RHYTHM AS AN ARCHETYPAL ELEMENT OF THE PSYCHE: A TRANSPERSONAL PERSPECTIVE

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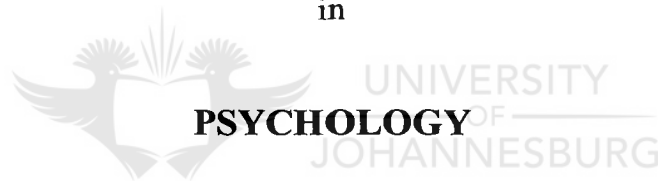
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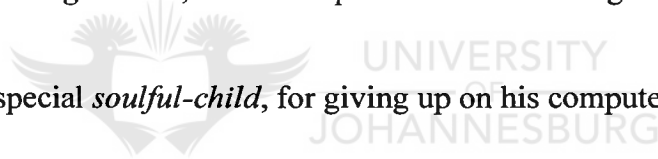Dr. Johannes Beuster for his invaluable contribution, invested interest anc

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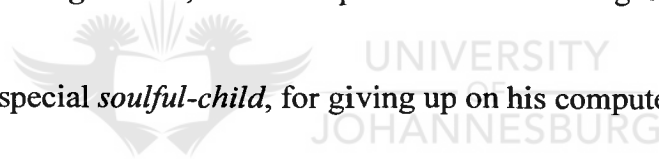
ABSTRACT

The nature of this study exerts to reveal the connection between archetypes and rhythm, through a transpersonal orientation, that acknowledges a transcendent *Self.* The backbone of this study, is guided by the transpersonal hallmarks which include a spiritual essence, nonduality, underlying unity of diversity or holism, a variety of manifestations of being, intrinsic health, both positive and negative aspects of humanness, self-transcendence and self-transformation. These are concepts that weave themselves through out the study. The secondary focus concerns how shifts in states of consciousness occur for transcendental experiences to occur. The interest in these experiences is as a result of the understanding that they potentially bring about a greater sense of *Self* and well-being.

The holistic approach of the transpersonal paradigm is useful for an analysis of archetypes, as it provides continuity and coherence when considering the nature of archetypes, for the main goal of the archetypal Self is to become an integrated unified whole. The archetype is described as, primordial images with a numinous character that emerge from an innate, universal pre-existing principle of organisation. How the concept of the archetype fits within the psyche is mapped in the location of the collective unconscious. A distinction is made between the archetype-as-such, which is the underlying unseen structure, and the archetypal image, which is the manifested content of the structure. The archetype functions within the psyche from the principle of organisation and self-regulation. The properties of a self-organising system are remarkably like those of the archetype. To give due respect to both sides of the same coin, a relationship is established between archetypes and chaos theory, even though they do not sit in the same camp.

Rhythm is conceptualized in a way that resonates with many of the archetypal qualities as it too is innate, universal, pre-existing and functions to bring about order, It manifests in a variety of forms, modes, styles or images and has a numinous essence (mystical, spiritual essence). The structural components of rhythm are sketched as an introduction to the principles of entrainment; a feature that gives rhythm its healing value in the human body and psyche. The study is a process of evaluating connecting themes from the diverse disciplines, of psychology, music and science into an integrated whole.

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CHAPTER 1

INTRODUCTION

In the beginning there was noise. And noise begat rhythm.
And rhythm begat everything else

- Hart. (1990, p.12).

1.1.   Overview

According to many ancient wisdoms, sound is at the heart of creation. The Indian Vedic

term *Nada Brahman* means *the primal sound of being.* The Sufis attribute the source

from which all form manifests, as the creative sound *hu,* and Chinese Taoist stories refer

to *Kung* as the Great Tone of Nature (Keyes, 1973). As an energy force sound vibrates,

beating rhythmic pulses that penetrate into every miniscule space of the universe.

Everything is encoded with vibration and rhythm (Hart, 1990; Leeds, 2001). From

antiquity philosophers, prophets and dynasties have shared a common reverence for the

divine power of sound and the profound affect of its rhythmic and melodic accomplices.

Ancient Chinese, Pythagorean and Aristotelian traditions acknowledged the vital role

music and rhythm played in emotional and psychological well-being. It is not surprising

that they equated the value of music and rhythm with the scientific domain.

In these ancient traditions the rational world of science and the mystical experience of

music were acknowledged as compatible allies used to explain the connection between

the finite material realities with the infinite immaterial world (James, 1995; Lugt, 1998).

Both realms were positioned as crucial ingredients for the expression of human

wholeness. For this reason, Plato argued for a system of education that included musical

training (Storr, 1992).

Then, with relentless momentum, the age of reason arrived that toppled the once balanced

unity of science and art (Hillman Chartrand, 1988). And so the empirical banners of

rational objectivity took over and dominated the podium of supremacy providing a one-

sided definition of reality. No longer considered with equal distinction, the arts collapsed into second rate status. Hence, the chasm between rational and spiritual, objective and subjective, the within and the without deepened, accentuating their separateness and moving away from wholeness.

The fragmentation of the world was further propagated by Descartes' mind-body dualism. The split highlighted a world of polarities. Dualities in themselves are not the problem but as long as these distinctions are favouring one side of the split a disturbance in balance, disharmony, disease and disruption will predominate. The field of psychology is not excluded from this fragmented reality. To gain empirical credibility within the scientific world, psychology aligned with Newtonian causal model, which emphasised the objective, observable reality of human nature. In so doing, the subjective essence of life was ignored. Relativity theory and quantum physics revolutionised the approach to modern science, demonstrating that everything is not as we think it is and not everything is measurable in observable terms (Beuster, 1991; Capra, 1982). In other words, scientific validity is relative, with causality only one possible explanation of reality. This suggests a calling towards acknowledging both the objective stance as well as the subjective experience into a more holistic world view. The humanistic, existential-phenomenological and transpersonal movements are approaches, that emerged to address the aforementioned split. They seek to bring back harmony, balance and the unification of dichotomous parts into an integrated whole, with the emphasis on optimal health and well-being (Hastings, 1999).

The subjective, mystical, irrational and spiritual human experiences, previously dismissed as unsuitable material for scientific study, were now recognised as part of a valid human reality. Building on the scaffolding of the humanistic framework, the distinguishing feature of the transpersonal paradigm considers human experiences that go beyond the individual sense of self-identity. Maslow (1968) termed them "peak" or "transcendent experiences" (Hastings, 1999; Valle, 1989). Features of the transpersonal orientation include, an ancient rooting, universality, a unity or connection that is present in all separate phenomena, acknowledging both negative and positive aspects of humanness, a

variety of manifestations of being, viewing self-transcendence as a natural process of self-transformation, and understanding the spiritual essence as an important aspect of being human. These hallmarks of transpersonal psychology reveal threads common to Jung's concept of the *collective unconscious*. The term *collective* relates to the idea of universality as opposed to individuality. Jung (1969b) refers to the contents of the collective unconscious as the archetypes which are archaic and numinous in nature.

Jung (1969b) claimed the collective unconscious is primordial, innate and universal and operates from a pre-existing structure of order. The tenets of Jung's archetypal theory present an appropriate framework by which to integrate the polarities and view the world in a more unified and holistic manner. Reconciling pairs of opposites so they are no longer differentiated in the psyche is the process of becoming one's *Self*, which Jung (1969b) called the *individuation process*; this represents the path to wholeness. It occurs when the archetypal material of the unconscious is integrated into consciousness (Jacobi, 1946).

In order to remain faithful to the concept of unification and holism, the present study gives due reflection to chaos as the polarity of order. The idea of chaos and order is bridged in the fledgling science of chaos theory, which explains the paradoxical concept of underlying order present in chaos. Miller (1991) postulated that the qualitative aspects of chaotic systems, for instance, complex feedback loops, self-organisation, holistic behaviour and inherent unpredictability can be directly applied to Jung's concept of the psyche. Principles of chaos theory may be translated to explain characteristics of archetypes (Miller, 1991). Schueler and Schueler (2001) provide a comprehensive model to explicate this relationship further.

The idea of *orderly disorder* is integrated using Bohm's (1983) holographic model which explains that, the wholeness of the universe is enfolded in the parts, in the similar way a piece of holographic film gives birth to a three-dimensional holographic image. The model is suggestive of the Hermetic axiom *As Above, So Below* (Miller, 1991). To this end, Miller (1991, p. 3) summed up that chaos theory "provides a comprehensive

metaphor for uniting physical, emotional, mental and spiritual realities.... It provides a bridge for unfolding 'heaven on earth', a means of manifesting and grounding spiritual energy, that is not only creative but healing."

It appears that one key principle common to the features of chaos theory is that of *motion,* which may occur in infinite repeating patterns. Repeating patterns within a space-time grid could be conceptualised as rhythmic. These repeating patterns and cycles bring order to a system. Some authors credit the organizing principle to music, for instance, Yehudi Menuhin (cited in Storr, 1992, p. 33) who said, "Music creates order out of chaos; for rhythm imposes unanimity upon the divergent; melody imposes continuity upon the disjointed, and harmony imposes compatibility upon the incongruous." However, Cooper and Meyer (cited in Storr, 1992, p. 33) argued, "to study rhythm is to study all of music. Rhythm both organizes, and is itself organized by, all the elements which create and shape musical processes". Hart (1990) explained that music is the externalisation and reflection of deeper pulses embedded in the human biology. Much of music's power arises from its connection to hidden rhythms we are mostly unaware of (Hart, 1990). It may appear, that music brings about order and organisation, but credit should really be attributed to the underlying component of rhythm that is present within all music.

Rhythm is not only responsible for organising music but, as a regulator is vital to the survival of the human organism both physically and psychologically. Being *off-beat, out of sync* or *out of tune* are metaphors casually used to describe a state of being out of rhythm and implies ill-health. Reinstating the normal rhythm of the organism may be achieved through the principle of entrainment. This is a process of syncing two different rhythms such that the arrhythmic pulse alters and aligns once again with the rhythmic pulse and has vast implications for the healing profession. From a health and healing perspective Nzewi (2002) identified music as instrumental in *re-tuning* inner conflicts within the human body and soul. He attributed the healing energy of music to the underlying structure of music, which includes rhythm and melody. Once again the distinction is made that it is not music per se that is responsible for shifts in well-being but the rhythm that underscores it.

In conclusion, the striking resemblance between the features of archetypes and rhythm is explored. They both appear to embrace a primordial, innate, universal and numinous nature and function according to the principle of organisation. Corresponding the structural principles and functional modalities of archetypes with those of rhythm, illustrates how rhythm is positioned as an archetypal element of the psyche.

1.2. Motivation

The focus of traditional psychology has been on the human experience from a bio-psycho-social perspective. This mainstream approach has seemingly marginalized an important aspect of the totality of being human, namely that of the spiritual. To provide a comprehensive understanding of human nature, it is required that theory, research and practice acknowledge the full range and depth of human experience. Although the humanistic, existential and phenomenological schools of thought acknowledge the spiritual aspect as an extension to their core focus, the transpersonal school views the spiritual aspect as the centre of their focus. It is understood that transcendent spiritual experiences allow for self-transformation and "...access to the unitave self..." (Cowley, 1993, p. 527). By integrating an understanding of the transcendent-self as part of the spiritual essence of being into mainstream psychology, the transpersonal approach to healing is broadened and strengthened (Cortright, 1997), as it leans towards embracing the concept of a *whole* being.

According to Jung (1969a), striving for wholeness is the ultimate goal of everything in life. It requires the process of individuation for a person to integrate the conscious and unconscious elements into a harmonious unity (Beuster, 1991; Jacobi, 1946). By synthesizing all aspects of the psyche, the individual attains self-realisation and becomes the individual he/she always intended to be (Jung, 1969b). The driving force behind the process of individuation is the transcendental function that represents the resolution of opposing forces within the psyche. Such an occurrence results in the individual experiencing *wholeness* that extends beyond the personal dimension (Beuster, 1991).

According to Jung this experience is, however, not accessed by everyone and is a state only attained by the exceptional few (Beuster, 1991; Jacobi, 1946; Jung, 1969a)

Steer (1996) referred to the process of making *whole* as being more than therapeutic restoration to some normal level of functioning. Rather it is a process that results in a greater functioning of the individual in that he/she engages with every aspect of life that exceeds the personal. The term *whole* is related to the Old-English word *hælan* from which *heal* is derived. This relation points to the idea that healing is essentially a process of *wholing*. If the field of psychology ignores the spiritual aspects of human nature, it resorts to studying only fragmented parts and is effectively amputating the healing process.

From an applicatory stance, ancient cultures have understood the modality of music as being significant for healing and wholing. Since the days of Pythagoras, the concept of *wholing* has formed an integral part of musical experience (Steer, 1996). Assagioli (1965) and Steiner (1983) confirmed that musical rhythmic experience involves the whole human being affecting directly the body, emotions and states of consciousness. The impact of rhythm is noted for having profound potential to transform physical, psychological and emotional states. In this regard it can produce either positive or negative outcomes and so it is important to understand how rhythm functions in order to elicit those rhythms that assist in enhancing well-being. Plato (1971) also acknowledged music as having a powerful and profound effect and encouraged only those styles that promoted well-being.

On closer analysis of the musical experience, it is noted that music manifests from the essence of rhythm and beat. Without rhythm music is non-functional and non-existent. Rhythm forms an integral part of being human. It permeates our lives, evident in the atoms electrical pulses, in the very first pulse of the heart, in the cycles of nature, through to the rotation of the planets. Some rhythms we cannot perceive, such as the micro-rhythms of the atoms and the macro-rhythms of the solar system through the Milky Way which takes 240 million years to complete one cycle (Hart, 1990). Rhythm is present in

all life, from the microcosm to the macrocosm, and hence displays a discourse of *holism* (Smuts, 1927), cross-cultural and universal connection.

The impact of rhythm in relation to the bio-psycho-social-spiritual functioning of individuals has, surprisingly, been a neglected field of study. Most historical research has focused on the correlation between music and emotions or music and cognitive aspects. Studies in this field have struggled to articulate a comprehensive and relevant understanding of rhythm or music that provides a coherent theoretical framework (Juslin & Sloboda, 2001). The lack of a unifying paradigm is possibly related to various approaches to the research being reductionistic and non-embracing of a holistic orientation. A study that conceptualizes rhythm, as the bedrock of music within an interdisciplinary model, would promote improved direction for further studies that have universal relevance.

Rhythm is not only the beats that order music but extends to every facet of life in the form of vibrating patterns. It is part of the blueprint of human nature, existing in the collective unconscious that we can access as a means of "wholing" (Steer, 1996). The importance of rhythm as a modality for healing, with regard to all levels of functioning is explained in this study.

1.3. Aim and Methodology

Key to the transpersonal paradigm is the concept of interconnections and the threading together of what goes beyond the conventionally recognized (Braud, 1998). Through the transpersonal lens, the present study intends to be at once expansive and integrative.

This study aims to address a significant gap in literature related to rhythm, transpersonal experiences and psychological well-being. The purpose of the study is to provide a meta-theoretical model that is inclusive of the phenomenon of rhythm as a primordial archetypal source, for promoting individual and community health in relation to the bio-psycho-social-spiritual totality.

A meta-theory, is a means of conceptual exploration that brings forth underlying themes of complicated relationships across theories, models, paradigms and disciplines (Overtone, 1998). Different disciplines generally adhere to different structures of inquiry; however, through a meta-theoretical approach it is possible to establish correlations between disciplines that reveal general ontological and epistemological suppositions. The transpersonal paradigm is best suited as an orientation for such a meta-theoretical approach as its basic architecture embraces integration of multi-disciplinary perspectives. It is an enormous undertaking to evaluate and integrate concepts from many different pedagogic settings. With this in mind, it is important to note that this study serves only as a preliminary investigation into the interlocking cogs of the distinct domains of biology, psychology, music, science and spirituality.

