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Education and Ecology From Al-Ghazaly's Perspectives

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Introduction

Ecological Literacy by David Orr (1992) addresses the importance of teaching ecology as an integral part of the curriculum in schools, from the very beginning of a child's formal education. This idea has validity, especially because our planet is suffering from an overload of chemicals, air pollution, loss of topsoil, and many other "ills" that can be corrected by incorporating ecological literacy in all academic systems, from grade school through college and beyond.

However, this paper precedes Orr's idea of classroom ecology by placing the emphasis on the home and family, as expressed by the great Muslim thinker, Al-Ghazaly (505 -1111), who lived in medieval times. While Al-Ghazaly, unlike Orr, did not write a book or even a chapter on ecology, per se, evidence is scattered throughout his works and books by other writers, that demonstrates his ideas were indeed consistent with some concepts of ecology taught recently. For example, Smith (1944) mentions that Al-Ghazaly writes of the beauty of green things, of running water, of a fair face, and of beautiful colors and sounds" (p. 82).

This medieval thinker connected ecological concepts with Islamic codes of behavior, which are part of daily life. For instant, the first chapter in Part II of his book *Ihya' 'ulum al-din* (The Revival of the Religious Sciences), is called "Rules of Eating and Drinking." It includes such topics as rules for eating alone, rules at the time of eating, rules of eating with others, and hospitality. The prayers before and after eating acknowledge the importance of food in our lives and giving thanks. we

interpret this as one aspect of “comida¹,” as explored in *Grassroots Modernism* by Esteva and Prakash (1998).

The *Qur'an* and *hadith* (Prophetic sayings) are the main sources for guiding Muslims’ lives and manners. This paper will present Al-Ghazaly’s concept of ecological literacy through his emphasis on the Muslim faith and the importance that this faith places on home and family life. This will be accomplished in three steps, each is built on the previous one:

1. The definition of education from the Islamic point of view, which includes ecology. (This also shows the link between Islamic education and Al-Ghazaly’s writings.)
2. The Role of Al-Ghazaly’s emphasis on education within the family
3. The importance of education as part of “comida”.

Defining Education in an Islamic Context

The term education in Arabic means *tarbiyah* and does not require sitting in a classroom and learning from books. The meaning of education in the Islamic context is learning by doing and watching parents and others, which, foreshadows Illich’s (1992), and other post modernists’ theories about “deschooling”. This meaning is inherent in the terms *tarbiyah*, *ta’lim*, and *ta’dib*. They are interrelated in their concern for humans, society, and the environment, which in turn, are all related to God. They represent the scope of education in Islam, both formal and informal

¹ Comida, which in Spanish literally means food, but in this context has a larger meaning to include the growing, harvesting, preparing, enjoying and sharing of food with those of our immediate and extended families and friends in community (see Prakash, 1998).

(Erfan, and Valie, 1995, p. 2). In the Arabic dictionaries *Lisan al-Arab* (2000) and *Al-qamus al-muheet* (2000) these three terms basically mean increasing, growing, reforming, cultivating, or purifying one's knowledge, such that one is a well-balanced person (Ibn Taymiyyah, 1994). Thus, this concept can be applied to intellectual knowledge, personal conduct, and spiritual growth. Again, education is much more than classroom lessons.

The *Qur'an* connects teaching with purifying one's soul. Allah says:

It is He Who has sent
Amongst the Unlettered
A messenger from among
Themselves, to rehearse
To them His Signs,
To sanctify them, and
To instruct them in scripture
And wisdom-although
They had been, before,
In manifest error- (62: 2) (Ali, 1995, p. 1466).

The terms , *ta'dib*, and *tarbiyah*, have been translated from medieval to modern times to mean "education", which in Islam is also meant to include the idea of a well-balanced person who is ultimately the inculcation of *adab* (morality). This word, which Al-Attas (1979) refers to as "encompassing the spiritual and material life of a [person] that instills the quality of goodness that is sought after" is also part of readying a child for adulthood, which in the Western world is called education. The Prophet Muhammad said: "O Lord God! Thou hast made good my creation; there fore make good my character." (Al-Attas, p. 1). According to this *hadith* and others, the term education is broadened to include morals. In order to make this clear,

Prophet Muhammad summarized his educational vision and mission by saying, “I have been sent only for the purpose of perfecting good morals” (Al-Bukhary, 1999, No. 274, p. 126).

