### WORKING PAPER

# \*Gathas: An Ancient System of Metaphors & Poetry

### Abreu, José Luis

\*Note: The Gathas are considered the first ethical proposal in the history of mankind. Here in this working paper which is expected to become a book in the near future, are presented several reflections and evidences on why Zarathushtra used poetry and metaphor to promote his ethical and philosophical teachings.

## Why Poetry and Metaphor in The Gathas?

Zarathushtra was born on March 26, 1767 BCE and according to Dr. Jafarey, "He had an ear for nursery rhymes. He became interested in poetry and his good old teacher had taught him rhythm and meter".

Zarathustra was a first caliber poet, he composed 17 individual poems which have been called "the Gathas", a term that means <u>songs</u>. To construct his poems he used five metrical structures. These poems/songs formed the foundations of the Zoroastrian Philosophy up to date.

It has been determined that the gathas poems were structured with concentric compositions, it means, for example that the first stanza rhymes with the third stanza.

Zarathushtra was a combination of a philosopher, a scientist and a social leader. Looking at this background, we cannot avoid the question: Why did he decide to communicate and to propagate his teachings by means of poetry instead of prose?

The traditional and simplest explanation says that "in the time of Zarathushtra the Avesta was a non written spoken language, and in consequence there were no reading or writing abilities. Zarathushtra thought that by using poetic language rather than prose language would make it easier to memorize information. In this way, during several centuries the Gathas were communicated from one generation to the next through a poetic rhythm method".

From my point of view, I think Zarathushtra reached beyond using a simple method of memorization. The poems/songs that conform the Gathas were designed with poetry and songs to stimulate the right hemisphere of the brain. This section of the brain among other important things is the seat of intuition, which is one of the

principles of life considered in Zoroastrian teachings. Zarathushtra referred to intuition in his language as Seraosha, which represents the way to listen to the divine voice.

It is not coincidence that scientists have determined that intuition, inspiration, emotions and creativity reside in the right hemisphere of the brain.

Other general characteristics of right-brain thought processes include the tendency to synthesize rather than analyze, and to relate to things in a concrete rather than a symbolic fashion. Where left-brain thinking tends to represent wholes by abstraction (using one piece of information to represent something larger), the right brain is more likely to interpret data through analogies ó -seeing relationships between wholes. Right-brain functioning is nontemporal, nonrational, holistic, and intuitive, relying on leaps of insight, hunches, or visual images. Discoveries about the right- and left-brain hemispheres have led some researchers and educators to advocate educational reforms that would allow right-brain modes of thought a greater place in the current educational system, which reflects society's overall tendency to reward the verbal, analytical left-brain skills. As split-brain researcher Roger Sperry notes, our educational system "tends to neglect the nonverbal form of intellect. What it comes down to is that modern society discriminates against the right hemisphere." The artistic, creative right brain is relegated to the "minor" subjects of art and music, but the main programs of study do not, as a rule, focus on developing the right-brain skills of imagination, creativity, or visualization (Gale Encyclopedia of Psychology, 2001).

Lieberman (2001) from Harvard University in his research paper titled "Intuition: A Social Cognitive Neuroscience Approach" explains that implicit learning processes are the cognitive substrate of social intuition.

These "feelings" have an efficiency of operation which it is impossible for thought to match. Even our most highly intellectualized operations depend upon them as a "fringe" by which to guide our inferential movements. They give us our sense of rightness and wrongness, of what to select and emphasize and follow up, and what to drop, slur over and ignore among the multitude of inchoate meanings that are presenting themselves... These qualities are the stuff of "intuitions." (Dewey, 1925, p. 244 in Liberman, 2001)

Liberman concluded in his research that implicit learning and social intuition have the same neural bases, and it should follow that they are linked functionally and computationally.

The Boston Consulting Group since 1963 created the Strategy Institute in order to detect, capture, and develop ideas from within and beyond business with the potential to impact how clients think about strategy and competitive advantage. Their findings have shown that poetry can help us think strategically. A poem is thought, experience, and emotion distilled into a tightly controlled form that uses words, images, sound, and rhythm patterns to create a complex set of meanings that constantly form and reform themselves. A poem's components take it beyond argument into a realm where expectations of a single analyzable meaning are deliberately questioned and subverted. All art does this, but poetry does it in a particularly condensed and therefore intensive way. A poem is a puzzle with multiple, inexhaustible, coexistent, and interchangeable "solutions"—each more or less dependent on the others for validity. The desire for closure (which drives most business considerations) and the desire to pursue the shortest route between A and B won't get us anywhere at all when we're faced with a poem. Business leaders too often develop their abilities in quantitative, linear thinking at the expense of nonquantitative response. Reading poetry encourages a fresh focus on these emotional, contextual, and cultural issues. It also requires that one enjoy the experience of poetry and want to become an astute reader. But the skill can be learned and, once acquired, should be transferable, for example, to responding to complex, strategic situations (Buswick, Morgan and Lange 2005).

In summary, this provides a way to open thinking spaces that may be often unused by the business strategist, and that can lead to better decisions. By focusing on how executives can refine their thinking abilities to take them beyond the ordinary limits of cause-and-effect approaches, encourages the application of those radical judgments that can help differentiate one organization from another. The authors, Buswick, Morgan and Lange believe they are the first to explore this relationship between reading poetry and business thinking.

