why should we look behind us, when we have to break in the mysterious portals of the Impossible? Time and Space died yesterday. Already we live in the absolute, since we have already created speed, eternal and ever present (p.43).

Like Marinetti, futurist aesthetics valued the dynamic over the static, technology over nature (p. 44). This kind of art demonstrates the deeply embedded artistic or aesthetic values in our practical and everyday concerns, including those related to science and technology. R. de la Ferrière argues for the need to return from art to the mystical. He explains that art was the translation of the sacred sense but became a mechanical interpretation of the human materialism (p.47).

To summarize these four pillars of knowledge, Huaman (2000) argues that didactics is the highest expression of the aesthetics of communication. It crowns, completes, affirms, and reaffirms scientific knowledge, artistic creativity, and philosophical thinking. It satisfies the existential need for communication. He posits that a knowledge that is not transmitted lacks social sense; an *art* that does not inspire and awaken new states of consciousness is a poor art; a philosophy that does not enable ontological and social transcendence is a decadent philosophy.

The interactions among the four pillars of science, philosophy, art, and didactics creates and synthesises knowledge.

4.5 Concluding Thoughts

I conclude by highlighting a critical aspect of teaching and learning: "To think". As Lincoln Steffens claims, "It is dangerous to think -- always". But the educated must take the risk. Contemporary difficulties are explosive, ever more numerous, and perilously urgent. With the proliferation of mass communication we are surrounded by hawkers, pitchmen, hard and soft sells, and persuaders, both hidden and overt. Bombarded daily by images, symbols, printed words, and electronic media, we need a critical apparatus to decide who and what requires further analysis. Observation, reflection, critical analysis in

research, and love for the truth encourage students to discover their intellectual and spiritual potential and require and engender RESPONSIBILITY. Nowadays, plenty of discussions on analysis, study, control, meditation and reasoning are barely or partially taking into consideration. With a dogmatic mind there is little appreciation to THINK.

As well, it is important to be aware of the structure of thoughts, and the ideology behind them, as most people follow them unconsciously. The role of emotions in thoughts is also undeniable. Bolte-Taylor (2017) argues that "although many of us may think of ourselves as 'thinking' creatures that feel, biologically we are 'feeling' creatures that think." (p.19). Can we isolate our 'rational' thoughts today and trace them back to their root feelings?

Chapter 5.   A proposal

As mentioned in Chapter One, the perspective of the Age of Knowledge as well in the teaching of R. de la Ferrière and Ferriz is analyzed to propose a *pedagogy of transcendence* to apply the principles that aim to shape the spirit to achieve the discovery of the transcendental man. I will briefly touch upon on three basic aspects of this pedagogy: adding objectives of transcendence to the already established; a pedagogical communication model (to inform, to illustrate, to teach and to form); creativity and analytical methods.

Learning is change in the quality of one's thinking rather than change in the quantum of one's knowledge. Learning is not the process of adding more to what is already there; it is, initially, a search for meaning and an attempt to link the unfamiliar with the familiar. Learning is a qualitative change in both understanding and thinking.

Curriculum is more than the knowledge taught in school. As one theorist conceives it, curriculum is concerned with the broader intellectual and ideological ways a society thinks about education (van Eeden, 2010). The design of a curriculum is largely concerned with developing clear objectives and learning outcomes. Learning outcomes describe the broad goals for learners. Each learning outcome is supported and defined by specific objectives. Overall, I suggest that learning outcomes consider the following:

- Forming strong spirits capable of understanding a system as a whole.

- Actualizing ancient wisdom in the characteristics of the Age of Knowledge.

- Discovering, proclaiming, and practising the natural laws that rule the intellectual and moral conduct of learners.

- Moving beyond the narrow view of science and technology, and instead understanding science as the unlimited sense of knowledge.

Learning objectives are intended to support learning outcomes. They define specific outcomes in terms of skills, contents, attitudes, and values. Objectives are commonly aligned with three kinds of content knowledge: declarative (to know) related to factual information; procedural (to know how to do something); and conditional or

strategic (to be) that involves reflection and attitude. To these three well-known areas of content knowledge, I suggest creating a new category: *formative* (*to transcend*) related to developing consciousness states. In this category, complex knowledge will align with the *objectives of transcendence.*

5.1. Objectives of transcendence

The objectives of transcendence aim to develop in learners new states of *existential consciousness* (*bhumis*) that go beyond what is rational or commonly known as 'normal'. In other words, going beyond 'normality entails a willingness and ability to transcend; for instance, deep-seated dogmatic attitudes. I outline these objectives of transcendence through the application of the first four *bhumis* of *Jnana,* (*shubha- ich'hâ*: goodwill, *vichârana*: reflection, *tanu-mânâsa*: Subtlety of mind and s*attva-âpatti*: perception of reality).

The following is a list of examples that could be added to or modified as far as necessary on learners' needs. The objectives could be interrelated, suited to one or all four categories. Which of these options obtains will depend on the learners' understanding. They are arbitrary and one is by no means more important than the other.

5.1.1. *Shubha- ich'hâ*: Goodwill

- Do all things with a good attitude (justice and kindness) and prevent credulity.

- Act with an orientation towards goodwill without sentimentalism or thoughts of suffering or hardship.

- Demonstrate willingness to achieve understanding, tolerance, peace, fraternity, and harmony.

- Learn to deal with *unfair situations* which is a natural human interaction, following the principles of tolerance, truth, and peace.

- Have a good disposition to regulate thinking so as to meet the challenges of a rapidly changing and increasingly complex and unpredictable world.

- Do not abuse talents and virtues. Maintain a humble disposition.

5.1.2. *Vichârana*: Reflection

- Avoid unintended consequences of actions; foresee all consequences before acting.

- Evaluate theories, doctrines, and ideologies that could protect the self-enclosed error within themselves.

- Consider the certainties and uncertainties of an action, as well as the probable and improbable outcomes of an action.

- Recognize that the mind is subject to self-deception, egocentric self-justification, and a tendency to project wickedness on to others.