An in-depth literature review of the operational definitions (transpersonal, the archetype and rhythm) will be explored and critically evaluated to formulate an integrative analysis. Research will be conducted as a comprehensive heuristic inquiry, as previously mentioned, from a transpersonal orientation. The study aims to draw on literature reviews that are multidisciplinary, and not confined to recent publications, but include the depth of knowledge in historical writings. As Braud (1998) said, there is no expiry date to wisdom.

The conceptual framework is rooted in Bohm's (1983) holographic model where the relationship of the parts to the whole is not one of fraction but one of equivalence. According to this model, the microcosm reflects and contains the macrocosm (Grof, 1993; Wilber, 1999). Through this method the study will evaluate the interconnections between multidisciplinary domains that include psychology, music, biology and anthropology. This unifying approach aligns with the transpersonal perspective of bringing together into 'one' as well as the ultimate goal of the archetypal *Self*, to achieve wholeness.

The foundation of this inquiry is mapped from the essential constructs and structural features of the transpersonal paradigm, which provide the key signposts that link

archetypal theory with rhythm. It would therefore be appropriate to commence with a presentation of transpersonal theory and the relevant features.

CHAPTER 2

TRANSPERSONAL PSYCHOLOGY

Whatever we say the totality is, it isn't – it is also more than we say and different from what we say.

- Bohm and Peat (1987, p.265)

2.1. Orientation and Essence

Transpersonal psychology is a relatively new emerging force challenging the conservative framework of traditional assumptions, in that it recognises transcendent experiences and non-ordinary states of consciousness. The aim of transpersonal perspective is to investigate individual experiences that transcend beyond the egoic-self or personal. It seeks to understand deeper spiritual values, which encompass more of a whole person in mind-body-spirit (Davis, 2000; Valle, 1989; Walsh & Vaughan, 1980a).

This transpersonal model evolved as a "Fourth Force" in psychology, which took cognisance of the full spectrum of human potential (Valle, 1989; Walsh & Vaughan, 1980a). Despite the valuable contributions of behaviourism and psychoanalysis (the first two forces), they were deemed reductionistic, with psychoanalytic thinkers and practitioners, in particular, also focusing on pathologising human nature. The limitations of the empiricist stance resulted in the revolutionising shift towards a more health-oriented perspective, attributed to the humanistic school of Abraham Maslow in the 1960's. In *Towards a psychology of being* Maslow (1999, p. xi) considered "Humanistic, Third Force Psychology to be transitional, a preparation for a still higher Fourth Psychology, transpersonal, transhuman, centered in the cosmos rather than in human needs and interest, going beyond humanness, identity, self-actualization, and the like."

Transpersonal psychology serves to bridge an "epistemological chasm" (to use a term borrowed from William James (1987 p. 1171) by integrating perspectives from a variety

of binary disciplines. It embraces Western empirical perspectives and Eastern philosophical wisdom, traditional and non-traditional, science and spirituality. This approach towards a blended ontology, positions the transpersonal movement on a controversial stage that appears to challenge the validity of previous psychological models. Walsh and Vaughan (1980a) argued that transpersonal psychology is not an antagonistic model fighting to replace other paradigms but is rather a calling for a more integrative, all encompassing model that builds on the psychoanalytic, behavioural and humanistic psychologies. One key motivating factor is one of inclusion rather than exclusion. It may be argued, that the idea of integrating and including different paradigms, which hold directly opposing premises under one umbrella is impractical. However, Walsh and Vaughan (1983) suggest that studying different theories with sufficient breadth and depth may reveal underlying commonalities that would facilitate such a synthesis. Wilber (1993) attempted such a task in his book *The Spectrum of Consciousness*. He threaded different psychologies and therapies from both Western and non-Western models to formulate a comprehensive unified developmental psychology (Wilber, 1980; Wilber, 1993).

Based on this all-encompassing approach, aspects of human experience that were previously considered incompatible with empirical study were being granted an opportunity of acknowledgment. An interest in *altered states of consciousness* and *peak experiences* began the perceptual shift that addresses transpersonal phenomena, bringing them out of isolation, so to speak. The field of psychology saw the emergence of a new paradigm.

2.2.   Origins and Emergence

Although transpersonal psychology is considered a fledgling science, its core concepts are rooted in the ancient wisdoms of humankind. Shamanic practices have, for example, been using trance and altered states of consciousness as a healing modality for centuries. Even the genesis of psychology suggested transpersonal aspects in the writings of some of its forefathers such as James and Jung (Davis, 2000). Jung is considered the first to have coined the term "transpersonal consciousness" in 1917 (Frager, 1989). However,

these introspective and esoteric expressions were rejected as immeasurable, subjective phenomena inappropriate for inclusion in the scientific fold. These experiences were previously regarded in mainstream Western psychology as primitive superstition and hence the resistance to including them in the study of human nature (Capra, 1982; Hastings, 1999; Valle, 1989).

The field of psychology gained scientific credibility through the employment of a Newtonian-Cartesian methodology, which understood human nature through the objective, value-free lens of empiricism (Capra, 1982). The foundations of traditional Western psychology were firmly cemented within this quantifiable paradigm. As a powerful and valuable epistemology, it produced the psychoanalytic and behaviourist schools as the first two forces in psychology. Adhering to the Newtonian framework resulted in both these perspectives viewing the human individual as a passive mechanistic entity merely responding to stimuli or infantile defense mechanisms (Capra, 1982; Mokwena, 2003; Moss, 1999; Valle, 1989).

Whereas the scientific canon marginalised humanistic and transpersonal phenomena as subjective and empirically invalid, the counterargument was that the psychoanalytic and behaviourist forums entertained a reductionistic and deterministic approach in attempting to understand the human individual. Although the behavioural and psychoanalytic models are acknowledged for their major contributions, they neglected to address the upper reaches of psychological development (Walsh & Vaughan, 1980a). Humanistic psychology emerged as a third force to remedy these limitations and embrace a science open to all aspects of human nature (Moss, 1999; Valle, 1989). A pioneer in the humanistic field was Abraham Maslow who in researching the concept of *self-actualisation*, encounted what he termed *peak experiences*. These studies attracted attention towards a transpersonal level of being, previously overlooked and excluded from conceptualisation of the human being in mainstream psychology (Hastings, 1999). The humanistic school that claimed a holistic orientation of the self, was itself limited in scope to address the full spectrum of human experience, specifically transpersonal phenomena.

In order to recognise these areas of experience it was deemed necessary to establish a *"Fourth Force"* in psychology. Hence the unfurling of the transpersonal movement began. Along with Suitch and Grof, it was officially inaugurated as a distinct approach in 1969 with the launching of the *Journal of Transpersonal Psychology.*

2.3.   Defining Transpersonal Psychology

Since the inception of transpersonal psychology as a formally acknowledged discipline, there has been a plethora of definitions attempting to describe the nature of transpersonal theory and practice (Valle, 1989). In the *Journal of Transpersonal Psychology,* Lajoie and Shapiro (1992) surveyed 40 definitions from 1968 to1991, highlighting the need to generate clarity and precision for the purposes of scientific validity. From this study Lajoie and Shapiro proposed the following definition:

> Transpersonal psychology is concerned with the study of humanity's highest potential, and with the recognition, understanding, and realization of unitive, spiritual, and transcendent states of consciousness (1992, p. 91).

The use of metaphysical terms (such as *spiritual, unity* and *transcendent*) in such definitions may present a *bête noire* or thorn in the flesh if these terms are taken to imply religious assumptions that are not quantifiable. Daniels (2001, p. 2) demonstrated concern that the transpersonal field is at risk of "mumbo-jumbo, myth mongering and humbug" if we allow preconceived, quasi-religious beliefs to be the focus of transpersonal psychology. In his view, Lajoie and Shapiro's (1992) definition implies such a "mystical ontology" (p. 2) and hence he called for a definition that refrains from including metaphysical assumptions and one that would cater for all belief systems. In his opinion, terms such as *spiritual* and *unity* are not universally embraced or accepted. However, it would depend on how these terms are understood. Prior to being related to ecclesiastical matters or religious values, the core meaning of spiritual is that which is immaterial or incorporeal. The unitive aspect in transpersonal experiences should not be dismissed so rapidly. Many disciplines have come to acknowledge the concepts of interconnectedness

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and interrelatedness in systems theory, which implies a relationship of unity. Bohm's holographic model is also indicative of *holism, oneness* and *unity* such that events occurring on the micro level are mirrored on the macro level and vice versa (Grof, 1993). There is the notion of *unbroken wholeness* whereby it appears that the parts are connected to the whole system extending to the entire universe (Bohm & Hiley, 1974). The question that arises, is does Daniels' critique merely seek a definition to accommodate his own ontology. Such a definition is one delivered by Walsh and Vaughn:

> Transpersonal experiences may be defined as experiences in which the sense of identity or self extends beyond (trans.) the individual or personal to encompass wider aspects of humankind, life, psyche or cosmos (cited in Daniels, 2001, p. 2)

According to Daniels (2001), this definition is preferable as it provides compatible ground for demonstrable investigation suited for empirical evidence. Certainly, it is not denied that clear, definitive and concrete conceptualisations are required for a field to gain credibility and validity; however, an inquiry that discards that which is incapable of representation will at some point be discarding aspects of human nature. This is contrary to the underlying principles of transpersonal psychology. Resistance to acknowledging experiences that seemingly lack explanation or do not fit the cause-effect paradigm will effectively eliminate any acausal cases from consideration for research, theory and practice. Even in the world of physics, certain events cannot be explained, yet this does not eradicate the event. Einstein believed that even if a causal connection was unknown, it still existed in the principle of 'supercausality' (Lindorff, 1995). This approach (attempting to uphold the Cartesian view to avoid controversy) succumbs to reductionism, that goes against the philosophy of incorporating the whole of human experience. If transpersonal psychology aims towards an integral approach that explores the further reaches of being human then the 'spiritual' aspect cannot be ignored. According to mainstream theorists in the field, transpersonal psychology stands at the interface of psychology and spirituality (Davis, 2000; Mokwena, 2003; Walsh & Vaughn, 1980b). If this is the case it appears an arbitrary argument on the part of Daniels to call for the exclusion of the term *spiritual* from transpersonal definitions. Of all the criteria

selected by which to frame transpersonal psychology, it is the transcendent, spiritual aspect that differentiates transpersonal psychology from other psychological epistemologies. However, it is the spiritual element within the field that seemingly begs clarity.

Jung postulated the term 'spirit', as that which cannot be explained rationally, as it exists as psychic experience and not in the external world but "is the principle that stands in opposition to matter" (Jung, 1969b, p. 208). For the purposes of this dissertation, the term spiritual is viewed as referring to the immaterial world. In other words, it is the counterpoint of things material. It comes to consciousness through images, peak and transcendent experiences.

Furthermore, definitional dilemmas occur, as the term *transcendence* is itself problematic as a concise determinant of the transpersonal perspective. Maslow (1973) identified 35 different meanings of the term. The common denominator underscoring the literal meaning of the term is "to go beyond the range or limits of ordinary human experience". It seems the criticism of terms such as *unitive, spiritual and transcendent*, induces a semantic argument that attempts to reduce the transpersonal definition to a singular, neatly packaged construct.

Problematic as it may be to some, the essence and nature of transpersonal psychology incorporates an attitude of multiplicity. The transpersonal field recognises and honours the astounding variety in the manifestations of being. It is then not surprising that a multitude of definitions are forthcoming. The task is to honour these differences and eliminate bias and oppression *against* them. The ideal means of understanding the complexity of the transpersonal concept would be to revert back to its simple origins.

The prefix *trans* derived from Latin means across, beyond on or to the other side, through, or into a different state or place (Braud & Anderson, 1998; Valle, 1989; Wittine, 1989). The word "personal" originates from the Latin word *persona*, referring to the mask an actor wore in a Roman play (Wittine, 1989). Transpersonal in its simplest

definition thus means *beyond the personal*. The idea of going beyond suggests experiences that are greater than just the personal self and go beyond usual states of consciousness, collapsing the limitations of time and space, encompassing the realm of the incomprehensible (Braud, 1998; Wittine, 1989). It emphasises forms of being, knowing and doing beyond those conventionally recognised (Braud, 1998). Going *beyond personal* also reflects a drive towards universality, as opposed to individual identity.

William James (1987) described how the "theorizing mind" requires a precise definition that captures the essence of its subject. However, in seeking a single essence and denying other characteristics that warrant equal attention we fall prey to one-sided dogmatism. Trying to pin down one singularly decisive definition appears to be more a calling to appease the scientific skeptics in providing an absolute truth, rather than acknowledging the evolutionary nature of the development of transpersonal psychology. Suitch (cited in Vich, 1992) proposed that the field was initially conceptualised to recognise the principle of continuous change. Bearing this in mind, it would seem feasible that the definition of transpersonal psychology, too, will unfold to incorporate its own evolution.

Hence this study, rather than to construct yet another definition, intends to focus on the core fundamentals that lie at the centre of the transpersonal paradigm.

2.4. Hallmarks of Transpersonal Psychology

The structure that characterises the transpersonal essence in psychology includes the following assumptions (Cortright, 1997; Davis, 2000; Frager, 1989; Valle, 1989):

- The *spiritual essence* is essential to being human.
- *Nonduality* involves the recognition that each part is ultimately a part of the whole such that the self and nonself are understood as one.
- An underlying *unity* of diversity, captured in the experience of *"oneness"*, is recognised by transpersonal psychology. It is an argument anchored in Aldous Huxley's (1958) perennial philosophy where human beings are viewed as part of the unity or wholeness of the universe.

- *Multiculturalism and diversity* are premises in transpersonal psychology that provide a space for the astounding variety of manifestations of being. It integrates a broad spectrum of knowledge from a variety of cultures, which accentuates its universal character. This all-embracing approach speaks a neutral language across disciplines.

- *Intrinsic health and human potential* is achieved only by understanding both positive and negative aspects of humanness. Jung said it is our lack of acknowledging the negative side of functioning and focusing only on the positive that causes disease (Jung, 1969b). Transpersonal psychology sees our "light" and "dark" sides as two sides of the same coin.

- *Consciousness is multidimensional* and the individual self is only one manifestation of a greater transpersonal *Self*.

- *Self-transcendence* is viewed as the natural movement toward transformation in one's most basic sense of self.

- *Self-transformation* is the process of moving from one stage of identification with the ego, through disidentification with roles, possessions, and relationships, to a transcendental identification with the *Self*.

2.5. Transpersonal Practices

The practical application of transpersonal psychology seeks to delve deeply into the most profound aspects of human experience. Vaughan (1979) distinguished three criteria in the application of transpersonal psychology – content, process and context. Its direction is motivated to explore transpersonal experiences (content) such as mystical, unitive, personal transformation, meditative awareness, near-death experiences, alternative and expansive states of consciousness (Braud & Anderson, 1998; Davis, 2000). The methods (process) used to access multiple levels of being include, meditation, holotropic breath work, dream analysis, Jung's active imagination, guided imagery, journaling, drugs, rituals and rhythmic drumming. The attitude, values and beliefs of the counselor or facilitator (context) are mindful of honouring the client's innate potential and well-being (Boss, 1980; Davis, 2000).

The aim of these practices is to facilitate processes that awaken an awareness from a lesser to a greater identity. These modalities are not only beneficial in dealing with weak ego-defenses, trauma recovery, developmental disabilities, addictions and grief work, but extend to include individuals who have already achieved a satisfactory level of mental health (Walsh & Vaughan, 1980). In his investigations of healthy people Maslow (cited in Walsh & Vaughan, 1980) described their transcended experience (meta-motives) as one of nonduality, where the distinction between self and not-self falls away, such that the inner person and outer world are fused and the person experiences a greater *Self*.