Morals is not only with other humans, but also with nature, Al-Ghazaly (in Winter, 1995, p. 17) believed that “A trait of character, then, is a firmly established condition [hay’a] of the soul, from which actions proceed easily without any need for thinking or forethought.” By developing good character, Al-Ghazaly also believed you were worshipping God. Perhaps we might add that helping the child develop positive attitudes can instill these character traits. Thus, through the parents’ nurturing the child in positive ways (also a way of following God’s commandments), we can consider this an informal education method, and the good characteristics become personal, daily life habits.

Berry (1992) and (Dennison, 1992) suggested that attitudes are incipient acts. Unless and until we change the attitudes that form our behavior, we will have little success in preventing or halting the acts to which we object. Thus, both Al-Ghazaly’s medieval concept of influencing behavior through positive attitudes and character, and post-modernists Berry and Burke’s concepts are similar, despite the centuries and cultures that separate them.

Historically, philosophers and thinkers in many different civilizations have intended to transform the way we see, think, act, and interact; they have often considered themselves to be mankind’s ultimate educators (Rorty, 1998) . Tāhā Hussein (in Galal, 1994) has long been revered by Egyptian intelligentsia as a great

educational philosopher. In *The Future of Education in Egypt*, he devoted a whole section of his book, explaining the role of the teacher. Galal offers Hussein's example of the traditional Arab-Islamic educator, whose job was to prepare and develop the rulers' sons to "assume the tasks of government, administration, and leadership, instilling in them the uprightness befitting an exemplar, who must direct and manage the affairs of the people" (p. 702). Hussein, like Illich, Prakash, Gandhi, (in Prakash, 1993), stresses that the teacher does not "merely fill the pupil's head with knowledge," but also needs to "train and discipline [the pupil's] mind...to prepare him for practical life and...to raise his intellectual level" (p. 702).

The Role of Al-Ghazaly's Emphasis on Edu-cology within the Family

Al-Ghazaly states that learning and discipline begin at home, before the child enters school. His writings actually promote ecological literacy in the family. Using Al-Ghazaly's teachings as a model, parents can start teaching ecology in their own homes with their pre-school children. His teachings are based on the *Qu'ran* and Prophetic sayings, with Al-Ghazaly's contribution being the organization of this information in a way that every Muslim can easily understand the concept of ecology that are woven throughout his work.

From the ecologist perspective in his book *Ecological Literacy*, Orr (1992) talks about the importance of "the art of living well in a place" (p. 125). Orr comments that education needs to be more than an indoor activity of sitting at a desk and learning from books. What we need is experiential learning that involves

interacting with nature. One of the ancient philosophies is that we can give people fish to feed them for one day or teach those people to fish so they have a livelihood (Freeman, 1998). By the same token, if parents give their children food and clothing without explaining how nature provided these things, those children will only be fed and clothed for the time being. But if the parents teach the children to grow food, or make their clothing, they can interact with nature and continue to survive independently.

Like other ecologists (Orr, (1992); Berry (1997), (1987), Esteva and Prakash, (1998); and (Ghandih, in Prahash 1993), Al-Ghazaly (1994) believed that educating and teaching are part of the parent's and family's role and what the children learn from their families, farms, friends, and environment is perhaps more important than the classroom.

Like Armstrong, (1992), Al-Ghazaly's (1994) "edu-cology" within the family reflects that of Prophet Muhammad's teaching. He helped his family with the household chores and did everything for himself: he cut his own meat, he mended and patched his clothes, cobbled his own shoes and looked after the goats (Malek, 1997, p. 152). Al-Ghazaly even believed that we can learn from our enemies, because we can learn how to act. Therefore, if a person destroys trees, the child can learn not to do so because it would harm the environment. More specifically, Al-Ghazaly (in Winter, p. 53) says: "it may happen that a man gains more from an enemy and a foe who reminds him of his faults than from a dissimulating friend who speaks highly of him, and hides from him his fault."

Just as Orr (1992) believes that ecology cannot be a separate subject, but rather a concept woven throughout all classes, so, too, the fact that Al-Ghazaly does not make a separate section in any of his books on ecology per se, demonstrates that both see ecology as a core issue in living. The universality of these concepts is that they are not specifically religious, but rather political and ethical ideas for saving the planet. Although they are part of the Muslim faith, they are found in other faiths; thus, the ecological tenets are pluriversal and can be applied to any family of any background.

According to Al-Ghazaly (in *Ihya'*, translated by Ul-Karim, 1978), education is analogous to rain and as such, may also be defined as the

...rain which comes down pure from the sky. Trees, plants and leaves drink that water through their roots. That water then assumes different natures according to the different kinds of trees and leaves. Water increases bitterness in a plant, which is bitter, and sweetness in a plant which is sweet. The condition of education is similar (Ul-Karim, 1978, vol. 3, p. 320).