Svetlana Timareva (2010) has reported that the study of the effects of music on the mind and brain has been a subject of interest for many. The interconnection between music and the physical and mental health of human beings has been researched since long. The research has concluded that music does have positive effects on the mind and brain of human beings. Music has the power of healing certain ailments. Indian classical music has been found to have the strongest healing powers. Be it about fighting anxiety, be it about speeding the healing process, music is the answer to all the queries.

There are times when one feels depressed. Feelings of gloom and inadequacy fill one's mind and carrying out even the daily activities becomes difficult. Depression reduces brain activity and hampers the mind's ability to plan and execute tasks.

Lack of the neurotransmitter, Serotonin, leads to a depressed state of mind. Soothing musical notes help increase the Serotonin levels of the brain, thus alleviating mental depression.

Anxiety is associated with an upcoming event that may have an unknown outcome. It may lead to sleeplessness and other anxiety disorders. Music plays a vital role in calming the nerves and soothing one's mind. Flat musical notes induce sleep, while natural notes provide the mind with alertness.

Music is found to affect the process of learning and thinking. If work is accompanied by quiet and soothing music, it helps the listener think, analyze and work faster in a more efficient manner. Music develops a positive attitude in the listeners and provides them with motivation. Surveys have shown that music brings about remarkable improvements in the academic skills of students, who are made to listen to certain kinds of music while studying or working in the lab. Listening to pleasant music, while doing a difficult task, can make it seem easier.

Music has a positive effect on the interpersonal skills of an individual. Failures that we face in life are often the result of lack of confidence and lack of desire to learn. Students obtaining poor school grades do not necessarily lack intelligence. Their poor academic results are often an outcome of their lack of motivation and their disinterest. Music lessons during school can help the students fight their mental block. Music proves helpful in encouraging young children to venture new fields. It helps them develop the confidence needed to achieve success in life.

Metaphor is a figure of speech that implies comparison between two unlike entities. It is also used to indicate resemblance. Tihamér von Ghyczy (2003) says that it involves the transfer of images or ideas from one domain of reality to another. (This notion is embedded in the Greek roots of the word "metaphor": "phor," meaning "to carry or bear," and "meta," meaning "across.")

Larson (2006) suggests that depending on their background, many individuals may not understand the concept of metaphor. It is even more likely that they will not know how it differs from two related concepts, analogy and simile. While the difference between these concepts is largely a matter of degree, one may to a large extent differentiate them along a continuum defining their explicitness. Analogies are often quite explicit and openly developed (often as a model, including mathematical models), whereas metaphors tend to be more implicit. Analogies are often of the form A is to B as C is to D, whereas metaphors more directly concern the relation between A and B. While a metaphor implicitly states that A IS B, a

simile more openly acknowledges that A is (only) LIKE B, though most metaphormakers understand that A is NOT (actually) B.

## **Metaphorical Models**

# Metaphor seems to be a fundamental component in Zarathushtra's poetry. Why?

Perhaps, some answers to that question can be obtained from **Lakoff and Johnson** (1980) who reported in their research studies that "Metaphor is for most people a device of the poetic imagination and the rhetorical flourish--a matter of extraordinary rather than ordinary language. Moreover, metaphor is typically viewed as characteristic of language alone, a matter of words rather than thought or action. For this reason, most people think they can get along perfectly well without metaphor. It was found,on the contrary, that metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature. The concepts that govern our thought are not just matters of the intellect. They also govern our everyday functioning, down to the most mundane details. Our concepts structure what we perceive, how we get around in the world, and how we relate to other people.

Our conceptual system thus plays a central role in defining our everyday realities. If we are right in suggesting that our conceptual system is largely metaphorical, then the way we thinks what we experience, and what we do every day is very much a matter of metaphor. But our conceptual system is not something we are normally aware of in most of the little things we do every day, we simply think and act more or less automatically along certain lines. Just what these lines are is by no means obvious. One way to find out is by looking at language. Since communication is based on the same conceptual system that we use in thinking and acting, language is an important source of evidence for what that system is like. Primarily on the basis of linguistic evidence, it was found that most of our ordinary conceptual system is metaphorical in nature. And we have found a way to begin to identify in detail just that the metaphors are halt structure of how we perceive, how we think, and what we do."

Zarathushtra understood the importance of metaphor and its role in language and the mind. Amazingly, he knew that metaphor is a fundamental mechanism of mind, one that allows us to use what we know about our physical and social experience to provide understanding of countless other subjects. He realized that such metaphors structure our most basic understandings of our experience. At the present time,

modern academicians assure that the theory of metaphor has developed within the cognitive sciences to become central to the contemporary understanding of how we think and how we express our thoughts in language.

Which metaphor models were used by Zarathushtra?