- Distinguish imagination from Illusion. Emphasize that the worst illusions arise from intolerance and dogmatism.

- Practice five virtues: *patience* to manage any unexpected situation, *moderation* to regulate passions, *prudence* to foresee the consequences of acts, *modesty* for not abusing our talents; and *sweetness* to be social and kind.

5.1.3. Subtlety of Spirit (*Tanu-mânâsa*)

- Use subtlety to recognize that reality is not always readily intelligible. Reality holds invisible potential and things do not appear as they are.

- Manifest true affection and friendship. Choose prudence whenever necessary.

- Do not harbour illusions or disillusionment, motivation or demotivation, but have the strength of hope. St. Augustine of Hippo explains that hope has two beautiful daughters, anger and courage. Anger is resistant to the way things are, and courage believes things do not remain as they are. Both inspire change.

- Understand that the products of our mind are not only beliefs and ideas, but also states of mind that have life and power. Ideas exist by and for man, but man also exists by and for ideas.

- Perceive the sources of error and illusion, and use ideas as mediators, do not identify with them.

- Penetrate the truth and life.

5.1.4. Perception of Reality (*Sattva-âpatti*)

- Recognize potential errors in the social, the cultural, from those ensconced in our best means of knowing, and in the projection of our fears and desires.

- Understand that suppressing emotion does not prevent the committing of errors. Memory itself is subject to error. Like attention, memory is highly selective and limited in capacity.

- Think and act epistemologically. For knowledge to be pertinent, it must elucidate all factors.

- Identify the false rationality arising from existing knowledge and overcome antinomies that could result from the progress in specialized learning.

- Understand that the fragmentation and compartmentalization of knowledge keep us from grasping what is woven together.

- Be aware that the perception of reality requires willingness, reflection, and subtlety of spirit.

5.2. To inform, illustrate, educate and form

Pedagogy is commonly understood as the principles and methods of teaching. I propose the axiology of pedagogical communication developed by D. Ferriz. Pedagogical communication consists of four indispensable steps: to inform, to illustrate, to educate, and to form. These four steps can be performed in a single educational act (one class); or developed step by step during various learning sessions. This requires preparation and a perception of students' potential on the part of the teacher.

The first step in the pedagogical process is the first thing we do in the classroom: *to inform*. All information should be transmitted efficiently and accurately. It should be planned, organized, integrated, and coordinated within other parts of a program or curriculum. New content fits hierarchically into our prior knowledge. However, information *solely* does not guarantee learning by the student, but it is necessary *to illustrate*.

The second step, *to illustrate,* expands information by adding new elements such videos, pictures, images, etc. Illustration helps to reconstruct understandings. Although information is expanded, illustration does not guarantee full understanding, comprehension, growth, or expansion in capabilities and skills, but it is necessary to *educate.*

The third step, to *educate,* builds on the two prior steps and inspires learners to think deeply and solve problems in ways that draw on new knowledge, skills, or

attitudes. The existing cognitive structures are revised or replaced. In this step there is an emphasis in achieving previous established learning objectives according to educational needs and priorities that bring about change, adaptation, construction, and conceptual, attitudinal and procedural restructurings in the student.

The last step, *to form,* is the highest level of pedagogical communication. In this step there is an emphasis in the achieving the *objectives of transcendence.* This will lead to discovering the transcendental man who understands the world and transforms it with his/her transcendence. There is an integration of all the areas of being, with relation to others and to the social, cultural and natural environment. Ideals are necessary for a better society, appropriate for all.

5.3. Creativity

Novaes (1997) relates creativity with discovery. Students' creativity is captured with the fascination of discovery, which taps into students' natural curiosity and desire to learn. Torrance (1993) focuses on creative thinking. He defines it as "the process of sensing difficulties, problems, gaps in information, missing elements, something askew; making guesses and formulating hypotheses about these deficiencies; evaluating and testing these guess and hypothesis; possibly revising and retesting them; and last, communicating the results" (p. 233). In a 30-year longitudinal study, Torrance finds that highly creative successful people: delight in deep thinking, have tolerance for mistakes, love their one's work, hold clear purposes, feel comfortable being a minority, and comfortable being different. Creativity rarely happens by accident, it does not just occur; it is a process.

Buonanno (2005) examines the cognitive processes underlying Edison's development of three revolutionary technologies (phonograph, the electric light, and the system of electrical power and distribution) within the psychology of creativity from the standpoint of the creativity-as-ordinary-thinking perspective. His study suggests that Edison used ordinary cognitive processes to develop those seminal inventions. Buonanno's findings adds to the growing body of evidence suggesting that other revolutionary creative products were developed through the use of ordinary cognitive processes. What may differ an ordinary person to a great person may be his or her creativity and intuition.

5.4. Analogical Thinking

I suggest analytical methods to move from a cognitive model of learning that derives from memory processing towards a cognitive model that derives from analogical reasoning. Analogical reasoning represents information and objects as systems of relationships that can be compared, contrasted, and combined in novel ways depending on contextual goals (Richland and Simms, 2015). Kosterec (2016) argues that analytical methods serve to obtain, decode, or make explicit information that is hidden, encoded, or entailed by the information in pre-existing knowledge bases. Every concept our mind creates owes its existence to a long succession of analogies made unconsciously over many years. The unconscious analogies give birth to concepts and continue to enrich these existing concepts over the course of our lifetime. At every moment in our lives, concepts in our minds are constantly triggered by analogies in an effort to make sense of the new and unknown by using the old and known.

5.5. Concluding Thoughts

Mark Van Doren states: "The art of teaching is the art of assisting discovery". The discovery of transcendental could lead to the discovery of his or her *perfection*. That is to say, it would amount to the discovery of the man/woman who persistently transcends his plane of understanding, his space, his culture, his language, his time in order to give full expression to his potential. As the motto of a Peruvian university states: *hominem uti nominem educare oportet,* which roughly means educate a man in everything he is as a man.