Education in the broadest sense can be defined as a social process. It is a process of life – not merely a preparation for the future. It is also a fundamental method of social progress and reform (Dewey, 1997). In *Ecological Literacy*, Orr (1992) describes how acquired knowledge (education or technology), like water, assumes different natures. If this knowledge is used to create situations that contaminate our environment, such as a modern factory dumping its industrial waste into a nearby river, we will slowly destroy the planet. On the other hand, we can also use this same knowledge (education) to

solve the planetary problems that we have already created and furthermore, to prevent additional destruction in the name of progress. We might need to redefine education so that it is not “the alienation of learning from living,” as described by Illich (1992) in *In Lieu of Education*. In fact, the Muslim faith and the ecological writings of Al-Ghazaly are based exactly on this idea of learning through living.

In addition to using the rain analogy, Al-Ghazaly (1951) makes another one by saying that the role of an educator is like that of a farmer. The farmer takes the undeveloped resources (dirt, seeds, water) and combines them to make food. Thus the parent/educator takes the child/student and the lessons and puts them together to convey knowledge and help the child to grow. As part of the process, the farmer removes the weeds and thorns and dead leaves to help nurture the growing item. In the same way, the parent/teacher fosters appropriate interpersonal relationships, corrects inaccurate ideas, and demonstrates what is good and what is not, nurturing the child’s good character.

Another facet of this analogy of the educator as farmer is that a person is a “tiller” (*hāriṭh*); what he accomplishes and achieves in his life on earth is his tillage, and the time of his death is his harvest, where he will reap what he has sown for himself (McCarthy, 1980) . Al-Ghazaly placed great emphasis on family life as a positive place of learning. According to Al-Ghazaly (1978), God entrusted children into the hands of their parents, who are like the farmers. “The heart of a child is bright like a jewel and soft like a candle and free from all impressions” (vol. 3, p. 75).

The family plays a critical role, being responsible for teaching its children language, customs, and religious traditions. Therefore, the primary responsibility for children's education and integrity falls on the shoulders of the parents. In other words, the parents will reap what they sow. And, if they neglect the child's upbringing, that is, do not remove the weeds, they bear the burden of the sin of neglect (vol. 3, p. 77), or in farm language, reap a bad crop.

Al-Ghazaly's perspectives on family education can be studied in terms of both theory and practice. For example, parents will read a verse in the *Qur'an*: "Save yourselves and your families from a Fire" (66:6). This refers to the concept that parents must teach their children wisely so that they will not suffer from Hellfire. Within this context, human beings are capable of free choice between right and wrong, growth or stagnation. The parents help the children to make good choices every day in order not to suffer Fire. From a practical perspective, Al-Ghazaly believed that children acquire personality characteristics and behavior through living in society and interacting with the environment. Al-Ghazaly (1978) claimed that, "nobody can be learned unless he puts his learning into practice" (vol. 2, p. 71). From both the theoretical and practical perspectives, learning reflects aspects of a society's philosophy, aims, cultures, and customs from generation to generation.

According to Dewey, education is a significant element in every society. The family as agent socializes us, from birth to adulthood, directly and indirectly. It is the one continuous force that still strongly affects humans on various levels: socially, emotionally, intellectually, and even physically. According to Al-Ghazaly (1994),

the Muslim family, steeped in the verses of the *Qur'an* and the words of Prophet Muhammad, is the first place of learning and cannot be separated from Islamic teaching.

Definition of Environment, Ecology, and Sustainability

In order to show the link between ecology and education in Al-Ghazaly's writings, some definitions are needed. According to Zekai Sen, (2000) in a book called *Religions of the World and Ecology*:

Environment may be defined as that part of space where human activities take place for the betterment of all living creatures in a harmonious manner. Degradation in human faith and uncontrolled interactions with the natural environment are the sole factors, which have damaged atmospheric, lithospheric, hydrospheric environments that are essential parts for survival on this planet.

Ecology is defined in Webster's (1993) *Third New International Dictionary* as:

1. A branch of science concerned with the interrelationship of organisms and their environment.
2. The totality or pattern of relations between organisms and their environment.
3. Human ecology, [that is], a branch of sociology that studies the relationship between a human community and its environment; specifically, the study of the spatial and temporal interrelationships between men (humans) and their economic, social, and political organization. (See also Ophuls, 1977, p. 4)

A third definition, that of (ecological as opposed to technological)

sustainability, is also important to define. In *The Development Dictionary*, Shiva (1992) in the essay Resources seems to be the most complete, because it includes the ecological crises our planet faces within the definition.