- 1. **Ahura Mazda as a friend** is the main metaphor in Zoroastrian poetry, which means "super-intellect, higher intelligence," it is one of the two names given to God by Zarathushtra. It is the super-intellect presented in metaphor for us to comprehend God. This metaphor help us visualize Ahura Mazda as a friend and companion, something that defines the Zoroastrian Philosophy. An example of this friendly metaphor is in song 5: "The Wise God, an ally through good mind and a good friend through the glorious righteousness..."
- 2. **Zarathushtra**, author of the Gathas, in his own metaphor is portrayed as the leader and lord of the living world to explain that he is the one that can make a better world through his good mind. Song 2 is dedicated almost completely to his metaphor in interaction with other important metaphors that will be studied in the next paragraphs, Song 2 is called "The choice of Asho Zarathushtra as the Lord and Leader of the World". As Jafarey has said: "He is the giver of the Manthra".
- 3. **Daenâ Vañuhi** is used as a metaphor by Zarathushtra to explain that his message is related to inner-perception, the conscience. It has been portrayed as the Good Conscience. This is a very important metaphor to define the meaning of the Zoroastrian Philosophy. In the Gathas (Song 10) we find the metaphor: "He who denies the false gods and their men, just as they deny him, and unlike others, acknowledges Him in good spirit, is, through his **progressive** conscience, the beneficent and master of house, rather a friend, brother, and father, O Wise God".
- 4. Vohu Manah was a metaphor designed by Zarathushtra to express good mind and good thinking. It also means wisdom and clear thinking. In song 2 we can observe an interaction of Vohu Manah with two other metaphors: Ahura Mazda and Asha. Here is the stanza: "The Wise God, of one accord with Righteousness, prepared His thought-provoking message in response to the sweet plea made by the World, because with His doctrine, He is the promoter for those who wish to be protected. He asked: Good Mind, do you know any person who can help the mortals? Later we can see that Vohu Manah, as a beautiful metaphor, replies: "Yes I do. There is only one person who has listened to our teachings. He is Zarathushtra Spitama. Wise One, he is prepared to proclaim the message

through his Songs for the sake of Righteousness. Grant him sweetness of speech." Here occurs a conversation among three of the most important metaphors, in which Vohu Manah recommends Zarathushtra for mission.

- 5. **Asha** is an important Zoroastrian metaphor that represents truth, order, righteousness, justice, precision. Jafarey (1989) explained that it means "to do the right thing, at the right time, in the right place, and with the right means in order to obtain the right result." It would be something which is of constructive and loving benefit not only for oneself but also for one's fellow creatures and for Ahura Mazda. The importance of Asha is shown in Ashen Vohu: "Righteousness is the best good. It is radiant happiness. Radiant happiness comes to the person to whom righteousness is for the sake of the best righteousness alone".
- 6. **Vohu Khshathra** is a metaphor composed by two terms. Khshathra: means to settle in peace, to rule a settlement, it is the "power" to settle people in peace. Used with the adjective of vohu, good, or vairyo, to be chosen, it means benevolent power, good rule, and the chosen order. It has been explained as the ideal government in spirit and matter and the ideal society. Jafarey (1989) has translated it as power, sovereignty and dominion in several contexts. This metaphor is so important that Zarathushtra constructed a complete song called the The Good Dominion Of Choice (Song 16), and in its very first stanza is stated that "The good dominion is to be chosen. It is the best dividend. In fact, it is devotion for the dedicated, who, Wise One, moves best within righteousness by his deeds. It is for this dominion that I am working for all of us now".
- 7. **Âramaiti** is a metaphor designed by Zarathushtra to call for a state to be at rest, to be tranquil. It means tranquility, stability and serenity. Jafarey (1989) has rendered it as serenity. It was used with the adjective spenta, "progressive," to express "ever-increasing serenity". An example of **Âramaiti** used as a metaphor is in song 1: "O Righteousness and Good Mind, I shall sing you praises none has sung before. I shall likewise praise the Wise God and those for whom Serenity promotes the unconquerable dominion. Respond to my calls for help".
- 8. **Seraosha** is a metaphor used to represent intuition as the way to listen to the divine voice. It also means inspiration and communion with God. This metaphor is very important because it establishes the mechanism in which poetry works in the right hemisphere of the brain. Zarathushtra explained the importance of a poetic language to activate a mental state of inspiration in the people in order to

connect humans with divine dimensions. Using this metaphor as an educational method he addressed Sage Jamaspa Hvogva in song 11, saying: "Here, Sage Jamaspa Hvogva, I teach you my message in a poetic and not in an unpoetic language, so that it shall always stay with you as prayers of glorification with the divine inspiration. Whoever distinguishes between law and lawlessness, O Wise Lord, is, through righteousness, a wonderful counselor".