On the teaching role, I emphasize that living and practising what one teaches is a must. Such an approach strengthens culture and builds a coherent society, because students perceive the environment, the intentionality, the coherence, the authenticity, and the spirit of the teacher. Teachers may thereby launch learners into the search for something larger than themselves. Goethe writes, "One never goes so far as when one doesn't know where one is going".

> Emerson urges the teacher - "You are trying to make that man another you. One's enough." (Wilson, 288)

The suggested outline for a pedagogy of transcendence can be applied within formal or informal education and to lifelong learners, from pre-schoolers to postgraduates. It is my hope that these suggestions serve to stimulate reflection and enlightened debate.

Final conclusions

It is obvious that education can't keep up with our fast-moving world. The vision of the Age of Knowledge is that we are on the brink of a new civilization. A shift in vision and perspective is what lies at the root of any change. Two main goals motivated me to undertake this research. Firstly, I wished to contribute to the field of education a perspective not yet studied academically, even if some aspects of the broad and complex thought of R. de la Ferrière have been recognized by several academic institutions. For instance, the ELIC foundation, Free Schools of Scientific Research for Children, is inspired by the pedagogical thought of R. de la Ferrière, who wrote: "Teaching something to a child is not the only important objective; teaching is also to shape a child's spirit so that the child can develop its capacity to observe and reflect, apply critical thinking in research, and love the truth". Since 1977, ELIC has undertaken several academic activities in the Americas and Europe in order to disseminate the pedagogical thought of R. de Ferrière and D. Ferriz. My second goal has been to attempt an introductory work to fill a major gap in the scholarship on R. de la Ferrière.

R. de la Ferrière presents *new thought* that requires serious study by minds that are not hidebound by dogma and methodology, given that his style is unique, necessitating both training and access to original sources. At various points across a literature that covers more than 4,000 pages (excluding his enlightening personal letters), R. de la Ferrière explores much more than 100 topics. Analyzing one topic allows us to observe the evolution of his thoughts. Unfortunately, most of his literature is in Spanish. His most important books were translated into Spanish under his supervision. As often happens with great minds, some of his ideas have been misunderstood; perhaps due to lack of knowledge, personal interests, dogma or ego. Nonetheless, his thoughts are still alive. The original Universal Great Brotherhood (UGB) became *Magna Fraternitas Universalis.* The FISS (International Federation of Scientific Society) was relaunched in America in 1998. Both institutions are still active worldwide.

I do not hesitate to argue that his thinking is in the vanguard and can meaningfully contribute to desired change in education! As educators and learners, it is time to improve our spiritual and intellectual circumstances to better the world. As R. de la Ferrière demands, "Put the seal of the Living God at the summit of higher studies."

References

Adler, G., (Ed.). (1975). C.*G. Jung: Letters, volume 2: 1951-1961*. Translated by R.F.C. Hull. Princeton, NJ: Princeton University Press.

Amao, A. (2016). *The Birth of a New Consciousness and the Cycles of Time*. Bloomington, IN: AuthorHouse.

Ambrose, Sternberg, Ambrose, Donald, & Sternberg, Robert J. (2012). (Eds.). *How dogmatic beliefs harm creativity and higher-level thinking.* New York, NY: Routledge.

Ames R.T. (2016) Getting Past Transcendence: Determinacy, Indeterminacy, and Emergence in Chinese Natural Cosmology. In N. Brown, & W. Franke (Eds.), *Transcendence, Immanence, and Intercultural Philosophy*. New York, NY: Palgrave Macmillan.

Arya, N. (2004). Peace through health: Development and use of a working model. *Medicine, Conflict, and Survival, 20*(3), 242-57.

Audi, R. (2003). *Epistemology : A contemporary introduction to the theory of knowledge* (2nd ed.). New York, NY: Routledge.

Aven, T. (2015). Implications of black swans to the foundations and practice of risk assessment and management. *Reliability Engineering & System Safety*, *134*, 83-91.

Bachelard, G. (1984). *The new scientific spirit*. Boston, MA: Beacon Press.

Bachelard, G. (2013). *Intuition of the instant*. Evanston, IL: Northwestern University Press.

Bachelard, G. (1968). *The philosophy of no: A philosophy of the new scientific mind* (*G. C. Waterston, Tr).* New York, NY: Viking Press.

Bai, H., & Scott, C. (2011). The primacy of consciousness in education: A role for contemplative practices in education. *The Korean Journal of Philosophy of Education, 33*(4), 129-145.

Bastick, T. (1982). *Intuition: How we think and act.* Hoboken, NJ: John Wiley & Sons.

Bear, L. L. (2000). Jagged worldviews colliding. In M. Battise (Ed.), *Reclaiming Indigenous voice and vision* (pp. 77-85). Vancouver, BC: University of British Columbia Press.

Beckman, J. (2000). *Religion in Post-World War II America*. Duke University. National Humanities Center. Retrieved from Internet on Nov.22, 2016 from http://nationalhumanitiescenter.org/tserve/twenty/tkeyinfo/trelww2.htm

Bennett, S., Maton, K., & Kervin, L. (2008). The 'digital natives' debate: A critical review of the evidence. *British journal of educational technology*, *39*(5), 775-786.

Billingsley, B., Brock, R., Taber, K., & Riga, F. (2016). How Students View the Boundaries Between Their Science and Religious Education Concerning the Origins of Life and the Universe. *Science Education, 100*(3), 459-482.

Bingham, Charles. (2010). Settling No Conflict in the Public Place: Truth in Education, and in Rancierean Scholarship. *Educational Philosophy and Theory, 42*(5-6), 649-665.

Bobbitt, D. (2011). Teaching Mcluhan: Understanding understanding media. *Enculturation*. (http://enculturation.net/teaching-mcluhan)

Braunstein, J. F. (2012). Historical Epistemology, Old and New. *Epistemology and History 7 Épistémologie et histoire 13 Epistemologie und Geschichte 19* Program 25, 33.

Bromberg, P. (2013). Hidden in Plain Sight: Thoughts on Imagination and the Lived Unconscious. *Psychoanalytic Dialogues, 23*(1), 1-14.