The original concept (of sustainability) refers to nature's capacity to support life. Sustainability in nature implies maintaining the integrity of

nature's processes, cycles and rhythms. It involves the recognition that the crisis of sustainability is a crisis rooted in neglecting nature's needs and processes and impairing nature's capacity to 'rise again.' In a finite, ecologically interconnected and entropy-bound world, nature's limits need to be *respected*, they cannot be *set* by the whims and conveniences of capital and market forces, no matter how clever the technologies summoned to their aid. (p. 217)

Using these definitions, Al-Ghazaly's writings can be seen to include the study of ecology as part of a child's education from birth. Ecological literacy mainly describes the problems of modern or postmodern industrialized societies, and how education can contribute to solutions (Anderson, 1992). Also by being part of the child's education, if not from birth, then at least integrated into classroom learning from nursery school. Thus Al-Ghazaly's writings are similar to those of the post-modernists.

Islamic Edu-Cology in Al-Ghazaly's Writing

The term edu-cology is the term the researchers has created to show the relationship between education (within the family) and ecology, which are inextricably linked in Islam, reflected in Al-Ghazaly's writings. While the *Qur'an* and the *hadith* form the umbrella of Islam, Al-Ghazaly's words rely on the umbrella and at the same time, explain each of the many concepts, like many raindrops on the umbrella, more systematically. He contemplated that the world of nature is a mirror reflecting the Divine God, who is both transcendent and immanent. Al-Ghazaly (1996) also wrote that the universe is our home, the sky is our roof, the earth is our floor, and the stars are our lamps. The animals, the trees, the air and all of nature are

the tools for living and must be used wisely. In addition, this thinker includes mundane activities, saying that a sign of a learned man “is that he be not disposed to indulgence in his food and drink, and luxury in his dress, furniture and housing. Rather, he should prefer economy in all things, emulating, thereby, the blessed Fathers” (Al-Ghazaly in Faris, 1991, p. 173). While he talks about balance, at times some thinkers have criticized Al- Ghazali as not practicing balance, because some of his stories have very strange ideas that seem to be the opposite of the reality of balance, for example, talking about a man who went to his grave without ever eating salt, or another fasting for 20 days to stress the importance of hunger (Al-Ghazaly in Winter, 1995). These stories and others led some scholars to questions Al-Ghazaly’s Mystic observations.

In reviewing Al-Ghazaly’s writings there were meditations that point to his concern about the environment. For example, he said that we need to look at the world and how it is created, not just humans, but also all of nature and God’s creatures. When we have become aware of all that surrounds us, next we should notice how we are influenced by everything that we see in nature. Using the *Qur’an* as his main resource, he writes many chapters in his books about nature, creation, and the environment.

Concerning animals, he points out how bees give us honey and cows provide us with milk and meat. However, Al-Ghazaly (1994) emphasizes that we must treat these animals with kindness. For instance, with beasts of burden, do not give the beast too heavy a load because the animals also deserve mercy. Writers came after

influence on Al-Ghazaly's works, in his book *Some Glittering Aspects of The Islamic Civilization*, Siba'i (1984, pp. 136-137) mentions some laws relating to the kind treatment of animals made by Islamic legists:

1. The owner of animals should provide all the needs of these creatures,
2. The legists have prohibited people from putting greater burden on the beasts than they can easily bear,
3. And if an animal oppresses another, it is nonsensical to think of it and judge it in human terms, and so no 'criminal' beast shall be punished for this 'crime'.
However, its owner can be brought to account and compensate for it, if it can be proven that he has been careless in keeping his animal properly secured and restraining it from doing harm.

Al-Ghazaly (1994) encouraged the people to plant trees to protect the earth. Furthermore, he directed the proper location for the trees to flourish, showing his knowledge of ecology, even as early as the Middle Ages. In teaching his students about the earth, he would explain how a seed is placed in the ground, watered by the rain, how it is harvested and how to grind the seed to make the seeds edible, etc.

Another aspect of Al-Ghazaly's writings, which can be interpreted as an ecological concept, is his attitude about spiritual disciplines. His method was simple. First, learn about a good trait, such as generosity. Then go out and perform generous acts. By continuing to do these generous acts, even struggling with the soul, until his nature conforms to the act, generosity then becomes easy (Al-Ghazaly in Winter, 1995).