- 9. **Spenta Mainyu** is a powerful metaphor to portray a progressive mentality. It is referred as the divine faculty that actively promotes the beneficial, evolutionary development or continuous creation and maintenance of both the material and mental, physical and spiritual universe. Song 12 in the Gathas is dedicated to deliver this metaphor, it is called the Spentâ Mainyu Gâthâ. Zarathushtra affirmed that Ahura Mazda was the designer of this metaphor: "You are the promoter of this mentality which created the joy-bringing world for him, and have granted peace and serenity for his settlement, because, Wise One, he had consulted good mind".
- 10. **Haurvatât** as a metaphor means "wholeness" and "completion." It is the perfecting process and final completion of our material and spiritual evolution. "The best shall come to the wise person who will propagate my true thought-provoking message. In Devotion to Duty (Song 6) we can visualize this abstract metaphor as something sustancial: "See for Yourself my intentions which I am pursuing through good mind. They are, Wise One, reverence and praising words for You through righteousness. Grant me the steadfastness of immortality and the substantiality of wholeness".
- 11. **Ameretât** was utilized as a metaphor to make a projection of deathlessness and immortality, and to show it as a reward. Ameretât and Haurvatât are the ultimate goals, and these metaphors represent the completion of our evolutionary mental development and our achievements in communion with God. In song 4 Zarathushtra shows that this is the ultimate reward for humans: "The best shall come to the wise person who will propagate my true thought-provoking message. It leads to righteousness for wholeness and immortality. Thus the dominion of the Wise One will, through good mind, increase for him".
- 12. **Athra** is a metaphor that resembles fire. In the Gathas fire is mental light, warmth, and energy. It is a sublime metaphor that calls for observation and meditation: "I realized You, God Wise, to be progressive when I was encircled by it through good mind. To its question: For what purpose do you want to acquire knowledge; I said: With the gift of homage to Your fire, I shall meditate, as long as I can, in quest of righteousness (Song 8)". It is also shown as a

metaphor for protection: "Who will, O Wise One, give me protection when the wrongful threatens to harm me, other than Your Fire and Mind? It is through the working of these two that, O God, righteousness thrives. Do enlighten my inner-self with this doctrine" (Song 11). And as a metaphor for happiness: "You grant happiness to both factions through Your bright Fire, Wise One, as well as through the purifying test. This is the established principle of existence: Sufferings for the wrongful, and blessings for the righteous (Song 16)". Âthra, through another metaphorical perspective has been visualized in texts of Younger Avesta as the son of Ahura Mazda.

- 13. Chinvato-peretu is a metaphor used to describe the bridge of sorting or culling. It is the state wherein the soul of a righteous person passes on to immortality but the soul of a wrongful person turns back and remains behind in order to further mature spiritually. Jafarey (1989) have rendered it as "the sorting bridge." In a very lovely and generous manner Zarathushtra promises support to his followers using a metaphorical language as follows: "Wise God, whoever, man or woman, shall give me what You know to be the best in life—rewards for righteousness, power through good mind—I shall accompany him and her in glorifying such as You are, and shall, with all of them, cross over the sorting bridge" (Song 11). In addition, the same metaphor is used by Zarathushtra to address his opponents: "The priests and princes yoke people under duress to destroy life with their evil actions. But their souls and their consciences shall upbraid them when they approach the sorting bridge, because they have been all the time dwelling in the house of wrong" (Song 11).
- 14. **The House of Song** is a metaphor that represents the reward that the followers of Zarathushtra are entitled to receive if they use good mind and righteousness. Evidence of this is found in Song 16: "The prize, I, Zarathushtra have promised my fellows in the future is the House of Song, in which the Wise One came first. I have promised it to you through gains of good mind and righteousness". And also in Song 10: "I shall seek to turn Him towards us with praises of reverence, because I have now conceived Him with my eyes of good thoughts, words, and deeds, and perceived Him through righteousness as the Wise God. Let us, then, offer our glorifications to Him in the House of Song".
- 15. **The House of Wrong** is the metaphor that opposes to the House of Song. References to this metaphor are: "The priests and princes yoke people under duress to destroy life with their evil actions. But their souls and their consciences shall upbraid them when they approach the sorting bridge, because they have been all the time dwelling in the house of wrong" (Song 11). In addition: "Now, the souls of the evil-ruling, evil-doing, evil speaking, evil-

conceiving, and evil-thinking return back because of their evil luster, because they really dwell in the house of wrong" (Song 14). And also: "The mumbling priests are not friends. They are sufficiently far from laws and from the settlement. They take delight in injurying the world with their deeds and teachings, a doctrine that ultimately places them in the house of wrong" (Song 16).

- 16. **The Sun** is another metaphor that brings rhetorical pictures to improve teaching the Gathas: "Now, whatever I have performed and shall perform, and whatever, like the rays of the sun, the wide dawning days, which one will esteem through the eyes of his good mind, are, Wise Lord, through righteousness, for Your glory" (Song 15).
- 17. **Prosperity** is a metaphor viewed from the perspective of Good Mind: "I know, Wise One, that I am powerless. I have a few cattle and also a few men. I appeal to You. Please, Lord, see to it. Lend me the help a friend gives a friend. Grant, through righteousness, the riches of good mind" (Song 11).
- 18. **Ushta** is a metaphor presented by Zarathushtra in the Gathas to denote radiant happiness. This metaphor explains that through the Gathas in the form of songs is that we can achieve the mental state of radiant happiness: "Kavi Vishtaspa has attained this through the power of the Fellowship and the songs of good mind. It is the wisdom the progressive Wise God has thought through righteousness so that to teach us radiant happiness" (Song 16). It is shown also that radiant happiness is a reward from God: "May the Wise, Ruling-at-will God grant radiant happiness to the person who radiates happiness to any other person at large. I pray for steadfast strength and courage in order to uphold righteousness. Grant me through serenity the blessings of a rich life of good mind" (Song 8). This metaphor is introduced for the first time in Ashen Vohu.
- 19. **Gaethâ** is the metaphor representing the living world of mankind and animals. It is the earth as a living organism for which we, as its self-aware, intelligent evolutionary offspring, have a profound responsibility to promote and to protect from all harm, especially from that which has been induced by our own self-centered ecological ignorance. Asho Zarathushtra is the first person to clearly envision the interrelatedness of all life on earth. He is the world's first concerned environmentalist (Jafarey, 1989). Examples of Gaethâ used as a metaphor in the gathas are: "The Soul of the Living World lamented to You: Why did You create me? Who fashioned me this way? I am oppressed by fury, rapine, outrage, and aggression. I have no one to rehabilitate me other than You. Lead me to true civilization." (Song 1)

"It is better for us two, the Soul of the fruitful World and me, to raise our hands for the divine grace and ask the Wise One: Will there be no livelihood for the honest? Will there be no reformer among the wrongful?" (Song 1).