Brookfield, S. D. (2000). Transformative learning as ideology critique. In J. Mezirow (Ed.), *Learning as transformation: Critical perspectives on a theory in progress* (pp. 125-148). San Francisco, CA: Jossey-Bass.

Bruner, J. (1964). *On knowing: Essays for the left hand.* Cambridge, MA: The Belknap Press of Harvard University Press.

Bryant, D. (1994). *Esoteric and exoteric knowledge in religious tradition*. Retrieved from http://www.theta.com/copyright/bryant.htm

Bunge, M. (1979). *Causality and modern science* (3rd rev. ed.). New York, NY: Routledge.

Burdzy, K. (2009). What is Science? In *The Search For Certainty: The Search For Certainty* (pp. 211-220). Singapore: World Scientific Publishing.

Buonanno, J. F. (2005). *Thomas A. Edison: Wizard of Menlo Park, or ordinary thinker? A case study in the psychology of creativity.* Unpublished doctoral dissertation. Philadelphia, PA: Temple University.

Bushee, J. (1876) *Precession of the equinoxes. A synopsis of the leading principles in connection with the phenomena of the "annus magnus" or "great year," with a description of a new precession apparatus for illustrating these phenomena in their special relation to the climatal changes of our globe, which may result in a "great ice age," or "glacial epoch.".* Worcester, MA.: Tyler & Seagrave. Retrieved from the Library of Congress, https://lccn.loc.gov/05002129.

Campion, N. (2016). *Astrology and popular religion in the modern West: Prophecy, cosmology, and the New Age movement.* Routledge.

Caputo, J. (1979). Transcendence and the Transcendental in Husserl's Phenomenology. *Philosophy Today, 23*(3), 205-216.

Case, P., & Phillipson, G. (2004). Astrology, Alchemy and Retro-Organization Theory: An Astro-Genealogical Critique of the Myers-Briggs Type Indicator®. *Organization, 11*(4), 473-495.

Case, Robbie. (1998). Changing views of knowledge and their impact on educational research and practice. *The handbook of education and human development: New models of learning, teaching and schooling* p. 73-95.

Chabris, C., & Simons, D. (2010). *The invisible gorilla: And other ways our intuitions deceive us.* Crown. New York

Collier, G. (2011). *What the Hell are the Neurons Up To?: The Wire-Dangled Human Race.* AuthorHouse.

Cohen-Almagor, R. (1997). Why tolerate? Reflections on the Millian truth principle. *Philosophia, 25*(1), 131-152.

Cohrs, J. Christopher, Christie, Daniel J., White, Mathew P., & Das, Chaitali. (2013). Contributions of Positive Psychology to Peace: Toward Global Well-Being and Resilience. *American Psychologist, 68*(7), 590-600.

Colas, D. (1997). *Civil society and fanaticism: Conjoined histories.* Stanford University Press.

Cortright, D. (2008). *Peace.* Cambridge: Cambridge University Press.

Costa, A. L., & Kallick, B. (Eds.). (2008). *Learning and leading with habits of mind: 16 essential characteristics for success.* ASCD.

Creegan, R. F. (1953). Transcendence and self-transcendence. *Philosophy and Phenomenological Research, 13*(4), 537-541.

Crossley, R. (1975). Education and Fantasy. *College English, 37*(3), 281-293.xxxx

Cuban, L., & Shipps, D. (2000). Reconstructing the common good in education: Coping with intractable American dilemmas. Stanford University Press.

Damasio, A. R. (1994). *Descartes' error*. New York: G.P. Putnam.

Damasio, A. R. (1996). The somatic marker hypothesis and the possible functions of the prefrontal cortex. *Phil. Trans. R. Soc. Lond. B*, *351*(1346), 1413-1420.

De Santillana, G., & Von Dechend, H. (1969). *Hamlet's Mill: An essay on myth and the frame of time*. David R. Godine Publisher

De Souza, M., Bone, J., & Watson, J. (Eds.). (2016). *Spirituality across disciplines: Research and practice*. Dordrecht: Springer International Publishing.

Díaz, J. J. (2008). Educación superior en el Perú: tendencias de la demanda y la oferta. En Benavides, M. (2008). *Análisis de programas, procesos y resultados educativos en el Perú: contribuciones empíricas para el debate.* MISC.

Du Toit, C. (2011). Selftranscendence and Eros: The human condition between desire and the infinite'. *HTS Teologiese Studies/Theological Studies* 67(3), E1-E12.

Dumsday, T. (2017). The exoteric/esoteric divide and Schellenberg's Sceptical Religion. *Religious Studies,* 1-18.

Dunn, T., & Lonergan, B. (n.d.) *The Internet encyclopedia of philosophy*. http://www.iep.utm.edu/lonergan/.

Durant, W. (1961). *The story of philosophy: The lives and opinions of the greater philosophers.* New York: Pocket Books.

Durkheim, E. (1915). *The elementary forms of the religious life*. The Free Press. A division of Macmillan Publishing Co., Inc. New York.

Eckert M. (2016) Future as transcendence: On a central problem in Ernst Bloch's philosophy of religion. In: Brown N., Franke W. (Eds.), *Transcendence, Immanence, and Intercultural Philosophy.* Cham: Palgrave Macmillan.

Edinger, Edward F. (1996). *The new god-image: A study of Jung's key letters concerning the evolution of the Western god-image.* Wilmette, Ill: Chiron Publications.

Edinger, E., & Wesley, D. (1996). *The Aion lectures: Exploring the self in C.G. Jung's Aion; edited by Deborah A. Wesley.* (Studies in Jungian psychology by Jungian analysts). London: Inner City Books.

Egan, K., Judson, G., & Madej, K. (Eds.). (2015). *Engaging imagination and developing creativity in education*. Cambridge: Cambridge Scholars Publishing.

Ehrenreich, B. (2009). *Bright-sided: How the relentless promotion of positive thinking has undermined America*. Basingstoke: MacMillan Books.