We can take this concept and apply to caring for things in the earth. If you understand the value of conserving water and you practice conserving it in all aspects of life, then eventually you will be a water conservationist. This method is not difficult if one accepts the validity of the behavior being made a habit. In teaching these habits to extend to eating, sleeping, drinking, etc., he guides parents to act appropriately and be models for their children. More specifically, one who overindulges in food and drink will fall prey to diseases; thus, the ecology of the body is affected as well. If one has already overindulged, he or she “should therefore proceed a little at a time by eating progressively less and less of his accustomed nourishment.” (Al-Ghazaly in Winter, 1995, p.134). Thus, if we carry this into our current planetary problems, we can reverse the destruction gradually, with each person being responsible for his or her own gradual reduction of negative habits.

In the 20th century some Western Muslim thinkers such as Hofmann (1993) states that Islam is the alternative. Hoffman, like the other post-modernists in this course, states that, “nature can be saved by nothing less than a revolutionary change of Western man’s attitude as a consumer” (p. 96). Hofmann (1993) concludes that “only when [Western man] sees himself, as the Muslim does, as ‘*abd* (servant of God) can such a revolution take place” (p. 96). The term ‘*ibadah* means that every Muslim needs to operate with good intentions, speaking every word and doing every deed that God would approve, coming from within the person’s heart. For Al-Ghazaly (1951), the term ‘*ibadah* is “conformity to the Sacred Law in commands and prohibitions, in both word and deed” (p. 11). Ibn Taymiyyah (1999), like Al-Ghazaly

extends this term to worship “ as a comprehensive term that encompasses everything that Allah loves and is pleased with, of both statements and actions, (both) the apparent and hidden” (p. 29).

From these readings one can see that Al-Ghazaly, like Hoffman, had a strong connection to the earth and to the teachings of the *Qur'an*. They both believe that Islam's commandments of the restrictions and rules were placed on humans to preserve the environment. Their concern with the water, vegetation, Earth, the animal kingdom, and the atmosphere come directly from his Muslim faith.

In some of Al-Ghazaly's books there are examples of all these ecological concerns, which he then connects to everyday activities. For example, using the belief about the importance of planting trees, he might recommend that families take good care of the trees where they live. Or he might take the Muslim concept of water as the secret of life and was very specific, noting that urinating in a lake goes against nature and to pollute the water is a sin. Prophet Muhammad said that, “any Muslim who plants or cultivates vegetation and eats from it, or another person, animal or bird, eats from it will receive a reward for it from Allah” (Bukhari, 2000).

In his book *Ihya'*, Al-Ghazaly (1994) codifies many of these teachings into an organized format that any one person or family could use as a daily guide. He was very specific, listing such activities: how to wash your hands so as not to waste water, how to eat in moderation because overeating is not only unhealthy, but wastes food that someone else could eat. Al-Ghazaly (in Winter, 1997) states that,

... the first trait to take control of [their children] will be greed for food; they are to be disciplined in this regard, so that for instance, they pick up food only with their right hand, says 'In the name of God' when raising it, eat from that which is nearest to them, and do not start eating before others. They should not stare at their food or at the other people present, neither should they bolt it, but should chew it properly; they should not eat one mouthful after another without pause, they should not get food on their hand or their clothes, and they should acquire the habit of some times eating nothing but bread so that they do not think that the presence of other kinds of food is inevitable. They should (be) made to dislike eating large quantities by being told that this is the practice of animals, and by seeing other children reproached for overeating or praised for being well-mannered and moderate. They should be made to enjoy giving the best food to others, and encouraged to pay little heed to what he eats and to be contented with its coarser varieties (pp. 76-77).

Al-Ghazaly in his advice encourages parents to teach their children that, "food is a means of maintaining health" (p. 80). He concludes by mentioning one of the Islamic jurists, Al-Shfi'I, who said

... never I been satisfied in sixteen years, because a full stomach fattens the body, hardens the heart, dulls the intellect, fosters sleep, and renders man lazy in worship. See, then, his wisdom in enumerating the evils of a full stomach and how he had deprived himself of its luxury in favour of diligence in worship; truly to act down on food is the beginning of religion (Al-Ghazaly in Faris, 1991, p. 60).

Al-Ghazaly also explains how to brush our teeth with a natural stick (*miswak*).

Alvares (1992) notes that commercial toothpaste is not necessary for life. When toothpaste is unavailable, the people in the community can return to using *neem* sticks, mango or cashew leaves, or some other natural mixtures from ginger, charcoal and salt. These noncommercial materials are all locally available and were used long before toothpaste was manufactured. Also it is not requiring any chemicals or factory work or destruction of the environment. From Al-Ghazaly's (1996) point view, the

natural stick is a very healthy way for cleaning our teeth. Furthermore, Al-Ghazaly (1994) believed that being frugal with the resources of the earth is important as an everyday consciousness.