One common process that occurs using these applicatory modes of practice is the induction of an altered state of consciousness. In saying this, it must be noted that not all practices are suitable for all clients. For instance, Roberts and Clark, (1976) pointed out that the use of psychoactive drugs is not appropriate with children, particularly in school settings. It is also interesting that the increase in administration of Ritalin in schools as a means of altering consciousness from one of hyper-alertness to a lower level of activity does not appear to be problematic. Jung also mentioned that the archetypal journey towards the transcendental Self is not easily traversed by everyone (Jacobi, 1946). What is important is that consciousness altering offers opportunity for promoting health if it is handled in a professional manner. To gain a deeper understanding of altered states of consciousness it is necessary to know what state is being altered. To achieve this end the study continues with an explication of consciousness and its relevant features, including states, levels and stages of consciousness.

2.6.   Consciousness

The cornerstone of transpersonal studies is the field of consciousness. It is through consciousness that we constitute our reality and experience. Clarifying consciousness in the Eastern traditions is considered elemental in the journey towards psychological well-being. Western psychology, on the other hand, has paid remarkably little attention to understanding this domain. During the 1960s an interest in the experience of psychedelic and consciousness-altering drugs sparked a new focus for transpersonal research towards

states of consciousness. It became evident that various states of being existed which go beyond our normal waking consciousness (Metzner, 1989).

The complexity in the study of consciousness blurs the defining edges. By distinguishing between states, levels and stages of consciousness the contours of our understanding are, however, sharpened.

States of consciousness were historically limited to states of waking. However, a broader range has come to be recognised. Dreaming, hypnotic, meditative and trance states are a few examples of the many potential forms of consciousness (Frager, 1989). States of consciousness are differentiated through what we experience cognitively, emotionally, somatically, perceptually and sensationally. For instance, the content of experience in the ordinary waking state of consciousness differs from the content of experience in a dream state of consciousness. It is also important to note the temporal aspect of states of consciousness, whereby, the experience of a particular state exists for a particular duration in time contained between a beginning and an end. Metzner provided a concise definition:

> A person's state of consciousness is the system, context, or field within which the different aspects of the mind, the contents of consciousness, including thoughts, feelings, sensations, perceptions, images, memories, and so forth, function in patterned relationships (1989, p. 331).

He wrote that when the pattern of functioning of these interrelated parts is disrupted for a definite period of real time, the state of consciousness is altered from the baseline state. The baseline state is assumed to be the "normal", ordinary waking state which is viewed as the most rational and hence all other states are viewed as inferior, irrational or pathological. Metzer (1989, p. 331), however, referred to baseline consciousness as "consensus consciousness", based on Tart's (1969) argument that the "normal" state is culturally determined.

Levels of consciousness refer to structural dimensions of the human psyche. Freud identified three levels as conscious, preconscious and unconscious. Jung went further, making the distinction between the personal and collective unconscious (Metzner, 1989). It may appear to be a contradiction to consider the unconscious as a level of consciousness when awareness in relation to attention is said to be a fundamental phenomenon. It is generally thought that awareness is not a component of the unconscious. However, the unconscious may be uncovered and revealed to conscious awareness through the perception of the archetypal realm. Perhaps a preferable example of levels of consciousness is demonstrated in the Shamanic cultures that speak of three levels known as the upper, middle or lower worlds through which the shaman may journey during the trance state, although depending on the particular teaching, structural levels vary in number. The distinction between levels and states illustrates that different levels can be traversed during the same state and the same level can be reached from different states.

Stages of consciousness refer to the progressive development of consciousness, explained by Wilber who illustrated the entire spectrum of consciousness in one integrated model (Frager, 1989; Wilber, 1980; Wilber, 1993). He described each stage as differentiated from the other by how the sense of self evolves.

- *The Initial Stage* is the identification of the self as one with the physical world;
- *The Bodyego Stage* is the differentiation between object and body such that the self distinguishes itself as separate from the environment;
- *The Mental Egoic Stage* is the differentiation between the mind and the body, such that the sense of self is separate from the universe;
- *The Transpersonal Stage* is a greater sense of self that transcends ordinary mind-body self; and
- *The Unity Stage* is the union of self with the universe, such that the self experiences nothing outside of itself.

Wilber's model seems to hold striking parallels to Jung's ultimate ideal of the individuation process. The development of the *Self* commences from a base of differentiation and through the transcendent principle or transcendent function is driven towards synthesis of the separate disparate parts, whereby, the individual experiences a sense of unity and wholeness.

It is postulated that accessing different states of consciousness facilitates self-transformation through experiences of an extended deeper whole *Self* (Frager, 1989). In this regard attention is directed to the processes that shift consciousness to an altered mode of functioning. The responsible party for state transition is referred to as the "trigger" or "catalyst" (Metzner, 1989). The trigger may be a function of the natural rhythmic cycles of life or one that is deliberately activated. Neurological activity forms part of the natural trigger that induces circadian and ultradian rhythms that alter states from sleeping to waking. Most research has, however, focused on states of consciousness that have been deliberately altered through inductive procedures such as psychedelic drugs, hypnosis, meditation, sensory isolation, and rhythmic drumming, to name a few.

It is known that through chanting, singing and drumming states of consciousness may be altered. The rhythm of the drum induces an altered state of consciousness through the process of auditory entrainment of cerebal and cardiac rhythms, which facilitates the shamanic "journey" (Metzner, 1989). The value of rhythm as a modality for inducing altered states of consciousness to facilitate healing is referred to in the chapter on rhythm.

Alteration in stages of consciousness follows a three-step process (Fager, 1989)
- Disrupt current state
- "Pattern-forces" stimuli that tend to move the disrupted system toward the pattern of the desired state of consciousness. Once a state is disrupted it is possible to move into a variety of other states
- Restructuring into a new, stabilized state of consciousness.

2.7. Critique

New paradigms that stretch the conservative frontiers of traditional thinking naturally evoke controversy and criticism. Notably, transpersonal psychology does not go unchallenged.

The transpersonal paradigm espouses an holistic vision by embracing all aspects of human nature. This is potentially viewed as another form of reductionism that violates the unique meaning attributed to individual experience of reality (Frager, 1989). With its concentration on the spiritual essence, transpersonal psychology is scrutinized for the risk of elevating unusual experience to the mystical, such that it denies possible psychopathology. Daniels (2001) presented his argument in this regard. This positioning of peak experience arises from perennial philosophy that promotes levels of self-development where the higher levels are regarded as better, more effective, more real and more spiritual (Frager, 1989). Mainstream psychology opposes the concept that other states of consciousness are potentially better than everyday waking consciousness. For this reason, Wilber's linear and hierarchical framework of development is opposed. It is said to devaluate and oppress cultures graded on a lower level by promoting urban, individual and the masculine, and not acknowledging their counter parts.

Another cause for discontent is that the transpersonal field fits more into the domain of philosophy and comparative religion than psychology (Frager, 1989). Philosophical fields have been dismissed for their lack of empirical and convincing evidence. It has been argued that personal, private experiences that reify abstract concepts of higher levels, cannot be validated in terms of scientific methodology (Walsh, 1998)

Teilhard de Chardin summed up the fundamental necessity for this new psychology:

> So far (and for good reasons) the psychologists have been concerned primarily with the medical task of freeing the individual patients from their hidden or buried complexes. But now the time has come, for...exploring and tapping the mysterious cores where still lie, untouched, the most powerful energies of the human soul (cited in Frager, 1989, p. 290).

2.8. Conclusion

In summary, the transpersonal paradigm extends beyond traditional psychology to embrace a wider range of disciplines, and in so doing brings about a broader, deeper understanding of human potential and well-being. The mainstay of this approach is the focus on self-transformation, which is viewed as the expansion of individual identity, from the egoic-self to the transcendent-self or spiritual-self. The transcendent self is experienced as a sense of wholeness, integration and unity. The idea of wholeness implies acknowledging all levels of human functioning.

In transpersonal practice inducing altered-states of consciousness is a modality used to facilitate self-transformation. It is a process that potentially accesses the contents of the unconscious psyche. In Jung's theory this specifically related to accessing the archetypes, which are the psychic components residing in the deeper levels of the unconscious. This deeper stratum of the psyche he termed the collective unconscious. For Jung this process, was, in part, the necessary requirement towards integrating the conscious and unconscious in an effort to achieve wholeness. The rhythm of the drum was previously provided as an example of how shamans facilitate shifting states of consciousness. This begs the question, as to the value of rhythm to act in a way that brings forth archetypal material and hence it's potential as a modality for bringing about integration of the whole human being.

The incorporation of ancient wisdoms and philosophies, along with the themes of integration, wholeness, transcendence, and transformation, positions the transpersonal model as an appropriate umbrella under which to formulate the main constructs of this study. These constructs, namely, archetypes and rhythm are essentially born out of the separate fields of psychology and music respectively. The transpersonal model illustrates that separate fields can be integrated through shared features. The following two chapters are an introduction and presentation, of the underlying principles and characteristics of each construct. By corresponding, the common ground of the two realms, the divide between these domains is transcended forming the final integration of the study.

CHAPTER 3

ARCHETYPES

It is this absolute inner order of the unconscious that forms our refuge and help in the accidents and commotions of life, if we only understand how to 'get in touch' with it.

- Jacobi, 1946, p.42

3.1.   Introduction

The work of some of the leading pioneers in transpersonal psychology springboards almost entirely from Jung's theoretical ideas. Of these ideas the *archetype* is perhaps the most distinctive concept of Jungian analytical psychology. Through the study of symbols that emerged in his patient's dreams, Jung observed how these symbols repeatedly appeared throughout history in myths, religion, fairytales and alchemical texts. Jung identified this symbolic material as unfolding from the collective unconscious and referred to this content as archetypes. This *ocean* of *primordial images* is the basis of typical patterns of expression common to all human beings. The features of archetypes are discussed, illustrating that it is a concept linking both the inner and outer worlds of humans, that is the unconscious and the conscious. Jung views the *Self* as the central archetype which functions to organsise the psyche by integrating differentiated parts into a cohesive whole.

The notion of organisation and order is one of the main properties of archetypes explored in this chapter. Jung's theory incorporates a dialectical relationship between opposing poles (Viljoen, 1997). Based on this premise, it seems pertinent to include a discussion on the polarity of order, in other words chaos. It must be clarified that chaos theory was not a formalized science during Jung's time, and so the ideas postulated under this heading are not the assumptions of Jung. However, it is demonstrated that there is resonance between the two theories. Perhaps if Jung had access to chaos theory he may have found it a useful resource to better describe some of his more complex ideas.

Lastly, this chapter presents the synthesis of parts through Bohm's theory of wholeness. The concept of an underlying universal pattern of order formulates the framework from which to explain the universality of archetypes.

3.2. Features of the Archetype

Although the archetypal concept has been credited to Carl Jung as the founding father, the term itself dates back to the horizon of time. Its elemental underpinnings are evident in the ancient philosophical texts of Philo Judaeus, Plato and St Augustine (Jung, 1969b). Philo Judaeus, a Jewish-Hellenistic philosopher from Alexandria, referred to "Mind of the Universe" as an archetype from which the God-Image in man was molded (Jung, 1969b; Krishna, 2000). In Platonic terms, the concept of archetype is related to the unseen, the fundamental element or essential ideas from which images and objects in the material world manifest. In relation to Plato's concept of ideas, Jung wrote that the "eternal ideas are primordial images stored up ἐν ὑπερουρανίῳ τόπῳ (in a supracelestial place) as eternal, transcendent forms" (Jung, 1969b, p. 33). This historical rooting motivated Jung to describe the foundation of archetypes as being archaic and primordial (Jung, 1969b). Jung declared that when we look at a word's original formation and history the nature of its underlying essence is revealed (Jung, 1969a).

Knapp (1988, p. 3) identified the arche as meaning "beginning, origin, cause, primal source and principle" along with "position of a leader, supreme rule and government". "Type" is referred to as a "blow and what is produced by a blow, the imprint of a coin, form, image, copy, prototype, model, order and norm". These definitions clearly illustrate the nature and properties of an "archetype" as being the fundamental and original principle of form and order. This crystallises the understanding that archetypal forms are pre-existing and therefore archaic. Surprisingly, there exists a debate as to whether an archetype is or is not an a priori structure. Saunders and Skar (2001) emphasised that it is not necessary to concern ourselves with the idea of archetypes as a priori structures, as it is their emergent property from dynamic systems on which we should focus our attention. How the image happens is secondary to the meaning and form of the image. McDowell (2001), on the other hand, viewed the archetype-as-such as an a priori principle of

organisation. Jung (1969a, p.516) himself said, "the archetype is the introspectively recognizable form of a priori psychic orderedness". Studies mostly concentrate their efforts on processes that have observable and hence researchable products, but this should not discard the underlying foundations of these processes into the abyss of trivia. This point is further explicated in the section on archetypal distinction below.

Another debate that needles the theory on archetypes is whether they are inherited or whether they are culturally determined and transmitted via learning. Pietikainen (1998) imported a culturally determined argument, suggesting that as there is no evidence of genetic inheritance, archetypes are acquired through the learning process. However, it is postulated that archetypes are neither inherited nor culturally determined. Certainly Jung (cited in Stein, 1998, p. 127) confirmed that "Archetypes are not derived from culture; rather cultural forms are derived from archetypes". Here Jung is referring to the archetype-as-such, for the image itself is derived from the natural or cultural environment. McDowell (2001) pointed out that only genes are inherited and universal principles are innate to the system. We inherit the potential to form the image but not the structure that makes up the image. The structure is a pre-existing principle (McDowell, 2001). Both Stein (1998) and Viljoen (1997) referred to the archetype as an "innate" factor or predisposition that influences the thinking and behaviour of a person in a predictable way.

Often the inherent or innate element of archetypes-as-such is seen as analogous to instincts in animals. However, it must be noted that archetypes are not instincts. According to Jung (1969a), the archetype has a spiritual or numinous character, whereas instincts are related to patterns of behaviour and physiological drives. Jung viewed archetypes and instincts as corresponding polarities between which psychic processes flow (Jung, 1969a). This concept remains true to Jung's view on the dialectical human being whose psyche constitutes opposing forces (Viljoen, 1997). The energy flow (which is required for all dynamic systems to exist) of the psyche is generated by an oscillation between the poles seeking unification. These opposing forces are not only manifest as the antithesis of spirit and instinct but can take on many forms, such as masculinity and

femininity, or introversion and extroversion (Jung, 1969a). There is an "eternal swing" between the domain of the instinct and that of the spirit. Due to the perpetual swing, archetypes and instincts are never found in pure form but as a mixture that unites the two polarities and are hence represented in conscious experience as urges, strivings, ideas visions, dreams and images (Stein, 1998). Stein (1998) further describes this relationship as the archetype providing form and meaning to the instinct and the instinct providing physical energy to archetypal images.

Essentially, Jung views the archetypes and the instincts as universal patterns and forces that form the contents of the collective unconscious, common to everyone. This theme of universality, which relates to regular patterns and degree of constancy, is a basic feature of Jung's understanding of the human psyche. The same symbolic material found in myths, folklore, rituals, architecture (such as the structure of the pyramid), rhythmic figures and doctrines of different cultures across time, illustrate the universality of the archetypes.

This introduction has served to establish the fundamental essence and nature of archetypes as primordial images that emerge from a universal, pre-existing, innate principle of organisation. Now that the basic characteristics have been described it is important to provide a brief compass bearing of the location of archetypes within the psyche.

3.3.   Archetypes and the Collective Unconscious

According to Jung the psyche consists of a clear distinction between the conscious and the unconscious (Stein, 1998). He went further to differentiate the unconscious into a superficial level, which he termed the "personal unconscious" and the deeper substrate he termed the "collective unconscious". Jung (1969b) says that the unconscious becomes accessible only when the contents become conscious. The contents of the personal unconscious are the "feeling-toned complexes" which relate to personal experience and the contents of the collective unconscious are the archetypes, which relate to a universal experience (Jung, 1969b).