Eliade, M. (1978). *History of Religious Ideas, Volume 1: From the Stone Age to the Eleusinian Mysteries*. Chicago: University of Chicago Press.

Fantova, F. J. M. (2008). *Resiliència i voluntat de sentit en la promoció de la salut psicosocial en els docents. Capacitat de reconstrucció positiva a partir d'un context inicial d'adversitat. Estudi de cas en un Institut d'Educació Secundària* (Doctoral dissertation, Universitat Ramon Llull).

Farias, M., & Lalljee, M. (2008). Holistic Individualism in the Age of Aquarius: Measuring Individualism/Collectivism in New Age, Catholic, and Atheist/Agnostic Groups, *Journal for the Scientific Study of Religion, 47*(2), 277-289.

Fast, E., & Horvitz, E. (2016). *Identifying Dogmatism in Social Media: Signals and Models*. (http://arxiv.org/abs/1609.00425)

Ferriz O. David. (1985). *El Retiro del Maestre*. EDITORIAL DIANA, Mexico.

Ferriz O. David. (1985). Los Paramitas: Del Pensamiento del Maestre Dr. Serge Raynaud de la Ferrière. Tomo II. Editorial Nueva Era S.A.

Ferriz O. David. (1994). *La Supremacía de la Jnana Yoga en la Era del Saber*: Segunda edición comentada. Publicaciones Hipótesis y Síntesis de la Fundación FISS Central Científica.

Festinger, L., Carlsmith, J., & Smith, M. Brewster. (1959). Cognitive consequences of forced compliance. *The Journal of Abnormal and Social Psychology, 58*(2), 203-210.

Fettes, Mark. (2013). Imagination and Experience: An Integrative Framework. *Democracy & Education, 21*(1), Democracy & Education, 2013, Vol.21(1).

Fischer, K. (1989). The imagination in spirituality. *The Way Supplement*, *66*, 96-105.

Frankl, V. (1966). *Self-transcendence as Human Phenomenon*. Journal of Humanistic Psychology 6(2), 97-106.

Fromm, E. (1974). *The art of loving*. New York: Harper and Row.

Garcia-Romeu, A. (2010). Self-transcendent as measurable transpersonal construct. *The Journal of Transpersonal Psychology*. Vol. 42, No.1.

Garcia-Romeu, A., Himelstein, S. P., & Kaminker, J., (2015). Self-transcendent experience: A grounded theory study. *Qualitative Research*, *15*(5), 633-654.

Gaudelli, W. (2016). *Global citizenship education: Everyday transcendence.* Abingdon: Routledge.

Gibbons, B. J. (2001). *Spirituality and the occult: from the Renaissance to the modern age.* London: Psychology Press.

Gigerenzer, G. (1991). From tools to theories: A heuristic of discovery in cognitive psychology. *Psychological Review, 98*, 254-267.

Gill, A. (2006). *In Search of Intuitive Knowledge: A Comparison of Eastern and Western Epistemology / by Arunjit Gill. Ph.D. thesis.* Simon Fraser University, BC, Canada.

Gross, C. (1999). Phrenology. In G. Adelman (Ed*.). Encyclopedia of Neuroscience, 2nd ed.* Boston: Birkhauser, 1645-1646.

Guy, S., Kashima, Y., Walker, I., & O'Neill, S. (2014). Investigating the effects of knowledge and ideology on climate change beliefs. *European Journal of Social Psychology*, *44*(5), 421-429.

Hacker, P. (2013). Thought and Thinking. In: *The Intellectual Powers* (pp. 353-404). Oxford, UK: John Wiley & Sons.

Haidt, J. (2006). *The happiness hypothesis: Finding modern truth in ancient wisdom.* New York: Basic Books.

Haynes, C. (2016). Identity, transcendence and the true self: Insights from psychology and contemplative spirituality. *HTS Theological Studies*, *72*(4), 1-9.

Heelas, P. (2006). The infirmity debate: On the viability of new age spiritualities of life. *Journal of Contemporary Religion*, *21*(2), 223-240.

Heelas, P. (2009). *Spiritualities of Life New Age Romanticism and Consumptive Capitalism* (*Religion and Spirituality in the Modern World).* Hoboken: Wiley.

Heidegger, M. (1953/1977). The question concerning technology. In M. Heidegger, *The question concerning technology and other essays* (trans. W. Lovitt) (p.p. 3-35). New York: Harper & Row.

Heidegger, M. (1996). *Being and Time.* Trans. Joan Stambaugh. Albany: State University of New York Press.

Helberg, N., Heyes, C., & Rohel, J. (2009). Thinking through the Body: Yoga, Philosophy, and Physical Education. *Teaching Philosophy, 32*(3), 263-284.

Hendricks, C. (2006). *Commitment and suspicion in critical thinking as transcendence.* Philosophy of Education Yearbook: 295-302.

Hiebert, P. G. (2008). *Transforming worldviews: An anthropological understanding of how people change.* Ada, MI: Baker Academic.

Hofstadter, D., & Sander, E. (2013). *Surfaces and essences: Analogy as the fuel and fire of thinking.* New York: Basic Books.

Holm, N. (2011). Educating The net generation for transformation and transcendence. *Journal of Christian Education*, (2), 5-18.

Hoock, J. (2004). Science Wars?. In *Knowledge and the world: Challenges beyond the science wars* (pp. 307-321). Berlin: Springer.

Hoyt, S. (1912). The Etymology of Religion. *Journal of the American Oriental Society, 32*(2), 126-129. doi:10.2307/3087765.

Huaman, N. (2010) Transcendence: personal blog. Downloaded from: http://nicanorhuaman.blogspot.com/2007/11/aportes-la-didctica-en-el-pensamiento.html

Huxley, J. (1957). *Religion without revelation.* New York: Mentor Books.

Jacobs, A. (2017). *How to think: A survival guide for a world at odds.* New York: Currency.

Jasper, K. (1965). *Philosophy is for everyman: A short course in philosophical thinking.* New York: Harcourt, Brace & World, Inc.