Al-Ghazaly's main contribution to Islamic family education is that he formed a distinct connection between the religious tenets of Islam and a way of life that embodied ecology in an organized way. In addition, as Orr (1992) points out in his book both he and Al-Ghazaly believe that learning about ecology should start very early in the home and should be made part of everyday life, not something studied separately, either as a separate subject in formal education, or as a separate part of life, but rather necessary to sustain life.

Teaching Edu-Cology

Al-Ghazaly's concepts of ecology as a family responsibility can be taken one step farther. Islamic law and Al-Ghazaly's expansion of ecology can be applied to contemporary environmental challenges. For parents, the writings of Al-Ghazaly can be guidelines for their own families. Children can be reminded daily of the importance of conserving water, following the rules of eating as laid down by their faith, and the use of 'comida' within the community, both Muslim and non-Muslim. Parents are role models for our children. If we waste water, food, paper, etc. or treat animals with harshness, so too will our children learn these un-ecological habits, which are considered also immoral according to many faiths, in addition to the

Muslim faith. . In addition, keeping the environment clean and safe for others in the community is part of his teachings

With Al-Ghazaly's writings, parents and teachers can realize the value of raising the children's awareness through his connection between the Muslim faith and every act performed in school. Whenever Al-Ghazaly advised teachers, he made the analogy that the student is like your own child and as the teacher, you are the parent. If a teacher has embraced the environmental and ecological tenets of Islam, the *Qur'an*, the Prophet Muhammad and the organized instructions of Al-Ghazaly, the students will learn first at home, and then in the school, and finally in college that ecology is crucial to the sustainability of our planet. They will be in concert with their religion, their faith, their community and their global home.

Al-Ghazaly's Politics of Ecological Administration

According to Al-Ghazaly the foundation of politic is that state and religion are twin concepts that cannot be treated separately as done in the West. Al-Ghazaly (in Faris 1991, p. 40) states that,

...God has created this world in preparation for the hereafter in order to gather suitable provisions therefrom. If these provisions were gathered justly, dissensions would have ceased and the jurisprudents would have become idle but since men have with greed gathered their provisions, dissensions ensued and consequently the need for a magistrate to rule them arose. In turn, the magistrate felt the need for a canon with which to govern the people. It is the jurisprudent, though, who has the knowledge of the rules of government and the methods of mediation between the people whenever, because of their greed, they contend. He thus becomes the teacher of the magistrates and their guide in government and control that through their righteousness the affairs of men in this world maybe set in order.

This quote demonstrates that Al-Ghazaly had a concern about greed, and that greed is the opposite of ecology. Therefore, the magistrate is responsible for the market place and the fair distribution of provisions. “Caring for the environment falls within the jurisdiction of ‘*muhtasib*. [literally], market inspector” (Netton, 1992, p. 33; see also Dien, 1992). However, Al-Ghazaly, believed the *muhtasib* was more than a market inspector. (This position could include husbands, wives, children, teachers, and students who advise one another when something or someone is in error. This includes mistakes in the nature or the environment; for example, a parent’s mistreating an animal). What can be seen is that Al-Ghazaly (1994) takes even the most narrow of definitions and expands it to include ecological issues. These post-modernists are merely reflecting what Al-Ghazaly wrote about many centuries before. After defending the *muhtasib*, the following section will describe the duties and rights of the *muhtasib* and the way to apply it to edu-cology.

The duties of the *muhtasib* is, according to Al-Ghazaly, (1994) more like a security guard for the environment, keeping it safe from other people who destroy it. For instance, the *muhtasib* would tell the community where to place the trees for shade and protection of the soil. He also encouraged, and help the families to have gardens, and policymakers to help farmers to grow food for the community. Another

duty of this person is to make sure that common showers, shared by the community, are kept clean, and more important, that water should not be wasted.

This same position includes responsibilities towards buildings. For example, architecture in Islam has always been within a natural setting, reflecting ecological equilibrium. Instead of air conditioning that requires technology and all the ills that technology can bring, Muslims built wind towers that were constructed to catch the wind and to ventilate the house naturally (Nasr,1997).

Al-Ghazaly (1994) also mentioned the word *rawashin*, which is like a windows without glass. These openings had narrow ledges so that the streets would not be narrowed. He spoke about the importance of not putting garbage in the streets and encouraged the shepherd not to kill the sheep in the street, so as not to dirty the street. Al-Ghazaly was well aware of the community's need to have clean, cool houses and streets as part of the ecological balance (see also Al-Shami, 1993).