Jung's interest was weighted towards the collective unconscious as he believed it to be the foundation of all psychic activity upon which consciousness is built, but even more notably as the source of transformation towards wholeness (Hopcke, 1992; Jacobi, 1946). Jung termed the process of becoming whole the *individuation* process, whereby an individual integrates and balances the tension between the contrasting components of the psyche, such that the conscious and unconscious are eventually reconciled into a whole. This process of synthesizing a differentiated psyche is propelled by the transcendent function, which ultimately leads to self-realisation. In other words, individuation is becoming who one actually is, which really means becoming a *Self* that is complete and whole. According to Jung, this is the fundamental purpose of all life (Viljoen, 1997).

The *Self*, which is the foundation or inner core of psychic existence, is also viewed as the archetype of unity and wholeness. Viljoen (1997, p. 110) further described the *Self* as emerging when there is equilibrium between the conscious and unconscious polarities. For such harmony to occur, it is required for the unconscious to become conscious. Jacobi (1946) indicated that it is various archetypal signposts, or symbols, which map the journey of the individuation process, and assist in revealing the unconscious components of the psyche. Modalities of accessing this hidden level of the psyche include becoming aware of and examining these archetypal symbols found in dreams, mythology, esoteric teachings and musical rhythm.

3.4. The Archetypal Distinction

The abstract nature of the archetype renders it difficult to understand, bringing to the fore confusion around its meaning. Critics argued that Jung had not presented a consistent, clear definition and as a result misunderstandings emerge. The problem results from the term "archetype" being used as a blanket term to discuss two distinct components. An essential difference between the two components is that the one refers to the structure, the principle or original idea, the irrepresentable, unseen collective unconscious, whereas the other is the concrete form, the manifest objects, the derivative expression, the conscious image, symbol or ritual. The first component is referred to as the archetype-as-such

whilst the later is the archetype-as-image. McDowell (2001, p. 637) argued that the archetype-as-such is a constant "pre-existing principle of organization". The archetypal image, on the other, hand is the representation of the core principle, which is socio-environmentally determined. In other words, the image is learnt. Certainly, confusion arises if an archetype-as-such is not differentiated from the archetype-as-image.

Based on this notion, the archetype-as-such is the underlying structure or form, which remains constant, whereas the image is the manifested content of this form. In other words, the archetype is always present but only becomes an image when it becomes conscious and is embellished with experiences from the environment. Jung (1969b, p.5) explained "The archetype is essentially an unconscious content that is altered by becoming conscious and by being perceived, and it takes its color from the individual consciousness in which it happens to appear."

The vortex system is an analogy used by some authors to illustrate their concept of archetypes (McDowell, 2001; Saunders & Skar, 2001). The same analogy is used to describe varying aspects of archetypes and, hence, various arguments may be put forth. These arguments are beyond the scope of this dissertation, never the less the vortex analogy is borrowed to further illustrate the difference between archetype-as-such (unconscious form) and archetype-as-image (conscious expression). The vortex can be viewed as the underlying structure, which is unseen and only becomes representational when seen as a tornado. The organisation or form of the vortex is brought to consciousness in the image of a tornado. There are many other images of the vortex, such as the whirlpool, whirlwinds, hurricanes, birds gliding on thermals, and so forth. Saunders and Skar (2001) explained that an archetype exists only as an abstraction until it is realised through complexes. There is no separate entity that can be identified as the archetype, but there are many different manifestations common to a wide class of similar systems.

The archetypal image is the means of expression for the contents of the collective unconscious. Jung (1969b) described this expression as occurring mostly through esoteric teachings, myths, fairytales, dreams, rituals and symbols.

Jung provided further clarity by comparing the archetypal components to the axial system of a crystal, whereby:

> The axial system determines only the stereometric structure but not the concrete form of the individual crystal. This may be either large or small, and it may vary endlessly by reason of the different size of its planes or by the growing together of two crystals. The only thing that remains constant is the axial system, or rather, the invariable geometric proportions underlying it. The same is true of the archetype. In principle, it can be named and has an invariable nucleus of meaning – but always only in principle, never as regards its concrete manifestation. (1969b, p. 80)

One essential element underlying both the archetypal structure and its concrete form is the principle of order and organisation.

3.5. The Principle of Organisation

The principle of organisation is a function of complex dynamic systems. A brief description of dynamic systems is offered followed by an outline of their constituent properties. The relationship between the properties of systems and Jung's archetypes is then demonstrated.

A system refers to an integrated whole whose structure arises out of the interactions of interdependent parts (Capra, 1982). For a system to be dynamic it needs to accommodate the flow of energy. It is also dynamic in the sense that it changes over time and complex in the sense that it is a system with a large number of interrelated parts (Schueler & Schueler, 2001). Capra (1982) explained that the changes that occur in a dynamic system are related to the flexible nature of the parts. If the parts were not flexible, the system

would comprise a static and rigid structure. The flexibility allows for interaction, which generates activity and hence energy flow. The co-ordination of the energy flow and interactions is not haphazard but follows an ordered process and occurs within the parameters of certain regularities and patterns of behaviour. In this way, although there may be irregularities and fluctuations within the individual parts, the system as a whole is an ordered structure. For example, medical researchers have learned that the heart needs to periodically fluctuate in rhythm in order to function correctly (Schueler & Schueler, 2001). The regulating property of dynamic systems is referred to as the principle of self-organisation.

3.5.1. Typical properties of self-organising systems

Capra (1982) and Saunders and Skar (2001) provided the essential features evident in self-organising systems.

- The property to regulate and organise the functions and structure of a dynamic system is part of the *inherent nature* of the system itself bought about by its own dynamic action. In other words, the order is not a result of environmental or external influences. This implies that self-organising systems exhibit a certain degree of autonomy.

- Self-organising systems correspond to the *principle of acausality,* as the order and pattern arise spontaneously, apparently out of nothing.

- *Flexibility* within self-organising systems enables organisms to adapt to new circumstances.

- *Self-renewal,* is a process whereby the system regenerates or renews itself without loosing the integrity of the overall structure. These processes are regulated in such a way that the overall pattern of the organism is preserved. This ability of self-maintenance persists under a variety of changing environmental circumstances. The process requires both the breaking down and rebuilding of structures. Tissues and organs are continually replacing their cells in cycles.

- *Self-transcendence* is the ability to reach out creatively beyond physical and mental boundaries in the processes of learning, development, and evolution.

- Self-organising systems are typically *robust*. It is not necessar─ conditions precisely to obtain the usual form.

- Once produced, the form will *persist*. It can recover from a fa▆ perturbation.

- Self-organising systems have a *repertoire of configurations*.

Recent research in the fields of mathematics and science indicated tha▆ behaviour of complex systems is to self-organise (Saunders & Skar, 2─ 2001). The psyche, like the physical body, is a complex macrosystem subsystems (Schueler & Schueler, 2001). Jung (1969a) also acknowle▆ a dynamic complex energy system. The components of personality are dynamic system, which functions adaptively. According to Jung, this ─ from the archetype (Jung, 1969a). It is noted in most writings that the essence of an archetype is one of order and organisation (Jung, 1969a ═ Saunders & Skar, 2001). The archetype has characteristic properties a═ organising systems (McDowell, 2001; Saunders & Skar, 2001).

Archetypes are inherent in the psychic system, and do not exist in the as an emergent phenomena (Saunders & Skar, 2001). Although archet▆ variety of images or configurations, they exhibit an underlying stabilit▆ images are common to a similar class. For example, the mother archet▆ multitude of images as Mother Earth or Mother Nature, Old-Mother H▆ Wicked-Step-Mother, Mother Goose, Mother Theresa, and the Madon▆ class to which these images belong is maternal-love that can have bot▆ negative meanings. Favourable qualities include nurturing, devotion, ▆ wisdom, whereas negative qualities connote seduction, cruelty and se▆ not require the exact same conditions to evolve the same structure and▆ self-organising systems, are viewed as robust.

- Self-organising systems are typically *robust*. It is not necessary to specify the conditions precisely to obtain the usual form.

- Once produced, the form will *persist*. It can recover from a fairly large perturbation.

- Self-organising systems have a *repertoire of configurations*.

Recent research in the fields of mathematics and science indicated that the typical behaviour of complex systems is to self-organise (Saunders & Skar, 2001; McDowell, 2001). The psyche, like the physical body, is a complex macrosystem of interacting subsystems (Schueler & Schueler, 2001). Jung (1969a) also acknowledged the psyche as a dynamic complex energy system. The components of personality are organised into a dynamic system, which functions adaptively. According to Jung, this organisation comes from the archetype (Jung, 1969a). It is noted in most writings that the fundamental essence of an archetype is one of order and organisation (Jung, 1969a; McDowell 2001; Saunders & Skar, 2001). The archetype has characteristic properties associated with self-organising systems (McDowell, 2001; Saunders & Skar, 2001).

Archetypes are inherent in the psychic system, and do not exist in the concrete sense but as an emergent phenomena (Saunders & Skar, 2001). Although archetypes have a wide variety of images or configurations, they exhibit an underlying stability that ensures the images are common to a similar class. For example, the mother archetype emerges in a multitude of images as Mother Earth or Mother Nature, Old-Mother Hubbard, the Wicked-Step-Mother, Mother Goose, Mother Theresa, and the Madonna. The common class to which these images belong is maternal-love that can have both positive and negative meanings. Favourable qualities include nurturing, devotion, protection and wisdom, whereas negative qualities connote seduction, cruelty and secrets. Archetypes do not require the exact same conditions to evolve the same structure and in this regard, like self-organising systems, are viewed as robust.

3.6.   The Other Side of Organisation

The complex nature of the universe operates off binaries and the dynamic tension (which generates energy) between them. The principle of order or organisation is no exception, with disorder or chaos its opposing pole. In order to remain congruent with the transpersonal view of wholeness and integration, it is necessary to address both sides of the antithesis. The theory on archetypes would be left half-conscious if the concept of chaos within the psyche were not mentioned. Jung asserted that "for in all chaos there is a cosmos, in all disorder a secret order, in all caprice a fixed law, for everything that works is grounded on its opposite" (1969b).

Chaos theory, which is a relatively new scientific discipline, demonstrates that within random chaos there lies a hidden order. Order comes out of chaos, such that Kellert (1993) described the universe as one of *orderly disorder.* In other words, order exists within chaos, whereby self-organising systems seek to find the hidden order in what appears to be random chaos (Schueler & Schueler, 2001). A self-organising system emerges from an unpredictable environment, hence if the psyche is a self-organising system it, too, embodies chaos.

Systems that are well behaved at the microscopic level do not necessarily demonstrate the exactitude of behaviour on the macroscopic level. This principle is termed the "butterfly effect", discovered by Edward Lorentz while trying to forecast the weather. The notion illustrates how minute differences in the initial conditions of events can have dramatic effects over the longer term. Precise prediction is impossible (Kellert, 1993). As a result, scientists and mathematicians have found it remarkably difficult to describe reality (including complex dynamic systems) by means of linear equations in an attempt to predict future outcomes. Their elaborate formulas could only present meagre approximations of observed behaviour. This is true for both natural and social sciences. Prediction of human behaviour within larger complex systems is not possible; however, we can understand elements of behaviour within the individual on a smaller scale. Chaos theory emerged in response to this empirical quagmire by acknowledging 'nonlinear' terms in equations (Gleick, 1987; Kellert, 1993; Schueler & Schueler, 2001). Kellert

offers the following definition of chaos theory as, "the qualitative study of unstable aperiodic behavior in deterministic nonlinear dynamical systems" (1993, p. 2).

This dissertation does not afford the luxury of an in-depth discussion of the complex nature of chaotic phenomena. Essential components that are highlighted as relevant include, period-doubling, bifurcations, fractals and strange attractors. Their essence is one of motion with rhythmic patterns, periodicities and oscillations, constituting a core characteristic feature (Kellert, 1993). This underlying essence provides an holistic interconnection that presents difficulties in discussing them as distinct component parts, as they pulsate together within the greater whole of chaos theory.

3.6.1. Period Doubling and Bifurcation

The two related concepts of period doubling and bifurcation came about from the investigations of Robert May into wildlife populations (Gleick, 1987; Kellert, 1993; Schueler & Schueler, 2001). It was found that a cyclic system, after certain critical points, would take twice the time, or period, to return to its original state. After numerous period-doubling cycles, this model becomes unpredictable. Schueler and Schueler (2001) explained that a system in equilibrium experiences a perturbation from its environment, such as a slight temperature change, which when repeated, sets the system on a trajectory that approaches a threshold point, at which stage instability sets in, resulting in a bifurcation (forking, splitting, dividing into two). This splitting or branching off is considered a critical turning point or sensitive decision point (SDP) and results in the system taking a new direction. The options are either one that tumbles into chaos through period-doubling or one that stabilises through feedback loops until it has regained its stability and equilibrium. Either direction positions the system in a new realm where new laws dictate how the system adapts to function according to new laws of the new environment (Barrow, 1988 cited in Schueler & Schueler, 2001). A typical bifurcation map is illustrated in Figure 1.
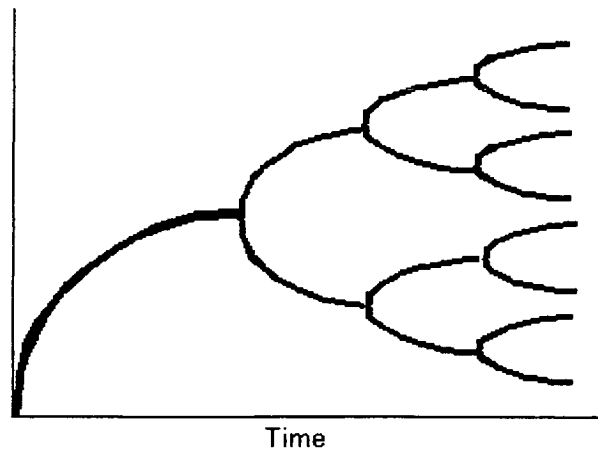
Time

Figure 1. A Bifurcation Map (Schueler & Schueler, 2001).

3.6.2. Fractals

Nature displays numerous shapes (such as a coastline, a snowflake, a cloud) that exhibit a degree of roughness, that do not present a clear definition. Mandelbrot (cited in Gleick, 1987) proposed a geometry of fractal dimensions to portray and measure irregular shapes (chaotic systems) in the universe. The term "fractal" is derived from the Latin verb *frangere* meaning to break. When an irregular structure within a finite space is broken up into smaller and smaller parts, a recursive pattern is discovered that mirrors the larger image on an increasingly finer scale. For this reason, Gleick (1987) described fractals as meaning self-similar. Paradoxically infinite iterations occur within finite space, portraying "regular irregularity" (Gleick, 1987, p 98). Scientific reductionism seeks to understand the component parts: however, the complexity of self-similarity requires viewing the system from a holistic perspective. Russian babushka dolls are analogous to fractals with each doll a smaller scaled down replica embedded and enfolded in the whole.