The Soul of the World cried again: Am I to accept a powerless man with a feeble voice as my caretaker? I want a powerful ruler. Will such a time come when he will give me his helping hand? (Song 1).

- 20. **Ratu** is a metaphor that stands for a person "who offers good settlement, nourishment and strength" to the living world (Song 2.2).
- 21. **Druj** was designed as a metaphor to represent a harmful lie, what is wrong and stands opposed to asha (righteousness).
- 22. **Kavi Vishtaspa** is a very important metaphorical representation, because it is a combination of conversion, friendship and righteous government leadership. For Zarathushtra he was his ally in the promotion of the good conscience. This metaphor is pointed out by Zarathushtra in song 11: "Who is my, Zarathushtra's righteous companion? Who wishes fame for the Great Fellowship? He, on this great event of initiation, is Kavi Vishtaspa. I shall invoke, with words of good mind, those whom You, Wise God, have established in Your abode.
- 23. **The Gathas** are the representation of the Zoroastrian method designed for teaching the good conscience. It basically combines poetry, metaphors, philosophy, ethics, sociology, neuroscience and many other scientific disciplines. This is the reason for the call of Zarathushtra in Song 3: "Awaken to this Doctrine of ours before the Great Event of Choice ushers in". Zarathushtra also called his universal message, the **Mâñthra**, which means derived from man, "to think, to contemplate, to meditate" in its causative form of mân, "to provoke one to think, to help one to contemplate," and the agentive suffix -thra, it means "a thought-provoking word, a stimulating message."

### **Metaphors in Teaching and Business**

In general, it is well known that metaphors provide us with a unique way of portraying the world. The concept of metaphors for approaches to teaching has gained support of educators and researchers. Metaphors help us describe, visualize, and make sense of the world around us. For example, a possible metaphor for the brain is a computer. The images this metaphor creates help us to make sense of something complex -- many would consider the brain, like the computer, to have intelligence, memory, and organization, and perhaps even to be user-friendly.

Teaching is also something that is very complex. Metaphors offer a great way to help create images for others of what teaching means (Annerberg Media, 2010).

Teacher's Mind Resources (2010) assures that "one of the most important aspects of a metaphor is the roles it creates for self and others. If I am a shepherd, my students must be sheep. If I am a gardener, my students are plants. What unconscious expectations do these metaphors create in the mind of the people? Must the sheep be docile, feeding complacently in the pasture chosen by the teacher? Is the gardener tending a field of corn, where every plant receives the same care—or a botanical garden, where the gardener fosters the unique development of each species?. Metaphors that focus on what the teacher does rather than what the students learn cast students as passive receivers. They inhibit teacher behaviors that might encourage students to take an active role in their learning. Sadly, teachers will often condemn students for laziness or apathy when, in fact, they give the students no opportunity to assume responsibility for their learning. Examining the roles inherent in a teacher's metaphor can provide remarkable insights on these problems. If reforms are to succeed, teachers must actively explore these critical components of their thinking. The unconscious cognitive processes of both theorists and teachers must be brought into consciousness if there is any hope of creating a meaningful change in education".

According to Lakoff and Johnson (1980) in all aspects of life, not just in politics or in love, we define our reality in terms of metaphors and then proceed to act on the basis of the metaphors. We draw inferences, set goals, make commitments, and execute plans, all on the basis of how we in part structure our experience, consciously and unconsciously, by means of metaphor. . . .Metaphors, as we have seen, are conceptual in nature. They are among our principal vehicles for understanding. And they play a central role in the construction of social and political reality. Most of our metaphors have evolved in our culture over a long period, but many are imposed upon us by people in power—political leaders, religious leaders, business leaders, advertisers, the media, etc. In a culture where the myth of objectivism is very much alive and truth is always absolute truth, the people who get to impose their metaphors on the culture get to define what we consider to be true—absolutely and objectively true.

The reason to be focused so much on metaphor is that it unites reason and imagination. Reason, at the very least, involves categorization, entailment, and inference. Imagination, in one of its many aspects, involves seeing one kind of thing in terms of another kind of thing—what we have called metaphorical thought. Metaphor is thus imaginative rationality. Since the categories of our everyday thought are largely metaphorical and our everyday reasoning involves metaphorical

entailments and inferences, ordinary rationality is therefore imaginative by its very nature. Given our understanding of poetic metaphor in terms of metaphorical entailments and inferences, we can see that the products of the poetic imagination are, for the same reason, partially rational in nature. Metaphor is one of our most important tools for trying to comprehend partially what cannot be comprehended totally: our feelings, aesthetic experiences, moral practices, and spiritual awareness. These endeavors of the imagination are not devoid of rationality; since they use metaphor, they employ an imaginative rationality (Lakoff and Johnson, 1980).