In order for this to take place, the *muhtasib* needs to be knowledgeable about his community and should apply the "rules" with kindness. Therefore, this position should serve as a model for the rest of the community, so that others can act within similar ecological boundaries, expanding the concept of *comida* to everyone's having a role in the community. He also includes in his responsibilities advising the community to make sure there were merchants for the goods and crafts needed by the community. Al-Ghazaly (1994) also believed that these merchants were necessary for the functioning of each community.

The role of the *muhtasib* obviously went beyond the narrow definition, and was expanded to include a responsibility for the entire community, both socially and ecologically. Ecology was built into the concept, and probably was an unconscious effort on the part of Al-Ghazaly to maintain balance. He lists five rights for the *muhtasib*: advising, admonishing, rebuking, threatening, and punishing. He also, includes women, children and students to be the members of the security guard for the environment in order to advise and admonish. Interestingly, that Al-Ghazaly includes the woman as a *muhtasib* even though women in medieval area had less opportunity to participate in social and political activities. The *muhtasib* is someone like the king, in that he should be happy in seeing the people in his community working and playing and growing in ways that are in balance with nature.

During the time of Al-Ghazaly's life, he witnessed the collapse of the Islamic state and noted in his book *Kings' Advice* that a king must not only serve justice and equity himself, but also must command his followers to do so as well (Al-Khalaf, 1998). This would extend, then, to the *muhtasib* because he is likened to a king. In fact, Al Ghazali was a letter writer for kings. Another one of Al-Ghazali's ecological influence stems from this position as a letter writer for kings. He advised different kings to help those who had no garden and means of growing their own food. If somebody took the farmer's land unjustly, the king should support this man until he reach victory. In one story, Al-Ghazaly (1996) writes about a King from India who said that the king was happy when he saw that his subjects were well-fed and lived

good lives. This included having some chickens, because the farms and farm animals are a branch of my state.

Thus, we can see that ecology in Al-Ghazali's perspective, had political ramifications, extending throughout whole kingdom or state in which the people lived in communities.

The Importance of Edu-cology as part of “Comida”

In his book *Ihya* Al-Ghazaly (1994) also emphasizes the prophetic sayings about not wasting food and taking care of our bodies by feeding them good food. He writes about the importance of doing things as a group: eating, harvesting, praying, and traveling. Children need parents to make a family; families need other families to make a community; a community needs other communities to make a country. Inherent in this expansion from family to universe is the idea of cooperation and ecological balance.

According to Al-Ghazaly (1994), the world is comprised of human bodies. Each body is part of the world, and each body has the responsibility of maintaining his or her part of the world, because we are all connected. In this way, the ecological balance depends on each and every person cooperating locally, regardless of color, gender or culture. This is part of what he calls “hospitality.” He writes about friendship and brotherhood, duties towards relatives, neighbors and friends, both Muslim and non-Muslim, and even slaves and servants.

Part of Al Gahzali’s contribution to comida is his idea that if we overeat, then where is the food for the widows, the orphan, and the destitute. He reminds us that God has commanded us to assist others in the community less fortunate than we are (Al-Ghazaly in Winter, 1995).

This quote from Al-Ghazaly’s *Book of Knowledge* summarizes his ideas that can be translated as comida:

But man has been created in a way which makes it impossible for him to live all alone since he is unable to secure his food and livelihood through tilling, farming, bread-making, and cooking as well as manufacturing clothes, building houses, or constructing tools for all these activities. Man was, therefore, compelled to lead an agrarian life of co-operation. (p. 143)

Another philosopher who reflects Al-Ghazaly's concept of *comida* can be seen in this quote: "The human species, which is the noblest of existent being in the universe, needs both the aid of the other species and the cooperation of its own kind to ensure the survival of the individual as well as that of the race." (Tusi, 1964, p. 189). This idea of *comida* is also reflected in Berry's post-modern writings, which demonstrate his "search for humane forms of social life, [which] challenges us to create new, post-modern, public commons." Prakash, p. 147). All of these post-modernists studied in this course seem to reflect Al-Ghazaly's concept of *comida*, education, ecology, and how they are integrated into *edu-cology*. We cannot do this alone. We need one another.

Environmental Legacy

Humans need four basic things: to live, to love, to learn, and to leave a legacy in order to fulfill their needs and capacities. "The need to leave a legacy is our spiritual need to have a sense of meaning, purpose, personal congruence, and contribution" (Covey, Merrill, and Merrill, 1994, p. 45).