3.6.3. Attractors

An attractor is understood as the state of motion towards which a particular system converges or settles (van Eenwyk, 1991). They are likened to a magnet that pulls unstable

trajectories into a stable steady state. There are various types of attractors with the most simple a fixed-point attractor. An example would be a swinging pendulum losing energy due to friction which, comes to a state of rest over a particular point. This point is the fixed-point attractor (Gleick, 1987; van Eenwyk, 1991). The limit-cycle attractor is one that settles into a periodic fixed pattern of motion. An example would be the motion of the planets. Their orbital path is traced with iterative regularity. Strange attractors are not as disciplined and never follow the same path twice. They are non-periodic, irregular and unpredictable, yet they resemble a state of extraordinary order and stability. According to Kellert (1993), the contradictory nature of strange attractors is reconciled in the dynamics of stretching and folding. Trajectories are both diverging away and then converging on the attractor, forming an image of two spirals representing butterfly wings. The divergence and convergence that occurs within a confined phase space, maps out a recursive pattern that has a fractal dimension, such that strange attractors are thought to be fractal. Although each trajectory never traverses the identical path there is evidence of self-similarity within the patterns of strange attractors (van Eenwyk, 1991). If a system is shifted out of balance, a strange attractor is responsible for pulling the system into a new direction, a new state of order. In other words, strange attractors bring coherence to seemingly incoherent behaviour.

In summary, it takes a marginal self-replicating (fractal) bump to swerve a system off its coherent course into chaos. A strange attractor pulls the system towards a bifurcation point (focal point of decision) such that the system takes on a new non-linear direction. The self-referential nature of chaos returns a system to order through recursive feedback loops that act as a regulator (such as the thermostat in a heater, or the pump mechanism of the heart). The course of the system continues along this trajectory until it encounters another small repetitive change, once more commencing the journey towards chaos. Through these chaotic cycles of behaviour, a system evolves into ever-increasing complexity, yet through the fractal process, self-similar patterns maintain the integrity of the whole and at the same time afford a multitude of diverse outcomes. The relevant characteristics of chaos theory have been outlined, providing the background to demonstrate how chaos theory is applied to Jung's archetypes.

3.6.4. Chaos and the Functionality of Archetypes

The aforementioned summary can be transposed to the operation of the psyche where the archetypes act as strange attractors.

The psyche is pushed into a state of flux from an interaction between the conscious mind (ego) and its environment eventually thrusting it towards a sensitive decision point (SDP), at which point future behaviour becomes unpredictable. Such a bifurcation point may result from the nudges required for the normal transformation of individuals along their developmental trajectory from birth to death. Schueler and Schueler (2001) provided such examples as the choice of going to college or not, getting married or not, and so on. Not all bifurcation points are a result of seemingly gentle pushes over time but can be sudden violent knocks, as in the death of a loved one, an illness or catastrophic event that sends the system or psyche reeling into greater degrees of instability. In such incidences, a longer duration may be required for stability to return whereby the psyche has integrated the radical shifts. If the crisis cannot be assimilated, the psyche tumbles into chaos, resulting in neurosis, psychosis, depression, low self-esteem and numerous other malfunctions. On the whole, the psyche is a self-regulating system. It is usually able to swing back into a stable rhythm of restoration through its inherent process of self-organisation. This self-organisation, as previously discussed, is attributed to the function of the archetypes.

The archetype is dormant in an undifferentiated state of equilibrium. It is then activated and acquires energy, becoming charged often from heightened emotions. Van Eenwyk (1991) described the generation of energy as resulting from the tension between opposites. The energy is constellated into patterns of behaviour, almost as a form of *a priori* coded information. Schueler and Schueler (2001) expand further on this process. Acting like a magnetic pull, the archetype attracts the attention of the conscious mind until it is perceived. Once consciousness makes contact with the archetype, the archetype will take on the form of either a psychic instinct or an image. As an image, it has symbolic meaning that can either be positive or negative. The conscious mind must derive meaning from the symbol. The symbol may be acknowledged by the ego but not

necessarily understood, or completely understood, and integrated with the ego (the symbol then ceases to exist), or never understood to the extent it causes dissociation in the psyche. It becomes an autonomous splinter psyche, which is apparent in all kinds of neurotic and psychotic symptoms (the symbol then maintains an irrational hold). For the conscious (ego) and the unconscious to integrate the experience, it is fundamental that the manifested archetypal image is understood (Schueler & Schueler, 2001)

The above explanation is illustrated in the following graphic representation of an archetypal bifurcation map in Figure 3.
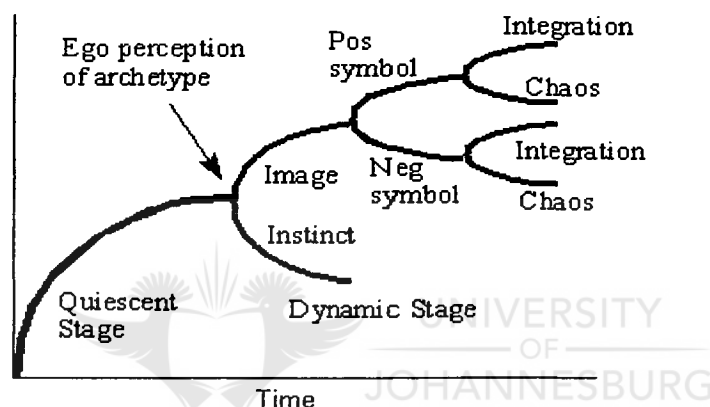
Figure 3. A Psychological Bifurcation Map (Schueler & Schueler 2001).

Schueler and Schueler (2001) explained that the psyche is ordered within a stability threshold, which is set up through the tension created between polarity interactions, such as that between stability and fluctuation. The ego functions normally within this stability threshold, but becomes pathological when fluctuation veers it outside this range. The archetype, acting as attractor of the psychological disturbance, regulates the system, using dreams as the primary feedback agent. Van Eenwyk (1991, p. 11) stated that the "feedback loop intensifies interactions between ego and unconscious, in effect 'pushing' the system". When a system is pushed, it reaches a certain intensity, resulting in chaos that generates patterns, which van Eenwyk (1991) described as analogous to Jung's uniting symbols. Although the strange attractor exists within a bordered phase space, it

has a myriad of possible outcomes. Likewise the archetype has its limitations, yet its imaginal appearance can take a multitude of forms. The patterned outcome of strange attractors is unpredictable; so, too, is the archetypal dream unpredictable.

For some the disruption may lead to a psychotic break, while for others it opens the door to new freedom and an expanded sense of self and creativity (Miller, 1991). If the ego can assimilate its dreams and learn from them, it can be healed of psychological problems because integration of the unconscious invariably has a healing affect (Schueler & Schueler, 2001)

Archetypes correspond to strange attractors as they represent the images of certain recursive dynamics. Van Eenwyk (1991) drew a parallel between the symbolism of Jung's mandalas and these attractors in that they are always repeating themselves (self-similarity) and are everywhere (scale variance). He wrote: "That its innermost structure and ultimate meaning are basically hidden certainly place it in the category of a fractal attractor" (p. 10). Van Eenwyk described the process as follows:

> When the tension between consciousness and the unconscious reaches a certain critical value, ……chaos enters the psychic realm (bifurcations and period doubling. This leads to a psychic situation that consciousness finds virtually impossible to differentiate. Yet, if the chaos is allowed to continue (the tension of opposites maintained), recognizable patterns (symbols/fractal; attractors) eventually appear. These patterns represent the emergence of order from chaos (1991, p. 10).

In summary, it has been illustrated that when an individual is in a state of inner turmoil and confusion, the dormant archetypal content within the unconscious is revealed to consciousness in the form of images. If the images are understood, order is re-established. As long as energy flows through a system, order will naturally emerge from chaotic situations. Thus it could be said that order is implicit within chaos, such that order and chaos are integral parts encompassed within the whole. The concept of wholeness is

understood not as a static entity but as a reality that is in constant motion of enfolding and unfolding. This view is described further in the theory of wholeness.

3.7. Theory of Wholeness

The concept of wholeness is fundamental to the transpersonal paradigm. It is also a key element in Jung's individuation process, which as previously mentioned, is considered the goal of the archetypal *Self.* Although the idea of life as a whole has been traced back to Plato, Aristotle and St Paul, it is Smuts (1927) who coined the term *holism,* from the Greek word *holos* meaning *whole.* The underlying principle is a creative process of whole-making where the whole becomes more than the parts from which it is shaped (Beukes, 1989; Smuts, 1927). Smuts explained this process as dynamic growth of a series of wholes, which progresses in a rhythmic pattern up to a point, when it suddenly alters. Through the ordered principle of self-regulation, it swings into a new rhythm creating a new unified whole. The previous patterns are, however, not discarded but incorporated as new starting points for the creation of the next whole, and so the process continues. In this regard there are striking parallels between Smuts' theory, Jung's theory and chaos theory.

Smuts' movement towards holism is echoed in Bohms' *holomovement.* Bohm (1983, p. 172) described the universe as "unbroken wholeness in flowing movement" that is involved in the continuous process of change and becoming.

Bohm (1983) maintained that there is a universal energy field that underlies all matter and all consciousness, where everything merges into one and is inseparable. Bohm (1983) termed this realm the *implicate* or *enfolded order.* It includes all potential and possible ideas that precede reality. From this unified background emerges every manifest object, entity and event which we perceive through our senses as an explicate or unfolded order. The explicate order produces concrete, separate expressions of reality that have manifested from a nonmanifest realm. Hence the explicate reality is only a partial reality that has unfolded from of a larger, indefinable and immeasurable matrix. Bohm (1983) suggests that the implicate order transcends normal limitations of space, time, mind and matter. Bohm's *implicate order,* Immanuel Kant's *a priori knowledge,* Plato's *eternal*

forms and Jung's *archetypes* all correspond to the idea of a pre-existing principle of order.

Bohm also considered a deeper level of order that extends from the implicate realm into a multidimensional reality which effectively is infinite. According to Weber (1981), at this deeper level within Bohm's holomovement lies a highly conscious, ordered, spiritual dimension that can only be described by using metaphors. It is inaccessible and immeasurable.

Bohm (1983) further illustrated his theory using a hologram, where the photographic process produces a three-dimensional image, such that every segment of the image contains *enfolded* within it the entire image. Thus if a hologram is cut into pieces, the whole image can still be unfolded or reproduced in each part (Grof, 1993). However, there is less definition of the whole the smaller the part becomes, such that the total order is not always visible (Beuster, 1991; Bohm, 1993). The key principle demonstrated is that the macrocosm is reflected in the microcosm, which could be considered akin to fractals in chaos theory. Beuster (1991) offered the example of the genetic blueprint in the DNA cell which envelops the same information that unfolds over the whole organism. The concept of cloning an exact replica of a whole creature from a single cell is derived from this theory. Teilhard de Chardin (1959) used the term *entelechy* to describe the same principle, such that there is a greater dynamic purpose encoded in each one of us. For example, it is the entelechy of the acorn to be an oak tree or of the caterpillar to be the butterfly. Implicit in every micro realm is encoded the potentials and possibilities of a greater whole. Teilhard de Chardin refers to this as a universe *within* and a universe *without*.

Bohm (1983) emphasised that unlike the hologram which is a static representation of the implicate and explicate order, the actual order itself is in the highly complex movement of enfoldment and unfoldment. No aspect of the holomovement is static (Weber, 1981). The implication is a dynamic relationship between explicate and implicate order. As the explicate is a partial expression informed and guided by the implicit whole, it is at the same time feeding information back to the implicate realm. Hence one could postulate

that life is in constant motion of unfolding and becoming. Smuts and Darwin (Beukes, 1989) referred to this as the evolutionary process. It must be clarified that it is the concept of movement which provides an evolutionary aspect to the theory; however, the implicate order itself does not evolve into being, as it precedes the universe.

Although everything is derived from one universal underlying order (or limited biological codes) the movement of dynamic interplay between realms, between encoded possibilities produces a vast variation of phenomena (or different biological life forms). Only a few notes underscore a musical ensemble, yet variation produces an array of compositions. Rhythm consists of a cycle between the limited code of sound and silence, yet its interplay with time manifests a range of rhythms, from the simple march, to the samba, to the complex polyrhythms of Africa. Likewise, the archetype could be considered encoded information within a psychical field of cosmic law that has many differential outcomes, such as in symbols, myths, dreams, images, and even rhythm (as indicated in this dissertation).

From the perspective of the holographic model, it could be surmised that the archetypal image is the explicate expression of a greater implicate archetypal order. The greater collective unconscious is enfolded within consciousness. In relation to the psyche, Bohm (1983) described *thought*[1] as concrete material functioning on an explicate level and *intelligence*[1] as flashes of creative insights generated from the implicate level. One could say that the laws of the implicate order are essentially intelligent acting as formative guiding principles in the act of creating a manifest reality. *Thought* is comparable to Jung's *conscious ego* whereas *intelligence* relates to the *collective unconscious* (Beuster, 1991).

A further comparison is evident where Bohm considers thought to be habitually learned and, as previously mentioned, Jung's archetypal image is learned through cultural influence.

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[1] Here thought and intelligence are not defined by Bohm in the classical sense. *Thought* is the active response of memory and operates in a mechanical way. *Intelligence* is an act of perception as to whether or not particular thoughts are relevant or fitting. Intelligence is the ability to perceive a new order and this may come as flashes of insight out of which something new may arise.

On the other hand, both Bohm's intelligence and Jung's archetype-as-such originate from the underlying unknown pre-existing universal order. It is this origin that provides archetypes with their universal nature.

3.8. Universality of Archetypes

It is evident that the archetype has a universal nature when translated from the law of the implicate order, which is shared by all life. Certain qualities are implicit in human nature such as emotions, which are shared by all human beings. The explicate expressions of joy, grief or anger may differ from person to person but the underlying emotion is common to the entire human race (Engler, 1999). Similarly, the archetypal symbol may vary but the underlying meaning is the same for everyone. Archetypal patterns that originate from the collective unconscious, which is a transpersonal realm, can hence be explained as extending beyond the personal. In other words, it is not unique to an individual but is omnipresent across humanity. Jung (1969b) wrote that the archetype, which cannot be set aside from the collective unconscious, is "present always and everywhere" and is "identical in all individuals" (1969, pp. 42, 43).

3.9. Numinous Character of Archetypes

It is necessary to make brief mention of the numinous feature of archetypes as it fits within the transpersonal perspective. Jung (1969a, para. 405) refers to archetypes as having a "distinctly numinous character" which is essentially "spiritual". This so called mystical quality associated with archetypes is what injects archetypes with their emotional charge. The effects of this numinous aspect can be healing or destructive. However, although it may at times appear negative if properly attended to through the analytical process it may facilitate the individuation process towards a whole *Self*. In this way, the positive attribute of numinosity brings about a more holistic human being. The numinous quality of archetypes corresponds with the transpersonal orientation towards non-ordinary heightened and transcendent modes of psychological awareness.

3.10. Conclusion

This discussion has described the essential nature of archetypes. By focusing on the principle of order as the main feature, and contrasting this with disorder or chaos as its counterpart, a comprehensive wholistic picture is presented. The interplay between order and chaos implies a dynamic process which accounts for opportunity of change within a system. From Bohm's assumption of an underlying unified order, it is understood, that concrete forms and events do not happen in a random chaotic way, but unfold according to some plan of organisation which is constantly changing (Beuster, 1991). The theme of paradoxes repeatedly emerges in this study, in the ideas of within-without, orderly-disorder, regular-irregularity, stability-instability, changed-unchanged and unfolding-enfolding. It is clear, that movement occurs between these different polar states, as dynamic systems are not static, but are always changing. For this motion to create order out of chaos it requires a fractal nature of repetition; and repeating patterns formulate the construct of rhythm.

CHAPTER 4

RHYTHM

More than anything else, rhythm and melody find their
way to the inmost soul and take the strongest hold upon it

- Plato (Gardener, 1990).