The metaphor of learning through participation in human practices was popularized through the seminal work of Lave and Wenger (1991). Their proposal that learning arises from learners participating in communities of practice is also referred to as situated learning, since, contra the 'common-sense' view of learning, it maintains that learning is highly contextual. On this approach, learning, both as a process and as a product, is inseparable from the socio-cultural setting in which it occurs. Subsequently, the participation metaphor has become widely-used, even by theorists whose ideas in other respects part company with Lave and Wenger. Thus participation is now a dominant metaphor in diverse writings about learning (Hager, 2008). In the case of Zarathushtra The metaphor of learning through participation is represented by Vohu Khshathra.

An extensive body of literature in "biology studies" has shown that metaphors play a significant role in biological conceptions of the natural world. We know that metaphors shape how we think about phenomena, and that while this has benefits it also leads to a narrowing of the options and a constraining role. Furthermore, scientific metaphors are necessarily drawn from the social milieu in which scientists live, so they tend to reflect large-scale cultural assumptions. This can serve political ends; as individuals, we think we're playing individual role in society, but based on cultural assumptions we're often actually serving larger system/agenda (Winner 1986; Lewontin 1991; Keller 1995; Kay 2000 in Larson 2006).

We use some metaphors so often that they may escape critical reflection. Nonetheless, we need to draw attention to them in order to become aware of what they highlight and what they hide, of how they affect the way we relate to the world around us (Lakoff and Johnson 1980 in Larson 2006). This is particularly true for contemporary scientific metaphors, which heavily influence how many of us conceptualize reality while often containing an implicit normative or political dimension (Larson, 2006).

In an interesting experience, The Boston Consulting Group, for example, has created an online "metaphor engine" which is a Web-based interactive collection of

more than 250 cognitive metaphors that foster strategic and innovative thinking by making ideas from the world outside business useful for the business strategist. The approach is based on the belief in the power of metaphor to unlock valuable insights. Through research in non-business domains, such as evolutionary biology, history, philosophy, and anthropology, the Metaphor Engine staff assembles examples of breakthrough thinking regarding strategic dynamics and outcomes. This multidisciplinary approach lets us see familiar issues with "a new set of eyes" and generate new frameworks for thinking about business strategy. Although the materials in the Metaphor Engine do not purport to provide solutions that can be applied specifically to consulting assignments, they do provide inspiration and a point of departure for thinking about larger strategic issues.

In the same order of ideas, Tihamer von Ghyczy (2003) in the Harvard Business Review explained the theory of the cognitive metaphor and its relevance to business, demonstrating that although many managers try to draw business lessons from other disciplines, most do it badly. Rather than being seduced by the similarities shared by business and another field, managers need instead to identify places where the metaphor breaks down. This is where the process of strategic thinking starts.

The business world is rife with metaphors these days, as managers look to other disciplines for insights into their own challenges. And metaphors can--despite their somewhat flaky image--be powerful catalysts for generating new business strategies. But metaphors are often improperly used, their potential left unrealized. We tend to look for reassuring parallels in business metaphors instead of troubling differences, the author contends. In fact, using metaphors to come up with new strategic perspectives begins to work only when the metaphors themselves don't work, or at least don't seem to. Consider the following case. An insurance company's corporate headquarters put together a team of experts to discuss ways the firm might respond to the challenges of conducting business via the Internet. Once the team drafted a master plan, the idea was that it would be promulgated to the individual agents and offices of this widely dispersed organization. In a meeting with the company's top managers, the author talked about Charles Darwin's conceptual breakthrough in formulating the principles of evolution. As his overview of Darwin's theories about variation and natural selection gave way to questions, a heretical notion took shape: Those far-flung agents' offices, instead of being strategic liabilities in a suddenly virtual age, might instead be the mechanism for achieving an incremental but powerful corporate transformation in response to the changing business environment. But it was only when the evolutionary metaphor began to break down--when the elements of Darwin's theory clearly were at odds with the besieged insurance company's situation--that real strategic insight occurred. This anecdote offers, in a compressed form, an example of how the process of using metaphors can play out and what managers can learn from it.

Weinrauch (2005) in research journal article provides the role, scope, instructional experiences, and prospects of employing musical metaphors as a possible teaching tool. Interactive student learning is encouraged by actually playing songs in marketing strategy courses. First, an overview on the explanation and popularity of metaphors in both nonbusiness and business fields including marketing is provided. A brief discussion is then offered on the potential value and opportunities for using musical metaphors in the classroom. A narrative is then given on the instructional process of four stages that the professor experienced in adopting music metaphors. Student benefits as well as the limitations and suggestions on the process of trying musical metaphors are then summarized. Last, anecdotal student reactions are described and some illustrated experiential music assignments are given. The contents of the article have interesting implications for marketing educators who may like to experiment with musical metaphors.