When a man dies, as the prophetic saying mentions, "his acts come to an end, but three, recurring charity, or knowledge (by which people) benefit, or a pious son, who prays for him (for the deceased)"(reported by Muslim, 2000). This *hadith* has

been mentioned by Al-Ghazaly several times throughout his *Ihya'* (see Vol. 1. p. 19; Vol. 4. p.336). Al-Zabidi (nd) in his commentary on Al-Ghazaly's *Ihya'* said that, the meaning of the word "man" in this tradition includes both male and female. He also explained that "recurring charity", part of the Muslim legacy, includes establishing a river, digging a well, and planting a palm tree (vol. 1, p. 174).

When one reviews Al-Ghazaly's works, one will find that Al-Ghazaly drew the attention of educators and the educated to the importance of practicing knowledge to leave a beneficial legacy. In his book *The Beginning of Divine Guidance* (1996), Al-Ghazali encourages both masters and disciples to take advantage of their time wisely. He said that one must know that day and night have 24 hours and do not sleep more than 8 hours. He said that it is enough to spend 20 years sleeping which is one third of one's life if he lived 60 years (p. 381). In addition, this thinker linked too much sleep with overeating, and therefore he admonishes not to eat much, or else you will drink much, and then will sleep abundantly, beyond the necessary 8 hours. Al-Ghazaly (in Winter, 1995, p. 124). concludes that "lifetime is the most precious of jewels, and constitutes a bondsman's capital with which he trades; sleep, on the other hand, is a [kind of] death, for when indulged in to excess it shortens one's lease on life". This behavior, that is, not overeating, overdrinking or oversleeping, is a form of self-discipline, which practiced regularly, translates into good habits and become part of one's (good) nature. These edu-cological guidelines of Al-Ghazaly confirm his concept of "recurring charity", that is, the need to leave a good legacy by leading a

good life, which is our spiritual need to have a sense of meaning and contribution to the world.

Summary

Throughout his entire life, Al-Ghazaly lived his ecological beliefs according to his Muslim faith, emphasizing economy in all things. However, there were some areas that he overlooked, such as the importance of handicrafts from a practical viewpoint. Al-Ghazaly may sometimes has, some Mystic observations, such as writings that the good is to escape from the world and denial of the world. But at the same time, he quotes the *Qur'an* with its tenets on moderation. Most of his teachings are common sense, but there is a small element of his works that are questioned by other thinkers that we must consider when we read about Al-Ghazaly (See Al-Khawajah, 1986).

Nevertheless, most of his work has been well accepted by the Muslim faith and many writers have used his writings in their own research. In later life, he established a center where people could come and learn the concepts that this thinker had preached all his life. Ibn Kathir (2000), the influential scholar in Islamic history, noted that Al-Ghazaly built a “gorgeous garden” near his house and held classes so that his ideas would be passed along to the next generation. As we can see by the writings of those who came after Al-Ghazaly (see the references), his influence is still felt today among the people of the Islamic faith as well as other believers in ecology.

Many books mentioned this medieval thinker, because his ideas have never really gone out of style, just temporarily misplaced because of the seduction of technology.

The post-modern books also reflect his ideas for teaching children in schools. The difference between the Islamic writings that include Al-Ghazaly and the post-modern writings is that the Islamic faith teaches that ecology must start with the birth of the child, and not wait for formal education. Also, the child learns ecology gradually until it becomes habitual and a way of life. In schools, too much of the learning comes too late and from the outside. Al-Ghazaly believed that the influence of the parents on the early years of a child is like writing in stone. With Al-Ghazaly, the concepts are internalized from childhood. Additionally, any scientific knowledge concerning nature cannot be separated from Al-Ghazaly's belief in the verses of the *Qur'an* and the sayings of the Prophet Muhammed.

“For the Muslim, however, scientific knowledge of nature will remain inadequate as long as it does not take into consideration both the presence and the content of the divine will.” (Al Faruqi, 1986, p. 320.) And this divine will, according to Al-Ghazaly, necessarily included an ecological balance of the world. In the essays by Berry (1990) and the chapter in *Grassroots Post-Modernism* by Esteva, and Prakash (1998) we are confronted with several concepts relating to recapturing, regenerating or remembering our roots.

Just as Gandhi's philosophy provides the broad shoulders for post-modern politics, so too, does Al-Ghazaly's philosophy provide the broad shoulders on which a post-modern view of ecology can stand. If human's role on earth is the most

important role of all, according to Qutub, (1981). then our responsibility as human beings is to steward the earth in such a way that we leave a legacy to our successive generations of an earth that is healed, that is cared for, that is expressed in Al-Ghazaly's words, "The heart's food is wisdom, knowledge and the love of God (exalted is he!) (Winter, 1995, p. 35). Through wisdom, knowledge, and love we can live in ecological balance with other creatures, other people and the gifts of the planet.

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