4.1.   Introduction

Rhythm is everywhere. It pervades every corner of existence from the microbial to the cosmic. From the first instant of conception, the foetus is exposed to the pulsating sounds of blood circulation, breath, heartbeat, endocrine, and brainwave activity within the mother's womb. The foetal body grows and develops to gasp its first moments of life as a separate rhythmic organism with its own molecular and respiratory tempo. The human organism is now engaged with a world that vibrates and oscillates on all levels. The electron in the atom, the molecules and microscopic cells of living matter, the rise and collapse of lungs, the diastole and systole of the heart, circadian rhythms of waking and sleeping, the menstrual cycle, the dance of the seasons, the ebb and flow of the ocean tides that are influenced by the cyclical patterns of planetary orbits, the expansion and contraction of the universe (Capra, 1982; Gardener, 1990; Leeds, 2001). In fact, as Leeds (2001) indicated, life would not exist without rhythm and, according to Hazarat Inayat Khan (cited in Gardener, 1990, p.74) "rhythm is life".

4.2.   Conceptualising Rhythm

Literature confirms that defining rhythm is no simple matter (Fraisse, 1982; Gardener, 1990). Perhaps its permeating presence provides the essence of complexity from which it escapes a definitive description. Rhythm is a term that straddles many different disciplines acquiring different meanings in science, astronomy, biology, language, music, and art. For the purposes of this study, attention is guided towards tonal-rhythmic pattern, as it has far more emotional value and meaning than visual-rhythmic pattern (Mursell, 1937). From this perspective, tonal-rhythm has value in relation to psychological factors.

It is used interchangeably with terms such as meter, beat, tempo or pulse. One would assume that the field of musicology, which embraces rhythm as a fundamental building block, to be less elusive. Yet the *Harvard Dictionary of Music* offers little respite and confirms the following, "It would be a hopeless task to search for a definition of rhythm which would prove acceptable even to a small minority of musicians and writers on music" (Apel, 1945, p. 639). According to Fraisse (1982), rhythm fuses numerous variables. People are inclined to focus on only one of these several aspects and so a generally accepted definition of rhythm does not exist.

Going back to its roots, the word "rhythm" is derived from the Greek word *rhythmos* which in turn evolved from the word *rheo*, meaning flowing (Gardener, 1990). Sachs (cited in Gardener, 1990, p. 75) referred to rhythm as "fluency due to some active, organizing principle, to ever renewed impulses whose very orderliness at once gives life and ease to the flow." He said rhythm "includes kinetic intermittence at regular intervals, which perceived through ears or eyes or feeling, makes our minds aware of a well-organized expanse in time or space". Plato (cited in Fraisse, 1982; Hart, 1990) defined rhythm as "the order in the movement", with Fraisse (1982) defining rhythm as the "ordered characteristic of succession". The central theme evident is one of order and organization within a time-space continuum, an order that flows.

Reinhard Flatischler (1992), a master drummer and researcher in rhythmicity, offered a preferable articulation of rhythm that would fit comfortably across epistemological paradigms. He identified two components of rhythm as pulse and interval. Pulse is an event usually heard as tonal sound, or felt as the beat or relaxation (systole) of the heart, or experienced as wakefulness; he termed it "material". Interval, on the other hand, is the space between the recurring pulses and is heard as silence, or felt as the contraction (diastole) of the heart, or experienced as sleep; he referred to it as "immaterial" or "soul". According to Flatischler, rhythm or pulsation manifests with the recurrence of similar events (pulses) at similar intervals. Bilmes (1992) also confirmed that a relation of successive rhythmic events to an event-spaced time grid is elemental to musical rhythm.

Both Blimes (1992) and Fraisse (1982) considered rhythm to be a psychological perception and linking sequential events a subjective phenomenon.

In nature the recursive pattern of pulsation is considered similar but never exact. Slight fluctuations are considered normal; however, if the pulsation exceeds its range, the rhythm is disrupted and is experienced as arrhythmical, as for instance, when the heart fibrillates. If pulsation is so precise as to be exact, it becomes mechanical and boring, loosing its natural vibrancy. Musical rhythm mirrors nature in attempting to maintain the balance between vital pulsation and rhythmic exactitude (Flatischler, 1992)

Rhythm then is a process that, in its most primitive form, oscillates in dynamic tension between two binary components (pulse and interval; variation and exactness; light and dark; wake and sleep), with regular periodicity within a space-time continuum. The dynamic tension is what differentiates rhythm from a single tone or sound and that which is perceived as erratic beat. If the time interval between the cycles of pulses becomes shorter and shorter, the rhythmic pattern diminishes until eventually only a single tone is heard; likewise, the further apart the intervals become, eventually only intermittent sound is audible.

4.3. The Structure of Rhythm

The structural analysis of rhythm provides information around its tonal features in terms of pitch, loudness, timbre and how its resonant characteristic is the source of its entrainment function. However, as Storr (1992) postulated, the relationship between tones cannot be described. It appears that the individual perceives this relation as part of a higher unconscious mental activity that delivers the relation to consciousness as one whole. Nevertheless, to understand the power of sound and tone as part of a rhythmic entity it is necessary to establish comprehension of the relevant features.

4.3.1. Matter, Vibration and Sound

All matter vibrates, as it is a form of energy. Even the atom, being the smallest particle of matter contains electrons revolving around the nucleus at speeds of up to 600 miles per

second (Leeds, 2000). It is a given construct in physics that motion creates frequency and frequency is the velocity or rate of the oscillation measured in Hertz (Hz) or cycles per second (cps) (Gardener, 1990; Gerber, 2000). All objects that vibrate produce sound (Gardener, 1990). This implies that sound is everywhere; however, the human auditory system is only cable of hearing frequencies between 20 and 20,000Hz. Frequency becomes sound through our auditory sensory perception. It is the specific frequency that creates a particular sound (a tuning fork that vibrates at 440 Hz sounds different from Middle C played on the piano that resonates at 256Hz). However, sound is present whether we sense it within our perceptual range or not. At the low frequency end, we may feel vibration of infrasound but not hear it and at the high range of frequency, we have ultrasound, which we neither hear nor feel (Gardener, 1990; Leeds, 2001).

4.3.2   The properties defining the character of sound

- **Pitch**

The pitch of sound is effectively the frequency of the sound wave. Slow, long waves are heard as low pitches, such as the sounds of the tuba or a bassoon. Fast, short waves are heard as high pitches, such as a tinkling bell or a flute. Scientists use the term frequency whereas musicians use the term pitch (Gardener, 1990). Each musical instrument has its own range of pitches (Gardener, 1990).

- **Loudness**

The intensity of sound is perceived as loudness and is measured in decibels (dB). The low threshold of our hearing is 0 to 5 dB, where an audible whisper is 15 to 20 dB. On the high end 130dB would be experienced as painful and hard on the ears. Most rock concert sound levels are at least 120dB. Experiments have shown that loud, shrill sounds sent into liquids can coagulate proteins and that eggs placed on the edge of a rock concert stage are hard boiled by intermission (Gardener, 1990).

- **Timbre**

Timbre relates to pitch or frequency and refers to the waveform created by the pitch or tone of the sound wave. The purest sound wave with the simplest curve is the sine wave

produced by a tuning fork and is seldom heard outside of the laboratory. This is considered pure tone. However, in nature sound waves that emanate from a struck object or instrument set off a number of pure tones with different wave lengths. The shorter vibrations are superimposed on the full length vibration and they combine to create a special tonal quality referred to as the timbre of sound. Each different acoustic instrument has a tonal quality depending on the combination of tones vibrating at different frequencies with different amplitudes providing each instrument with its own unique timbre (Gardener, 1990).

- **Resonance**

Every object has what Leeds (2001) referred to as a "resident" frequency, which is the frequency at which it naturally vibrates. Resonance occurs when there is a meeting of like frequencies, in other words, when vibrations of one object set off vibrations in another object (Beauliu, 1987; Leeds, 2001). If two objects have similar frequencies, they form a resonant system, so that if one is vibrated the other tunes in. For example, if two tuning forks in close proximity have the same pitch and one strikes one the other will also vibrate. This is called sympathetic resonance (Beauliu, 1987; Leeds, 2001) and is the principle behind our preference for certain colours, music, even other people. "Resonance" means to re-sound or echo.

4.3.3. Entrainment

Huygens, a Dutch scientist, first discovered entrainment in 1665, when he observed two pendulum clocks positioned alongside each other beginning to swing in precise unison (Leeds, 2001). When resonance and rhythm merge, the powerful phenomenon of entrainment manifests. Entrainment occurs when two different beats pulsing in close proximity "lock-in" or synchronise to the same rhythm. The weaker pulse is activated and altered to match the stronger pulse (Gardener, 1990; Leeds, 2001).

As the human body is a rhythmic oscillator, the laws of entrainment apply. Leeds (2001) presented two means by which rhythm has influence on the body. Firstly internal-to-internal, such that the heart rate and breath rate naturally entrain. If one speeds up the

other follows on. More importantly in the studies of music and sound therapy is the external-to-internal entrainment. If the brain waves are altered by an external pulse, the other major pulses in the body synchronise and follow the same pulse rhythm.

Entrainment is a natural phenomenon present in nature. Scientists theorise entrainment to be a means of economising energy (Hart, 1990; Leeds, 2001). Bentov explained that: "It seems that nature finds it more economical in terms of energy to have periodic events that are close enough in frequency to occur in phase or in step with each other" (cited in Leeds, 2001, p. 40). It has been microscopically observed that two muscle cells in the heart have unique beats, yet as they gravitate towards each other their pulse changes until they entrain and are beating as one (Gardener, 1990). Other examples are, a flock of geese or a large school of fish align their motion to move in sync; and by playing a march, a military band synchronises its strides to reduce fatigue (Storr, 1992). For entrainment to occur, the system must be able to achieve the same rate of frequency, components must be in close proximity, and the rhythm of the source inducing the entrainment must be constant and regular (Leeds, 2001).

The human biology is a multidimensional vibrating system with the various molecules and organs oscillating at a range of frequencies. Research indicated that by means of the mechanics of entrainment it is possible, by using sound, to change the rhythms of our brainwaves, heartbeat and respiration. Patients' heartbeats or respiratory cycles respond to music that has a regular pulse, by synchronizing their rhythm with the music. In light of entrainment and resonance, rhythm acquires immense value as a potential source for inducing states of well-being, healing and transformation.

4.4. Pulse and the Human Body

The human body is a dynamic system pulsating with its own inherent rhythms. Some periodic rhythms range in frequency from cycles per second (heartbeats, basal metabolic rate, respiration, muscle activity) to daily cycles (circadian rhythms, such as waking/sleeping), weekly (infradian rhythms, such as sexual activity) or monthly cycles (selenian rhythms, such as the menstrual cycle). The entire human body dances to a beat

synchronized by the central nervous system and in accordance with the pulse of the greater cosmos. Rhythm itself has a fractal nature, mirroring its iterative patterns from the micro-cellular level to the macro-galactical level. The rhythms in the body which have gained the most attention are those that can be duplicated musically for entrainment purposes, such as the heartbeat, respiratory cycle and brain waves (Gardener, 1990).

4.4.1. The Heartbeat

The heartbeat is the basic original beat of all music. Heartbeat has had a strong influence on the tempo of music. It is the first rhythm we hear in the mother's womb. Many rhythms are born out of the heartbeat, for instance, the drumbeat of the Native American Indian and Aboriginal cultures, and the *keteg* of the Javanese.

The entrainment phenomenon applies if the heartbeat is to be used for healing purposes. It is most effective to commence the rhythm at the same rate as the patient's pulse rate and then alter the rhythm to bring the heart rate down or up to the desired rate (Gardener, 1990). Altshuler (cited in Gardener, 1990) refers to this maneuver as the *iso* (equal) principle. The tempo of the music in the beginning must be in tempo with the patient. Anapestic beat is a rhythm that goes against the heartbeat, confusing the natural entrainment process. It is said to be most present in some rock and roll music. However, adolescents who developmentally are in states of chaos as their physiology and psychology go through radical changes, may find it easier to entrain to chaotic rhythms, finding them invigorating rather than debilitating (Gardener, 1990).

There are many rhythms that musicians may use in their healing music for duplicating the heartbeat. The simplest and most basic one again is the beat of the native drum (Gardener, 1990). Drummers globally, from the Native American medicine man to the Japanese *taiko*, imitate the melody of the heartbeat. Indian rhythms are based on three tempo ranges that are multiples of the normal heart rate (Leeds, 2001). Needless to say, most rhythms around the world use the heart rate that pulses in multiples of two as the bedrock of their compositions.

4.4.2. The Breath

Just as the heartbeat is most basic to human life, so too is the respiratory cycle. The rhythm of the breath-cycle is much slower than that of the heartbeat. When we sleep, meditate, or relax, the breath slows down further. The tempo of breath changes with exercise increasing to match the tempo of the heartbeat (an example of internal-to-internal entrainment).

The breath cycle rhythm occurs in three parts; inhalation, exhalation and the stillness in between. Many believe the point of power lies in the moment of stillness between breaths. When we allow a deeper process of breathing, the cycle of stillness becomes as long as the phases of inhalation and exhalation. At this point, we are breathing in a triple cycle rather than a dual cycle (Leeds, 2001). How could breath cycle be duplicated for entrainment purposes? A third pulse is created, so in breathing there is a form of triple time, the intake of breath, the exhalation and the almost still point between exhalation and new inhalation, where the breath rate is not of equal tempo. The still point is shorter than the inhalation and exhalation. Compositions that would entrain with breath rhythm would have to be based on asymmetrical rhythms. Typical Western rhythms are multiplied or divided evenly whereas oriental patterns are indivisible.

4.4.3. The Brain Waves

Brain waves are rapid fluctuations of voltage activity within the cerebral cortex and are determinable on an electroencephalograph (EEG). From research using the EEG, four classifications of brainwaves have been differentiated, according to their range of frequencies (Freeman, 1991; Gardener, 1990; Leeds, 2001)

- *Beta waves* (13-30 Hz) occur when a person is awake and in a state of alert consciousness. Attention is focused on the external activity of the world.

- *Alpha waves* (8 – 13 Hz) are waves that result when we are in a relaxed, meditative state.

- *Theta waves* (4-7 Hz) occur when a person is feeling drowsy prior to drifting asleep, is in a state of deep meditation, is in a trance or is in an hypnotic state.

- *Delta waves* (0.5 – 4 Hz) are the longest and slowest waves that accompany deep sleep.

Not only does the brain produce different rhythmic wave patterns for the different states, but it also functions with hemispheric oscillation. In other words, left and right brain dominance shifts on average every two hours (Gardener, 1990). According to Gorges (cited in Gardener, 1990) in states of deep meditation (theta-state) hyper-synchrony occurs whereby there is a harmonious alternating rhythm shifting between the two hemispheres. It is said that when the brainwave cycle of the two hemispheres is in sync, a state of awakened consciousness may occur and an opportunity for spiritual transcendence. In such a state the threshold between unconscious and conscious material becomes permeable. This is the state the transpersonal researchers and theorists would be interested in.

This optimal state of brain power is considered a result of entrainment and makes for the economic transfer of information between both hemispheres. According to Leeds (1990), this state occurs occasionally throughout our waking day but does not occur on demand. Ideally, one would want to enhance the theta state whilst remaining consciously alert, which would require a process or stimulation whereby one could induce such a state. Atwater (1999) referred to the state of "hypnagogia" (mind awake/body asleep) that emerges when a state of cognitive consciousness is maintained whilst brainwaves are altered to a lower frequency and hence state of arousal. This synchronized state of heightened awareness is increased when specific audio tones are applied to each ear (Leeds, 2001) introducing the phenomenon of binaural beats.

4.4.3.1. Binaural beats and brainwave entrainment

The principle of brainwave entrainment was discovered by Oster in 1973, through a phenomenon he termed "binaural beats" (cited in Freeman, 1991). When two different frequencies or tones are played simultaneously, but entering each ear separately, the brain resonates at a third frequency, which is the difference between the two tones. In other words, 400Hz introduced to the left ear and 406 Hz introduced to the right ear would

result in an EEG reading of 6 Hz. Freeman (1991) indicated that prior to this discovery there had been no way to entrain or synchronise brainwaves.