Jaspers, K. (1971). *Philosophy of existence.* Philadelphia: University of Pennsylvania Press.

Johnson, A. M., Vernon, P. A., & Feiler, A. R. (2008). Behavioral genetic studies of personality: An introduction and review of the results of 50+ years of research. In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *The Sage handbook of personality theory and assessment.* Vol. 1: Personality theories and models (pp. 145–173). London, England: Sage.

Johnson, C. (2008). The spirit of spiritual development. *Positive youth development and spirituality: From theory to research*, 25-41.

Jung, C.G. (1959). *Aion: Researches into the phenomenology of the self*, Collected Works of C. G. Jung, Volume 9 (Part 2). New York: Bollingen Foundation Inc.

Jung, C. G. (2014). *Flying saucers: A modern myth of things seen in the sky.* London: Psychology Press.

Kalantzis, M., & Cope, B. (2004). Designs for learning. *E-Learning and digital media*, *1*(1), 38-93.

Kang, K. A., Kim, S. J., Song, M. K., & Kim, M. J. (2013). Effects of logotherapy on life respect, meaning of life, and depression of older school-age children. *Journal of Korean Academy of Nursing*, *43*(1), 91-101.

Kanuka, H. (2008). Understanding e-learning technologies-in-practice. *The theory and practice of online learning.* (http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.472.7029&rep=rep1&type=pdf#page=103).

Katz, L., Epstein, S., & Sarason, Irwin G., (1991). Constructive thinking and coping with laboratory-induced stress. *Journal of Personality and Social Psychology, 61*(5), 789-800.

Keyserling, C. H. (2013). *Creative Understanding*. Vancouver: Read Books Ltd.

Khalsa, S. B. S., & Butzer, B. (2016). Yoga in school settings: A research review. *Annals of the New York Academy of Sciences*, *1373*(1), 45-55.

Klepko, S. (2017). Pedagogy of Peace and Philosophy of War: the Search for Truth. *Future human image*, (7), 46-49.

Kohlhauf, Lucia, Rutke, Ulrike, & Neuhaus, Birgit. (2011). Influence of previous knowledge, language skills and domain-specific interest on observation competency. *Journal of Science Education and Technology, 20*(5), 667-678.

Kremer-Hayon, L., Moore, M., & Nevat, R. (1985). Dogmatism in teacher education practices. *The High School Journal*, *68*(3), 154-157.

Lawlor L. (2004). What immanence? What transcendence? The prioritization of intuition over language in Bergson. *Journal of the British Society for Phenomenology*, *35*(1), 24-41.

Le, & Levenson. (2005). Wisdom as self-transcendence: What's love (& individualism) got to do with it? *Journal of Research in Personality, 39*(4), 443-457.

Lilla, J. (2012). *Immanence and Transcendence. Blog Self-Realization* (https://jenniferlilla.wordpress.com/2012/07/04/immanence-and-transcendence/)

MacKinnon, A. M. (2013). The heart of learning. *Creative Education*, *4*(12), 16-19.

Magli, G. (2004). On the possible discovery of precessional effects in ancient astronomy. *History and Philosophy of Physics.* (http://arXiv:physics/0407108)

Maintenay, A. (2011). A Notion of "Immanent Transcendence" and Its Feasibility in Environmental Ethics. *Worldviews: Global Religions, Culture, and Ecology, 15*(3), 268-290.

Mann, A. T. (2002). *The divine life: Astrology and reincarnation*. New York: Sterling
    Publishing Company.

Marcus, L. (2017). Transcendence, idealism and modernity. *History of European Ideas,*
    43(3), 223-225.

Marimaa, K. (2011). The many faces of fanaticism. *ENDC proceedings*, *14*, 29-55.

Martin, C. (2009). The Good, the Worthwhile and the Obligatory: Practical Reason and
    Moral Universalism in RS Peters' Conception of Education. *Journal of Philosophy*
    of Education, *43*(s1), 143-160.

Maslow, A. (1968). *Toward a psychology of being.* (3rd ed.). New York. John Wiley and
    Sons, Inc.

Maslow, A. (1971). *The farther reaches of human nature.* New York: Viking Press.

McAllester, M. (1991). *Gaston Bachelard: Subversive humanist*. Madisson: The
    University of Wisconsin System.

Mcclellan, C. (2001). The legacy of Georges Cuvier in Auguste Comte's natural
    philosophy. *Studies in History and Philosophy of Science, 32*(1), 1-29.

McLean, G. F. (2003). *Hermeneutics Faith and Relations Between Cultures: Lectures in*
    Qom, Iran. CRVP.

McLuhan, M. (1964). *Understanding media : The extensions of man.* Boston: MIT Press.

Midelfort, H. E. (1999). *A history of madness in sixteenth-century Germany*. San
    Francisco: Stanford University Press.

Milliron, M., Valeau, Edward J., & Raby, Rosalind Latiner. (2007). Transcendence and
    globalization: Our education and workforce development challenge. *New*
    Directions for Community Colleges, 2007(138), 31-38.

Moran, D., & Wood, Robert E. (2008). Immanence, self-experience, and transcendence.
    In E. Husserl, E. Stein, and K. Jaspers (Eds.), *American Catholic Philosophical*
    Quarterly, 82(2), 265-291.

Moran, D. (2014). What does Heidegger mean by the transcendence of dasein*?*
    International Journal of Philosophies Studies. 22(4), 491-514.

Moreland, J. P. (2014). *The soul: how we know it's real and why it matters*. Chicago:
    Moody Publishers.

Moretti, L. (2015). In defence of dogmatism. *Philosophical Studies*, *172*(1), 261-282.

Morewedge, C. K., Giblin, C. E., & Norton, M. I. (2014). The (perceived) meaning of spontaneous thoughts. *Journal of Experimental Psychology: General*, *143*(4), 1742-54.

Morin E. (1999). *Seven complex lessons for the future*. Paris: UNESCO publishing.