### **Final Reflections**

Marcellino (2010) observed that "various leadership academicians and scholars have applied metaphors in their works. For example, Bolman and Deal (1997) illustrated how adopting metaphors and applying them to a school could reframe the school as a factory, jungle, family or theater. Hoyle, Bjork, Collier and Glass (2005) compared a school district superintendent to the CEO of a business corporation, while Norton et al. (1996) compared the school district superintendent to a lightning rod, teacher, catalyst, director and builder (pp. 62-63). Cherry and Spiegel (2006) described an educational leader metaphorically as a touchstone leader (i.e. the change agent); an advocate (i.e. fair and equitable leader); and a parent (i.e. supportive and caring leader). With similar design, Deal and Peterson (1999) contend that school leaders must become historians, anthropological sleuths, visionaries, symbols, potters, poets, actors and healers (pp. 87-99). Senge (2006), a business academic, expanded the leader's roles regardless of the discipline, by advising leaders to become designers, teachers and stewards".

Moreover, Marcellino (2010) assures that "The concept of using teams is prevalent today. According to Kline (1999) and Thompson (2000), teams are especially useful to enhance creativity and problem-solving; these are characteristics that are needed globally as we advance on a fast track technologically (Pink, 2005). Couger (1995) suggested having adults compile metaphors about an experience in order to stimulate creativity, while Kemp (1999) suggested that the use of metaphors might

help students evaluate an experience as it evolves. According to Kemp, the use of metaphor could support faculty in assessing learning groups".

The broad expansion of technology allows leadership students to interact as virtual teams (Lipnack & Stamps, 1997). Moreover, academics posit that individual growth will occur more readily in teams as adults interact, discuss and influence one another to adapt and change (Bolman & Deal, 1997; Katzenbach & Smith, 2003; Pearce & Conger, 2003; Polzer, 2003; Senge, 2006). When the team process works, its members feel a sense of exuberance and energy that is a testament to the extraordinary power of teams (Leavitt & Lipman-Blumen, 1995). But unfortunately, when adults interact in teams, not all teams are successful (Bolman & Deal, 1997; Katzenbach & Smith, 2003; Kline, 1999; Kling, 2000; Lipnack & Stamps, 1997; Marcellino, 2006; Pacanowsky, 1995; Senge, 2006). According to Kling (2000), an individual may grapple with maintaining self-identity versus identifying with the team. Marcellino (2010) concluded that "educational leadership instructors may be able to improve their team instructional models. The use of metaphor may be applied as an instructional technique as well as a tool for diagnosis of team tensions or problems, which may allow leadership instructors to gain access to teams and apply supportive coaching when appropriate so that team learning and professional relationship-building may be improved".

Zarathushtra, the poet, designed the Gathas as a unique system of interconnected metaphors with perfect congruence among them. This Zoroastrian model, based on metaphors linked to critical thinking, promotes freedom of choice allowing individuals to make their own choices. For example it permits to ask questions and to search for the right answers. Questioning is allowed to the seeker and there is not punishment for having doubts. The teachings of Zarathushtra are very complex, however, in a brilliant way through the method of metaphor the Zoroastrian knowledge becomes available to every person.

Zarathushtra did not want to create metaphors to attract followers based on a blind conscience or in fear. For this reason, using his own metaphor Zarathushtra shows him as a regular person in the Gathas:

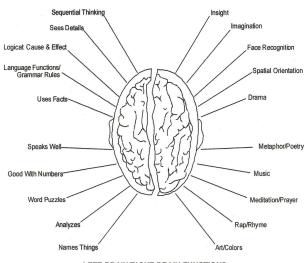
"The Soul of the World cried again: Am I to accept a powerless man with a feeble voice as my caretaker? I want a powerful ruler. Will such a time come when he will give me his helping hand?" (Song 2)

"I know, Wise One, that I am powerless. I have a few cattle and also a few men. I appeal to You. Please, Lord, see to it. Lend me the help a friend gives a friend. Grant, through righteousness, the riches of good mind" (Song 11)

As we have seen Zarathushtra became an expert in the design of metaphors in order to promote his teachings. It was an educational strategy to achieve a teaching process of quality in his students, because in the Gathas he relates his message to a process of teaching.

The rhetorical images of the Zoroastrian metaphors travel in the beautiful poetry of Zarathushtra to our brains in order to inform us about the existence of Ahura Mazda as our friend. Finally, the divine message found its way in a perfect bridge of metaphors built by Zarathushtra. *Vohu Manah* was right, he was the perfect man to do the job proposed by Ahura Mazda.

In the next two pages the reader will find two tables containing some of the main metaphors used in the gathas along with the properties of each metaphor considered in the study.



LEFT-BRAIN/RIGHT-BRAIN FUNCTIONS

# **Gatha Metaphors and their Domains**

Metaphor	Image Domain
Ahura Mazda	Super Intellect /
	Nature
Daenâ Vañuhi	Good Conscience
Zarathushtra	Leader, Ethical
	Person
Vohu Manah	Good Mind
Asha	Righteousness,
	Justice
Vohu Khshathra	Good Dominion,
	Social Responsibility
Âramaiti	Serenity, Emotional
	Stability
Seraosha	Intuition, Inspiration,
	Creativity
Spenta Mainyu	Progressive
	Mentality, Progress
Haurvatât	Final Completion,
	Wholeness,
	Perfection
Âthra	Light/Protection
Chinvato-peretu	Ethical Judgement
The House of Song	Reward for the
	righteous
The House of Wrong	Place for the wrongful
The Sun	Light, Enlightenment
Prosperity	Reward
Ushta	Reward-happiness
Gaethâ	Earth as a living
	organism
Ratu	Messenger/Teacher
Ameretât	Immortality (Reward)
Druj	Wrongdoing
Kavi Vishtaspa	Friend, Conversion &
	Leadership