Monroe, founder of the Monroe Institute of Applied Sciences, further developed and patented binaural beat phenomena into a technology called Hemi-Sync, short for "hemispheric synchronization" (Atwater, 1999; Freeman, 1991; Leeds, 2001). The binaural beat system uses sound technology to stimulate focused states of consciousness in order to promote psychological and physical health (Atwater, 1999). Research has shown that the natural power of sound has various beneficial applications.

Atwater (1999) referred to research that indicated the following beneficial changes associated with binaural beats:

- sensory integration,
- relaxation, meditation, stress reduction, pain management, improved sleep,
- enriched learning environments,
- enhanced memory,
- creativity,
- treatment of children with developmental disabilities,
- facilitation of attention,
- peak and other exceptional experiences,
- treatment of alcoholic depression,

4.4.3.2.   Rhythm Phenomena and States of Consciousness

Since the beginning of time, it is in human nature to induce altered states of consciousness. Firstly, it was used with the aim to assist in healing the community and imparting spiritual information. Shamans are the master technicians in inducing what Grof referred to as "non ordinary states of consciousness" (cited in Hart, 1990). Hart (1990) described how the shaman's journey into trance is facilitated by entraining to the rhythm of the drum. It is not so much the percussive instrument that enables the shaman to shift into his spirit world but the ability to entrain to the rhythm. The shaman is then believed to be transported into a timeless realm; so that he/she does not get lost, the

rhythm of the drum symbolizes an extension of the heart that is beating in the shaman's empty body, back here in human time. The drum rhythm acts as a connecting thread so the shaman can find his way back from timelessness (Hart, 1990).

The concept of binaural beats as a means of shifting states of consciousness through entrainment has also been part of ancient wisdoms and shamanic traditions. The people of Bali duplicate the theta state using binaural beats produced with their gamelan instruments. These metal bar instruments work in pairs that are tuned about a quarter tone out of pitch from each other. The difference in the frequency sets up the binaural beat, which induces the meditative trance state.

The notion of entraining the human body to healthy rhythms has been the main concept addressed in the previous discussion. It is evident that this process is important as a healing modality and has far reaching implications for enhancing well-being in all areas of human functioning. The question now asked is how does rhythm apply to the human psyche?

4.5.   Pulse and the Human Psyche

In relation to the human psyche the most basic question is how the concept of rhythm applies to conscious and unconscious aspects, cognitive processes, (such as attention span, memory, intelligence), emotional arousal and behavioural responses. There are two perspectives from which to consider this phenomenon: firstly, how external rhythms mostly experienced and studied in the realm of music, impact on the psyche and, secondly, how the psyche itself functions in a rhythmic fashion. The answer as to why rhythm has a profound and powerful impact on the human psyche lies in its primitive tonal nature. Tone stimulates bodily responses and arouses conscious processes. Physiologically tone has impact on both the non-voluntary autonomic response and the higher voluntary mechanism such as controlled by the cortex. Investigations have shown that tone produces physiological changes in the body, which are characteristic of emotion. In heightened states of emotion, a rise in adrenalin output, changes in electrical resistance, blood pressure, respiration and heartbeat are noted (Mursell, 1937). It appears

that the holographic model of interconnections is once again applicable, such that tone in stimulating the body also stimulates the psyche.

Although bodily responses may appear similar across a range of emotions such as fear, anger, jealousy and pride, the emotions themselves are differentiated from one another. Emotion is not only an internal change of energy within the organism but also a response to the external environment. This response to the external object arouses distinct emotional patterns (Mursell, 1937). Jung (1969a) would refer to the external object or thing having a special feeling-tone, which implies an evaluation, which induces emotional arousal. The emotional responses may be positive or negative. In the times of Plato certain types of music were recognized as harmful to the character of a person. Styles that were experienced as sorrowful and plaintive were deemed to induce indolence and drinking (Storr, 1992). Assagioli (1965) agreed that music can be injurious when it heightens states of emotion such as depression. Jung, however, acknowledged both negative and positive aspects of the human psyche and if he had pursued an interest in music may have commented that negative music offers an opportunity for the adaptation and integration of psychic chaos. Musical rhythm has the capacity to evoke repressed emotions that can bring about a sense of unity with the universe (Assagioli, 1965). Various moods or feelings are influenced by specific factors of rhythm. For instance, high or low pitch, loudness or softness, rising or falling, inflection or tempo, are elements that contribute to different psychological effects. An increased tempo induces greater emotional tension (Assagioli, 1965; Mursell, 1937). It is the tonal-rhythmic pattern within music that provides the differentiating external conditions. Mursell (1937) argued that the majority of human beings are sensitive to differences of emotional meaning conveyed in the tonal-rhythmic patterns of music that appear universal. Not all theorists concur on this matter as it is argued that not all people are influenced in the same way by a single piece of music. For one individual the experience of a musical piece may be disturbing and distressing, whereas for another it may seem exciting. An in-depth discussion on this issue is beyond the scope of the present study but could be considered for further research.

Rhythm is associated with organizing muscular movements. Its astounding effects have been noted on patients who have neurological disorders that disable their mobility. In his book, *Awakenings*, Sacks (1990) a neurologist, described a patient who suffered immobility from post-encephalitic Parkinsonism. Only when she recalled tunes from her childhood, was she able to move. Sacks acknowledged the therapeutic power of music in its ability to return a flow of movement to his once immobile patients (Storr, 1992). Bodily movement and emotion are interwoven. Storr (1992) explained that it is difficult not to be moved by music. It seems natural for the human body to respond to tonal-rhythmic sounds by means of swaying, rocking, tapping or humming in time. Assagioli (1965) reflected on how, when rhythms of the body, the emotions and the music itself combine to form one integral rhythm, it is expressed in dance with one's whole being.

In addition to the ordering relationship between rhythm and the muscular system, rhythm may also impose order on mental processes. Rhythm acts as an external stimulus for mental activity but the mental processes also function to regulate the structure of the psyche's inner world by imposing balance, order and symmetry. Storr (1992) noted that through the perceptual system, patterns of relations between incoming sensory stimuli are sought in order to provide a sense of coherence. He further elaborated that a tune is a series of tones, perceived as a pattern and in this way sense is made from a series of tones integrated to form one melody. This pattern-formation is viewed as a means to link data into new wholes. It is inherent in humankind to create integrated wholes. Storr (1992, p.175) claimed: "We are compelled to make coherent patterns out of our mental processes if we are to retain them in consciousness. Chaos cannot be accurately recalled.... We link things together, combine opposites, create new wholes out of data which were previously unconnected".

Although mental processes have been considered to be continuous, as in James' (1987) concept of the *stream of consciousness*, they actually are intermittent processes in consciousness. The perception of continuity is considered to be an illusion. Reality is in a constant state of flux and change, requiring continuous adaptation from any form or system that experiences it. Storr (1992) described thought as a jumble of incoherence

floating on the stream of unconscious, which the psyche orders into coherent patterns, and hence conscious thought is perceived as continuous and logical. Music and rhythm have similarly been described as the relation of tones which, on their own, make no sense, yet through the process of perception are integrated to appear to make up a continuous melody. Hegel and Bergson (cited in Storr, 1992) reflected on this description as an echo of the continuous melody of the inner life of human beings.

As previously mentioned, the psyche is a dynamic system that self-regulates to bring about a feeling of equilibrium and harmony by balancing its dichotomous elements. The psyche is never static and includes a pulse between all its opposing poles. This does not only include emotional dynamics between sorrow and joy, anger, and passivity but also the dynamics of personality characteristics such as extroversion and introversion Assagioli (1965) described the complex psychological rhythms as the oscillating patterns within an individual between elation and depression, between sorrow and joy, between strength and weakness or between extroversion and introversion.

The depth of exploration into this aspect of rhythm in relation to the psyche is potentially voluminous and unfortunately cannot be addressed in this dissertation. A brief overview has been provided that illustrated the key elements, of which the most important is how, on every level, human nature has the capacity to link and form perceptual patterns previously unconnected into an integrated whole.

4.6. Healing Applications of Rhythm.

Friedman (2000), a psychotherapist and drum facilitator, acknowledged various applications of the healing power of rhythm in his book, *The Healing Power of the Drum*. He provided a broad spectrum of research, ideas and personal accounts that illustrate how rhythmic drumming has positive results on individuals with conditions such as autism, Down syndrome and multiple sclerosis. Rhythm is used to help Alzheimer's patients to improve short-term memory and increase social interaction. Likewise, Parkinson's patients have been assisted in regaining control of movement through participating in the rhythmic nature of the drum. In his experience rhythm has been instrumental in releasing

emotional pain of post-traumatic stress disorder in war veterans, relaxing stressed corporate employees and facilitating anger management in adolescents at-risk (Friedman, 2000). Most of Friedman's anecdotes describe the power of the drum as a rhythmic tool to promote well-being. However, he did indicate that other rhythmic devices such as the metronome or a recording of other rhythms have the potential to elicit positive changes in the human physiology and psychology.

Grof (1988) developed holotropic breathwork as a form of rhythmic psychotherapy. It combines rhythmic breathing with rhythmic music which facilitates a person entering a nonordinary or altered state of consciousness. Through this process the person may experience re-visiting unresolved past emotional events offering the opportunity to resolve old hurts and trauma.

Another psychotherapeutic process using a rhythmic technique is Eye Movement Desensitisation and Reprocessing (EMDR). Shapiro (1989) developed this method, which induces an oscillation between the left and right hemisphere. The person follows the therapist's rhythmic hand movements from right to left and back again. This movement brings about an REM (rapid eye movement) state. This state of simulated sleep whilst the person is fully awake allows access to repressed memories which are bought into consciousness for healing.

CHAPTER 5

ARCHETYPAL PRINCIPLES OF RHYTHM

In the deepest layers of consciousness, every human being lives in perfect harmony with rhythm.

- Flatischler (1992)

5.1. Introduction

The connection between archetypes and rhythm is formulated and integrated in this chapter. An attempt is made to unify two diverse fields by linking their common foundational structure and characteristic features. From a meta perspective the corresponding themes that have emerged relate to, the inherent or innate nature, universality, principles of order and organisation, harmony, polarities, numinosity and archaic primordial rooting. Lastly, the implication of rhythm's archetypal essence in healing and adaptation is provided.

5.2. Rhythm as an Innate Pattern of Being

So profoundly are we immersed in a universe of rhythm that its presence seemingly eludes our awareness. At most, we are not conscious of the inner rhythms operating to maintain the normal functioning of our physiology, unless the cycle fluctuates out of normal range, sounding the alarm that grips our attention. Similarly, the archetypal realm is hidden in the unconscious until such time as the stability of the psyche is threatened and the archetypal structure attracts the attention of the consciousness revealing its image or symbol. As previously demonstrated, rhythm is innate in the human mind and body, in the human environment and in the greater universe. In other words, it is an inborn pattern of behaviour. Rhythm is not born out of the human organism; the human organism is born out of rhythm. Likewise, archetypes exist in the human psyche as potential patterns of imagination, and its universality crosses cultural divides. It manifests through time and space.

5.3.   Universals

It has been theorized that the root of commonality lies in the principle of natural laws that govern the universe. The archetype of rhythm is governed by the natural laws of sound, which are governed by the natural laws of vibration. No human being is without exposure to the natural laws of vibration and rhythm. We encounter the natural rhythms of the universe daily (Flatischler, 1992). Hence rhythm is a thread that connects all of humanity, acting as a universal language. It is known that archetypes have an array of different individual expressions across cultures; however, every form is rooted in the same common basis of archetypes (Flatischler, 1992). Likewise, there are many rhythmic forms or figures throughout the world but the underlying structure is the same for everyone. In other words, there is a common ground plan from which different manifestations emerge. According to Flatischler (1992), the underlying archetypal structure in the rhythmic realm is the phenomena of *cycles* and *pulses (tonal sound)* separated by *intervals*. He maintained that it is from these universal elements that each culture has developed its own diversity of rhythms.

5.4.   Rhythm as an Archetype of Order

Another feature that positions rhythm in the archetypal realm is the principle of order. Besides originating from a unified field of order as described by Bohm (1983), it has been postulated that the function of archetypes is to bring order to a psyche in turmoil. Likewise, the function of rhythm is to impose order within the physiological functioning of an organism and in the recurrent cycles within the universe. Hence, it appears order is present on two levels; first the rhythmic archetype is a function of order and on another level it functions to order. In other words, it emerges from an implicit order and then almost carries the ordering germ into the manifest reality (such that we experience and sense it in the physical body and in nature's cycles). However, there is a further level whereby manifest reality continues to carry this rhythmic order through into creative expression (as in the art of music-making). Pythagoras distinguished a similar three-tiered level of music: *musiac mundana*, being the music made by the celestial sphere itself (Steiner (1983) refers to this as Devachan music); *musica humana*, the unheard music of the human body and *musica instrumentalis*, the music played by humans on instruments

(James, 1993; Lugt, 1998; Tomlinson, 1993). If we consider that rhythmic drumming is used to induce shamanic trance states, such that the individual connects with or experiences the unified field described as being one with the universe, we could add a further level that completes the circle or cycle. Based on this assumption, rhythm could be articulated as a multidimensional phenomenon of holographic wholeness. Its essence on the macro level is mirrored and enfolded on the micro level. From this perspective, rhythm also correlates with iterative patterns of fractals. The universe is immersed with rhythms within rhythms within rhythms. In the words of Teilhard de Chardin (1959) they are *within* as they are *without*. Conceptualising rhythm as cycles (pictorially depicted as a circle/s) is analogous with Jung's mandala (Sanskrit for circle) that represents the symbol of unity and wholeness of the archetypal *Self*. It is proposed that the *Self* operates from the center of the collective unconscious, creating rhythmical order that regulates the whole. This rhythmic pattern gives rises to archetypal constellations from which numerical characteristics become evident (Beuster, 1991).

In the realm of rhythm, order also underlies the relationship of pulse (tone) and interval through the laws of ratios. Pulsation ratios are fundamental archetypes, in that they are governed by the laws of mathematics (Flatischler, 1992). Numbers form the foundation of mathematics and numbers are considered by Jung to be archetypal symbols revealed to consciousness from a pre-existing underlying order. Put more succinctly, number as an archetype is considered by Jung as a predetermined means for understanding an orderedness that already exists (Jung, 1969a). Hence, numbers are described as having a relative autonomy analogous to archetypes.

Bohm (1983) explained that an understanding of measure is the key to achieving harmony. This idea is explained through so called "sacred geometry", which reveals once again universal self-replicating patterns that are present almost everywhere. The Fibonacci series is such a fractal sequence that increments by the sum of the two preceding numbers as the progression continues; 1, 2, 3, 5, 8, 13…. When any number is divided by the preceding number the ratio produced is close to 1:1.6 referred to as the *golden mean, divine proportion* or *phi* (ϕ)(Gardener, 1990). The golden proportion is

present in the chambered nautilus, with each chamber becoming proportionally larger than the one before it. It occurs in the hexagonal geometry of snowflakes. It is exhibited in the breeding patterns of rabbits and in the proportions of bodies and wings in birds and flying insects. It is even found at the less obvious molecular level in the double-helix spirals of DNA genetic code. Beuster (1991, p.65) noted, "the unconscious mind seems to express the same rhythm and pattern found in nature at large". It is possible that underlying this commonality is the expression of sacred geometry through the golden mean. It is apparent that one key response elicited from forms that exhibit golden ratios is one of harmony and balance.