Murphy P., A. (2012). The Protégé effect: Why teaching someone else is the best way to learn. From the page of Psychology Today. (https://www.psychologytoday.com/gb/blog/how-be-brilliant/201206/the-prot-g-effect?page=0)

Mukhopadhyay, U. (2003). Precession of the equinoxes and its importance in calendar making. *Resonance, 8*(4), 44-56.

Nowak, L. (1975). Relative truth, the correspondence principle and absolute truth. *Philosophy of Science*, *42*(2), 187-202.

Nystrom, C. (2002). Immediate man: The symbolic environment of fanaticism. *ETC: A Review of General Semantics, 59*(2), 175-191.

O'brien, T., & Noy, S. (2015). Traditional, modern, and post-secular perspectives on science and religion in the United States. *American Sociological Review, 80*(1), 92-115.

Ober, J., & Project Muse. (2015). *The rise and fall of classical Greece.* Princeton: Princeton University Press.

Pappusetty, D., & Kalva, H. (2014, November). Effect of Subliminal Cueing on In-attentional Blindness. In *Proceedings of the 1st International Workshop on Perception Inspired Video Processing* (pp. 39-40). ACM Multimedia Conference Nov 03, 2014-Nov 07, 2014 Orlando, USA

Pascual-Leon, J. (1990). An essay on wisdom: Toward organismic processes that make it possible. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 244–278). Cambridge, UK: Cambridge University Press.

Paskins, B. (2014). Fanaticism in the Modern Era. In *Fanaticism and Conflict in the Modern Age* (pp. 19-30). New York: Routledge.

Peña-López, I. (2015). Students, computers and learning. *Making the connection*. OECD. (http://www.oecd.org)

Perkinson, H. J. (1977). Fanaticism: flight from fallibility. *ETC: A Review of General Semantics*, 54-57.

Piaget, J. (1970). *Genetic epistemology / Translated by Eleanor Duckworth.* (https://doi.org/10.1177/000276427001300320).

Piedmont, R. (1999). Does spirituality represent the sixth factor of personality? Spiritual transcendence and the five factor model. *Journal of Personality*. Vol. 67-6, 985-1013.

Pietrasiński, Z. (2016). *The psychology of efficient thinking. tr. by Bogusłław Jankowski.* New York: Elsevier.

Pope, N. (2016). Dewey Hates Hobbits: Fantasy and imagination in the work of John Dewey. *Contemporary Pragmatism, 13*(2), 181-204.

Prensky, M. (2016). *Education to better their world: Unleashing the power of 21st-century kids.* New York: Teachers College Press.

Psillos S. (2012) Adding Modality to Ontic Structuralism: An Exploration and Critique. In: Landry E., Rickles D. (Eds.), *Structural Realism*. The Western Ontario Series in Philosophy of Science, vol 77. Dordrecht: Springer.

Potgieter, F.J., Van der Walt, J.L. & Wolhuter, C.C., (2014). Towards understanding (religious) (in)tolerance in education, *HTS Teologiese Studies/Theological Studies* 70(3), Art. # 1977, E1-E8.

Ramacharaka, Y. (1905). *Science of breath; a complete manual of the Oriental breathing philosophy of physical, mental, psychic and spiritual development*. El Cerrita, CA: Field Books.

Ramadan, T. (2010). *The quest for meaning: developing a philosophy of pluralism*. London: Penguin.

Raynaud de la Ferrière, Serge. (1980). *El Arte en la Nueva Era.* Mexico City: Editorial Diana.

Raynaud de la Ferrière, Serge. (1988). *Sus Circulares*: Tomo I (3rd. edition). Lima: Editorial Nueva Era.

Raynaud, Serge. (1973). *Los Grandes Mensajes.* 2a. impresión. Mexico City: Editorial Diana.

Raynaud, Serge. (1978). *Yug Yoga Yoghismo: Una Matesis de Psicología*. 10 a. impression. Mexico City: Editorial Diana.

Raynaud, Serge. (1982). Propositos Psicológicos: Volumen I. Mexico City: Editorial Diana.

Reas, E. (2016). Brain signatures of spontaneous thoughts. PLOS (Public Library of Science) Blogs Networks.

(http://blogs.plos.org/blog/2016/06/08/brain-signatures-of-spontaneous-thoughts/)

Redden, G. (2011). Religion, cultural studies and New Age sacralization of everyday life. *European Journal of Cultural Studies*, *14*(6), 649-663

Redden, G. (2016). Revisiting the spiritual supermarket: does the commodification of spirituality necessarily devalue it?. *Culture and Religion*, *17*(2), 231-249.

Rheinberger, H. J. (2010). *An epistemology of the concrete: Twentieth-century histories of life*. London: Duke University Press.

Rice, E. L., & Fredrickson, B. L. (2017). Do positive spontaneous thoughts function as incentive salience? *Emotion*, *17*(5), 840-855.

Richert, R. A., & Harris, P. L. (2006). The ghost in my body: Children's developing concept of the soul. *Journal of Cognition and Culture*, *6*(3), 409-427.

Richert, R. A., & Harris, P. L. (2008). Dualism revisited: Body vs. mind vs. soul. *Journal of Cognition and Culture*, *8*(1), 99-115.

Richland, L., & Simms, N. (2015). Analogy, higher order thinking, and education. *Wiley Interdisciplinary Reviews. Cognitive Science, 6*(2), 177-192.

Roazzi, M., Nyhof, M., & Johnson, C. (2013). Mind, soul and spirit: Conceptions of immaterial identity in different cultures. *International Journal for the Psychology of Religion*, *23*(1), 75-86.

Roback, A. (1922). Intelligence and intellect. *The Journal of Philosophy, 19*(12), 325-330.

Robinson S. & Aronica, L. (2015). *Creative Schools: The Grassroots Revolution That's Transforming Education*. New York: Penguin books.

Rocca, G. (2004). *Speaking the incomprehensible God Thomas Aquinas on the interplay of positive and negative theology / Gregory P. Rocca.* Washington, D.C.: Catholic University of America Press.