#### References

- Annerberg Media. 2010. http://www.learner.org/workshops/nextmove/metaphor/
- Bolman, L.G., & Deal, T.E. (1997). Reframing organizations. San Francisco, CA: Jossey-Bass.
- Boston Consulting Group. 2010. The Strategy Institute. Modalities of thinking. <a href="http://www.bcg.com">http://www.bcg.com</a>
- Buswick, Ted; Morgan, Clare; Lange, Kirsten. 2005.

  Poetry in the boardroom: thinking beyond the facts:
  A roundtable discussion. Volume 26, Number 1.

  Journal of Business Strategy. ISSN 0275-6668
- Cherry, D., & Spiegel, J. (2006). Leadership, myth, & metaphor. California: Corwin Press.
- Couger, J. D. (1995). Creative problem solving and opportunity nding. Danvers, MA: Boyd & Fraser Publishing Company.
- Deal, T.E., & Peterson, K.D. (1999). Shaping school culture: The heart of leadership. San Francisco, CA: Jossey-Bass, Publishers.
- Gale Encyclopedia of Psychology, 2nd ed. Gale Group, 2001.
- Lakoff, George and Mark Johnson. 2003. Metaphors We Live By. University of Chicago Press
- Hager, Paul. 2008. Learning and metaphors. Medical Teacher. 30: 679–686.
- Hoyle, J.R., Bjork, L.G., Collier, V., Glass, T. (2005). The superintendent as CEO. Thousand Oaks, CA: Corwin Press.
- Jafarey, Ali. 1989. The Gathas, Our Guide. Ushta Publication, California
- Katzenbach, J. R., & Smith, D.K. (2003). The wisdom of teams. Boston, MA: Harper Business.
- Kemp, E. (1999). Metaphor as a tool for evaluation. Assessment & Evaluation in Higher Education, 24(1), 81-90.
- Kline, T. (1999). Remaking teams: The revolutionary research-based guide that puts theory into practice. San Francisco, CA: Jossey-Bass, Inc.
- Kling, J. (2000, July). Tension in teams. Harvard Management Communication Letter. Harvard Business School Publishing, Article reprint #C0007A.
- Larson, Brendon M. H. 2006. Metaphor in Science: A Modular Teaching Unit. Department of Environment and Resource Studies. University of Waterloo. Waterloo, Ontario, CANADA

- Lave J, Wenger E. 1991. Situated learning: Legitimate peripheral participation. Cambridge: Cambridge University Press.
- Leavitt, H., & Lipman-Blumen, J. (1995, June). Hot Groups. Harvard Business Review, 73 (4), 109-116.
- Lieberman, Matthew.2000. Intuition: A Social Cognitive Neuroscience ApproachPsychological Bulletin. Vol. 126, No. 1, 109-137
- Lipnack, J., & Stamps, J. (1997). Virtual teams. New York: John Wiley & Sons, Inc.
- Marcellino, P.A. (2006). A teambuilding model for the educational leadership Classroom. In F. Dembowski & L. Lemasters (Eds.), NCPEA 2006 yearbook Unbridled spirit: Best practices in educational administration (pp. 216-225). Lancaster, Pennsylvania: Pro>Active Publications.
- Marcellino, Patricia. 2010. From Pedagogy to Diagnosis:
  Metaphors Provide Access to Leadership Teams.
  The International Journal of Educational Leadership
  Preparation, Volume 5, Number 1 (January March 2010)
- Norton, M.S., Webb, L.D., Dlugosh, L.L., & Sybouts, W. (1996). The school superintendency: New Responsibilities new leadership. Upper Saddle River, NJ: Allan & Bacon.
- Pacanowsky, M.(1995). Team tools for wicked problems. Organizational Dynamics, 23(3), 36-49.
- Pearce, C. L., & Conger, J. A. (2003). Shared leadership: Reframing the hows and whys of leadership. Thousand Oaks, CA: Sage Publications.
- Pink, D. (2005). A whole new mind: Moving from the information age to the conceptual age. NY: Riverhead Books.
- Polzer, J. T. (2003 February). Leading teams. Harvard Business School Publishing. Article Reprint #9-403-094.
- Senge, P. M. (2006). The fth discipline: The art and practice of the learning organization. New York: Currency Doubleday.
- Teacher's Mind Resources http://www.teachersmind.com/metaphors1.htm
- Thompson, L. (2000). Making the team: A guide for managers. Upper Saddle River, NJ: Prentice Hall, Inc.
- Tihamer von Ghyczy, 2003. "The Fruitful Flaws of Strategy Metaphors," Harvard Business Review, September 2003.
- Timareva, Svetlana. 2010. Effects of Music on the Mind and Brain. http://www.buzzle.com
- Weinrauch, J. Donald. 2005. An Exploratory Use of Musical Metaphors to Enhance Student Learning. Journal of Marketing Education, v27 n2 p109-121.