Jung further suggested that numbers possess more than mathematical quantitative concepts used to explain causal orderedness but are also endowed with a numinous and mysterious qualitative character (Beuster, 1991). This idea around numerical mystery has resonated through time, as evident in the writings of Pythagoras. The first four numbers which occur most frequently in primitive patterns of order, are in the Pythagorean system combined to form the tetractys which represents a pyramidal symbol, resembling the mystery of how the physical world is derived from the infinite one (James, 1995; Lugt, 1998). The symbolic meaning of these numbers is: *one* represents unity, wholeness; *two* denotes the principle of change; *three* is the triad of beginning, middle and end; and *four* symbolizes the foundational corners of a pyramid (James, 1995; Lugt, 1998). The most fundamental rhythmic intervals correspond to the principle of the tetractys, which Pythagoras demonstrated using his self-made monochord. The ratio 1:2 resulted in the octave, the ratio 2:3 resulted in a major 5th and the ratio 3:4 in a perfect 4th.

5.5. Harmony and the Tension of Opposites

According to Pythagoras, this numerical symbolism was vested in establishing a relationship between opposites (James, 1995). Similarly, a dialectical relationship between opposites is a pervasive theme in Jung's view of humankind (Viljoen, 1997). It has been understood by ancient traditions that tension between opposites is necessary for life to exist (McNiff, 1986). When the tension is weighted unevenly towards one or the other pole, the system experiences stress, resulting in either collapse or

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transformation. Transformation occurs when the opposing poles synthesise, such that neither pole is discarded but that both have equal expression. Jung understood that the co-ordination of pairs of opposites is essential for the resolution of psychic conflicts (Jacobi, 1946). As explained in the section on chaos theory, a system naturally seeks self-regulation and order, bringing the system into state of homeostasis. This state of balance is achieved through rhythmic pulsation that unites the opposing elements, resulting in an harmonious whole. Harmony could be described as the result of balance between two contradictory forces. Plato (1974) emphasised the importance of living an harmonious life and maintained it was appropriate musical rhythms that promoted such well-being. He believed that "…rhythm and harmony penetrate deeply into the mind and have a most powerful effect on it" (p. 142). For this reason, Plato sought to regulate those rhythms that upheld harmony and order and to banish complex melodies that bought discord and dis-ease. He stressed that only appropriate songs, that lead to harmony should be taught to the youth. Although Plato (1974) recognized that music could manifest both positive and negative outcomes, he idealised the positive outcome of rhythm and ignored rhythms that violated the balance. Jung, on the other hand, acknowledged that we are ultimately striving towards an harmonious whole but he also acknowledged that sometimes to get there we need disturbance as a process from which to restore equilibrium (Jacobi, 1946).

5.6. The Numinous aspect of Rhythm

Schopenhauer and Nietzsche, were both philosophers of the 19th century who, like Plato, found the effect of music on human beings powerful and significant (Storr, 1992). Schopenhauer aligned more with Plato's view of music as a means of detaching from the distasteful experiences into a tranquil state of contemplation; Nietzsche's ideas on the other hand connect with Jung's concept of reconciling two opposing principles, such that he saw great music as a combination of two contrasting principles (Storr, 1992). Relevant to this notion, Nietzsche emphasised that for art to be great, it needs to embrace tragedy and triumph, pain and joy, suffering and life. Such a response implies that only through acknowledging the horrors of life can we find a means of overcoming them (Storr, 1992).

For Nietzsche, great music included both opposites, which provides unity rather than division; "Language can never adequately render the cosmic symbolism of music, because music stands in symbolic relation to the primordial contradiction and primordial pain in the heart of the primal unity, and therefore symbolizes a sphere which is beyond and prior to all phenomena. Rather all phenomena compared with it, are merely symbols" (cited in Storr, 1992, p. 163).

This attribute by Nietzsche to the inner spirit of music strikes a similar chord to one given by Schopenhauer who attributed music as a means of accessing the inner essence of existence. He noted that most art expresses a copy of external reality, whereas music brings humanity into an immediate and direct relationship with the underlying reality (Steiner, 1983; Storr, 1992). Schopehauer corresponded this inner essence revealed through music to the Platonic term 'Idea'. As previously mentioned, Jung refers to this as the archetype because it is typically archaic and primordial (Storr, 1992; Lugt, 1998). Ficino (cited in Ammann, 1998) claimed that music has a stronger effect than visual images because, as sound, it uses the medium of air, which he equates with the spirit. In the terminology of Bohm (1983), one is directly perceiving the implicate order when listening to music. Although Jung did not pursue an interest in the musical arts, in a letter to Moreux during 1950 he reflected his understanding of music's archetypal and numinous nature as he wrote:

> Music expresses, in some way, the movement of the feelings (or emotional values) that cling to the unconscious processes. The nature of what happens in the collective unconscious is archetypal, and archetypes always have a numinous quality that expresses itself as emotional stress. Music expresses in sound, what fantasies and visions express in visual images. I am not a musician and would not be able to develop these ideas for you in detail. I can only draw your attention to the fact that music represents the movement, development and transformation of motifs of the Collective Unconscious (Pulvermacher, 1984, p. 257).

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Jung (cited in Knapp, 1988, p.1) wrote that music "reaches deep archetypal material that we can only sometimes reach in our analytical work with patients". A possible explanation is that music is ordered through the temporal monitor of rhythmic pulses, of which one part is tonal sound that emerges from the unified field of vibration. The archaic roots of sound would, therefore, inadvertently carry its primordial seed in the pulse of rhythm. The primal vibration (cosmic sound) along with implicit order present in rhythm, is potentially what provides rhythm with a transpersonal quality. In this regard, rhythm contains archetypal numinosity. The notion of archaic mystical aspects of rhythm, illustrate its underlying archetypal nature, which is expanded on in the following section.

5.7.   The Primordial Archaic Rooting of Rhythm

Where the archetypal image manifests from the preconscious archetype, so rhythm manifests from the tension between sound (tone or pulse) and silence (interval), which exist as *a priori* structural components. Sound is embraced by many ancient traditions to be the very origin of creation (Gaynor, 2002). Hindu and Vedic traditions, Mayan people, North American natives and Aborigines all attribute sound or song as the source of creation. In biblical gospel we read: "In the beginning was the Word, and the Word was with God, and the Word was God" (John, 1:1). The word, as sound, is held with sacred reverence in the well-known mantra "OM" (Gardener, 1990; Gaynor, 2002). Mantras have been used since the earliest times to bring about a level of consciousness that leads to a closer understanding of Divine Truth. Gardener (1990, p. 48) quoted Lama Govinda, as saying OM "tears down the walls of ego and opens a person's innermost being to vibrations of a higher Reality".

5.8.   Rhythmic Implications for Healing and Adaptation

McNiff (1986) suggested that the key to health or transformation is the ability to unite opposing tensions through rhythmic movement. Illness occurs when something becomes dislocated from the rhythmic pattern of the whole creating disharmony (McNiff, 1986). When the rhythmic flow is blocked (often the source of transformation) or interrupted the organism experiences tension, depression and the loss of vitality.

Jung (1969a) postulated that the greatest therapeutic effect was achieved with the union of opposites as part of a centering process. This centering occurs through the integration of the conscious and unconscious contents. According to Jung (1969a), these two factors working together stimulate the transcendent function. Unconscious material is required to produce the transcendent function, of which dreams have been considered the most easily accessible archetypal product. Jung notes that dreams are difficult for developing a transcendent function and calls for other sources to facilitate accessing archetypal content of the unconscious. It is the assumption of this dissertation that rhythm is such a source. Rhythm can bring about meaningful synthesis of fragmentary parts.

Nzewi (2002), a professor of African music, emphasized how the African people understood that the necessity for survival hinged on the ability to harmonise two polar worlds that were mutually dependable. He wrote that a state of equilibrium was required between religious and secular, between the spiritual and the mundane, and between the intangible and the material realms. If impairment occurs in one, it destabilises the efficacy of the other and hence impacts on the well-being of the whole. Along similar lines Storr acknowledged that "impairment of one's sense of balance and equilibrium is extremely unpleasant. In contrast, anything which increases our feeling of being securely balanced and in control of our movements enhances our sense of well-being" (1992, p. 41).

Paradoxically, it is through the lack of balance that we acquire balance. This is the process required for adaptation. Although the human organism, on all levels, naturally organizes itself into a rhythmic pattern of motion, it requires the fluctuations in rhythm and harmony to change, grow and evolve within the ongoing flux in the universe.

CHAPTER 6

EVALUATIONS AND FURTHER RESEARCH

Re-enchant our world, to listen again to its cosmic music and tune our soul to it in harmony in order to restore a corresponding vibration between the instrument of the macrocosm, our world and the microcosm of ourselves, the human beings.

- Ammann, (1998, p. 586)

6.1.   Limitations

The nature of this study, to incorporate and integrate a broad range of diverse disciplines into a single holistic model, is in itself threaded with complexity. It would seem appropriate from a holographic perspective to explore all the intricacies of the woven patterns that connect the different enterprises. Admittedly, this is far easier said than done. Unfortunately the scope of this dissertation only allows for a meagre sampling of a subject that has the potential for prolific expansion and, hence, only the core features that knot the various domains together are addressed. Certainly, when a study appears to skim the surface, it is inevitable that debates or further questioning will be stimulated.

By compartmentalising the underlying constructs in a conventional manner, potentially positions the discussion into fragmented parts. While this may at first glance appear to be a piecemeal approach, contrary to an holistic stance, it remains a necessary requirement for empirical inquiry. When operationalising the different domains one basic problem that becomes evident is the complexity in formulating precise definitions. However, the definitions within the context of this study are not concrete, as they continue to evolve with the development of the respective theories. Maloney (2000) further pointed out that any study on archetypes carries a number of difficulties as a result of archetypes being a highly abstract concept.

Another key drawback of this dissertation is its theoretical weighting, which overrides limited practical reflection. The intention is to provide a preliminary framework for further studies to address applicatory issues. Repetition of themes and ideas that loop back and forth across these pages may be at risk of criticism for laborious articulation. However, a theory of rhythm cannot escape its own repetition and its own reinforcing patterns.

This dissertation impresses on the potential for a universal language that offers the opportunity to bridge diverse disciplines. The underlying concepts allude to a collaboration between worlds once considered significantly separate. The data presented may be varied, yet through common core themes (such as order, multiplicity, mathematics, polar tensions and so forth) an holistic conceptualisation is made. To this end a transpersonal approach of integration is embodied.

6.2.   Further Research

The implicit value of healing through rhythmic experience, be that through music - making, or through auditory entrainment, such that a greater sense of *Self* is experienced warrants further investigation. There are many avenues open for further research connecting the relationship of rhythmic pulses and psychology. Rhythm and its function within the healing process is of particular significance. An example would be to explore the various energies and appearances of rhythm and what aspects are particularly useful for enhancing well-being within an individual and a community. In this regard, considering what psychological, emotional, physiological and/or transpersonal experiences could be produced from the impact of different rhythms using different instruments (a rhythm struck on a drum or a rhythm struck on a triangle), would be of interest. It is said that drum rhythms are felt to vibrate with the pelvic and abdomen area, whilst the higher frequency percussion instruments such, as triangles, match the thorax upper body (Gardener, 1990). This has implications for designing therapeutic models that have relevance for specific psychological difficulties as well as relevance of these models within various cultural contexts.

Within the African context, the drum as a form of rhythmic percussion, for example, has played a vital role in the healing context. Somehow the underlying power of African rhythm has been forgotten or merely taken for granted. In Western tradition, musical and rhythmic structures are understood intellectually, whereas in the African culture the rhythmic structure is understood in the bodily experience (Flatischler, 1992). Bringing these two worlds together through research would promote a more universal understanding of the rhythmic power in for example drumming.

It would be useful to clarify whether rhythm is able to swing emotional discord and turmoil of patients diagnosed with particular pathologies back into a harmonious whole. From a psychoneuroimmunology perspective, previous research in the realm of sound technologies revealed a healing impact on disease, such as cancer. As rhythm contains tonal sound as part of its character it seems there may be a natural translation in the relevance of rhythm as a healing modality.

As a form of music making, rhythmic percussion is considered a popular ritual as a means of altering consciousness. For example, could it be the rhythmic pulse embedded in "rave music" that facilitates inducing the popular sought after trance experience in the adolescent or younger generation? A deeper understanding of the process and phenomenological experience requires follow-up.

Besides having possibilities for research in the practical application of rhythm, the field also has potential for expanding on the theoretical aspects of the archetypal nature of rhythm. Further imaginal correspondences that correlate to universal rhythmic figures could be useful in providing empirical evidence of the archetypal nature of rhythm.

6.3   CONCLUSION
In his discussion on a systems approach to life, Capra (1982) highlighted the important role of rhythm in building a new holistic worldview. Everywhere we look we see rhythm and patterns moving through time. These temporal oscillations form the fundamental component of interconnection between the tiniest individual organism and the greater

collective universe. The interconnection is cemented further through the idea of *holonomy*, where the phenomenon of rhythmic patterns of the whole universe or being is somehow mirrored in each of its parts. The purpose of this dissertation was to illustrate the archetypal power of rhythm through the holographic metaphor. This analogy accommodates both expansion and integration, which is saying that there is more to the whole than the sum of its parts. From this perspective the implication is a study that does not negate individual uniqueness in its variety of forms but recognises an underlying unity of forms (Cortright, 1997; Davis, 2000; Frager, 1989; Valle, 1989). Ultimately, this leans towards a paradigm that reflects universality.

Besides operating as a universal phenomenon, rhythm is paradoxically at the same time part of individual distinction (as in unique speech patterns, fingerprints, handwriting) (Capra, 1982). The theme of polarities and dichotomies has been a strongly present throughout this dissertation in concepts of Teihard de Chardin's *within-without*, the *orderly-disorder* of chaos theory, the *unconscious-conscious* integration through archetypes and the *pulse-interval* that underscores the pulsating cycles of rhythm. When there is a balance of tension between the poles, the oscillating pulse from one to the other brings about a sense of harmony and oneness.

In moments of perfect rhythm whereby the parts are all in synchrony with the greater whole, it is possible to experience the transcendent *Self*. In this way the individual entrains with the greater whole feeling oneness with the universe as described by the transpersonal paradigm. Capra (1982) described such experiences as occurring in many situations (hitting a perfect shot at tennis, a fulfilling sexual experience, in contemplation of a great work of art, or in deep meditation). According to Schopenhauer (cited in Storr, 1992), it is through music that this synchrony is best achieved. Disharmony perpetuates when opposing philosophies, disciplines, countries, cultures and individuals struggle for dominance. When these colliding tensions integrate, harmony ensues.

Jung (1969a) described the process of uniting opposites as a means of bringing about harmony. He referred to this process as the transcendent function which facilitates the

individuation process. By harmonizing conscious and unconscious information wholeness emerges. This wholeness is a sense of *Self* that is greater than the ego self. Harmonising or synthesizing can only result if there is an original state of flux or conflict between the incongruent halves. The archetypal image is responsible for alerting the psyche to the state of imbalance between the conscious and unconscious forces and subsequently attempting to restore harmony. In this way archetypes are unconscious messages that pulsate in rhythmic patterns, motifs or images into consciousness. The rhythmicity is evident in the remarkable repetition of forms across cultures that give archetypes a universal underpinning. In rhythmic terms they constitute repeating iterative patterns such as in the symbol of the mandala. Rhythm itself holds archetypal qualities as a language that connects all human beings. Flatischler (1992) comments that, rhythm exists as an archetype in all humans through the pulsation of pulse, interval and cycle.

The power of rhythm lies in it potential to heal and restore harmony. This study has illustrated how music, rhythm and sound have a profound affect on the human biology and the human psyche. The archetypes of the psyche have largely been revealed to consciousness through dreams and images. Jung did not consider rhythm as an archetypal element in and of itself, nor as a potential modality for accessing archetypal material. Yet music and rhythm are perhaps more important than imaginal representations of things because as Schopenhauer, Nietzche (cited in Storr, 1992) and Ammann (1998) decree, they access the *real nature of things.*

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