Rokeach, M. (1954). The nature and meaning of dogmatism. *Psychological Review, 61*(3), 194-204.

Sadowski, E. (2017). *Intuition and education.* Ph.D Thesis. Simon Fraser University, BC, Canada.

Serhiy Klepko. (2017). Pedagogy of peace and philosophy of war: The search for truth. *Future Human Image, 7*, 46-49.

Scott, G. G. (2006). *The empowered mind: How to harness the creative force within you*. Englewood Cliffs, NJ: Prentice-Hall.

Seeley, L. (1904). *History of education*. London: Filiquarian Publishing, LLC.

Sheldrake, P. (2007). *A brief history of spirituality*. Oxford: Blackwell Publishing.

Simons, D. (2017). Inattentional Blindness and the Illusion of Attention. In *The Oxford Compendium of Visual Illusions* (p. The Oxford Compendium of Visual Illusions, Chapter 104). Oxford: Oxford University Press.

Simons, D. J., & Chabris, C. F. (1999). Gorillas in our midst: Sustained inattentional blindness for dynamic events. *Perception*, *28*(9), 1059-1074.

Singer, A., & Pezone, M. (2003). Education for social change: From theory to practice. *Workplace: A Journal for Academic Labor*, *5*(2), 1-4.

Smith, R. C. (2016). *Gaston Bachelard: Philosopher of science and imagination*. Albany: Sunny Press.

Sorokin, P. A. (2015). *Ways & power of love: Techniques of moral transformation*. West Conshohocken, PA: Templeton Foundation Press.

Taylor, C. (1991). *Ethics of Authenticity*. Cambridge: Harvard University Press.

Takaya, K. (2004). *On the connections between imagination and education: Philosophical and pedagogical perspectives*. (PhD thesis). Simon Fraser University, BC, Canada.

Tapping, K. (2014). Age of Aquarius. Publication of National Research Council Canada. (http://www.nrc-cnrc.gc.ca/eng/publications/nrc_pubs/tapping/2014/2014_01_23.html)

Tarnas, R. (2006). *Cosmos and psyche*. London: Penguin Group.

Tate, K. A., Williams, C., & Harden, D. (2013). Finding Purpose in Pain: Using Logotherapy as a Method for Addressing Survivor Guilt in First-Generation College Students. *Journal of College Counseling*, *16*(1), 79-92.

Tisdell, E.J. (2003). *Exploring spirituality and culture in adult and higher education*. San Francisco: Jossey Bass.

Torrance, E. P. (1993). Understanding creativity: Where to start? *Psychological Inquiry, 4*, 232-234.

Townsend, S., Major, B., Sawyer, P., Mendes, W., & Simpson, Jeffrey. (2010). Can the absence of prejudice be more threatening than its presence? It depends on one's worldview. *Journal of Personality and Social Psychology, 99*(6), 933-947.

Turkle, S. (2017). How computers change the way we think. In *Law and Society Approaches to Cyberspace* (pp. 3-7). Abingdon: Routledge.

Turner, S., & Factor, R. (1981). Objective Possibility and Adequate Causation in Weber's Methodological Writings. *The Sociological Review, 29*(1), 5-28.

Ulf Drobin. (1982). Psychology, philosophy, theology, epistemology: Some reflections. *Scripta Instituti Donneriani Aboensis, 11*, 263-274.

Urban, H. (1997). Elitism and esotericism: Strategies of secrecy and power in south Indian Tantra and French Freemasonry. *Numen, Xliv*(1), 1-38.

Vaish, A., Grossmann, T., & Woodward, A. (2008). Not all emotions are created equal: the negativity bias in social-emotional development. *Psychological bulletin*, *134*(3), 383-403.

Valk, John, & Tosun, Aybiçe. (2016). Enhancing Religious Education through Worldview Exploration. *Discourse and Communication for Sustainable Education, 7*(2), 105-117.

Van Doorn, M. (2014). The nature of tolerance and the social circumstances in which it emerges. *Current Sociology*, *62*(6), 905-927.

Verschueren, J. (2012). *Ideology and language use: Pragmatic guidelines for empirical research.* Cambridge: Cambridge University Press.

Vitsaxis, V. (2009). *Thought and faith: Comparative philosophical and religious concepts in ancient Greece, India, and Christianity. Volume II.* Translate by Deborah Brown Kazazis and Vassilis Vitsaxis. Boston: Somerset Hall Press.

Vogt, W. P. (1997). *Tolerance & education: Learning to live with diversity and difference.* Newbury Park: Sage Publications, Inc.

Waddington, David I. (2010). Troublesome sentiments: The origins of Dewey's antipathy to children's imaginative activities. *Studies in Philosophy and Education, 29*(4), 351-364.

Walton, J. (2017). The significance of consciousness studies and quantum physics for researching spirituality. *Journal for the Study of Spirituality, 7*(1), 21-34.

Wheeler, E., Santoro, A., & Bembenek, A. (2017). Separating the "Limbs" of Yoga: Limited effects on stress and mood. *Journal of Religion and Health,* doi: 10.1007/s10943-017-0482-1.

Williams, L. P. (1963). The vision of truth-Basic perspectives in Emerson's philosophy of education. *Peabody Journal of Education*, *40*(5), 286-290.

Williams, T. (2010). The New Barbarism? Learning in Twenty-First Century Schools. *The Imaginative Conservative.* (http://www.theimaginativeconservative.org/2010/08/new-barbarism-learning-in-twenty-first.html)

Woodyard, H. D. (1973). Dogmatism and Self-Perception: A Test of Bem's Theory. *The Journal of social psychology*, *91*(1), 43-51.

Wright, A. (2000). *Spirituality and education Andrew Wright.* (Master classes in education series). New York: Routledge/Falmer Press.

Yancey, Yancey, Kathleen Blake, & Project Muse. (2016). *A rhetoric of reflection edited by Kathleen Blake Yancey.* (UPCC book collections on Project MUSE. Higher Education). Logan: Utah State University Press.