Khaled Adel Harras The Virtual Coin June 2001

"Our individual lives cannot, generally, be works of art unless the social order is also." — Charles Horton Cooley

After five years of intensive studies at AUC, it is normal that each and every one of us currently graduating ought to ask himself many questions. Some of these questions are: What have I got or learned from AUC? And what should I do after that? Those questions definitely do not have any simple or clear answers, however, I truly think that the answer to them show how ready we are as new graduates to face the real practical life, and at the same time how much use have we made of our previous period of our lives, especially that at AUC. In fact, learning different courses, specializing in one major, getting involved in extracurricular activities, playing sports, joining clubs, socializing, going to parties and movies are just some of the things that most of us spend their time in during our stay at AUC. However, when we graduate, and go through life, all that may seem useless or a wasted fun period of our lives compared to the seriousness and cruelness of life. Does that mean that we wasted our time at AUC? Definitely not. The point that I am trying to raise here, is that what we get and learn from AUC is not a degree nor a prestige nor any absolute form of knowledge, what we really obtain and acquire from AUC is what I would call a "virtual coin" that lasts with us for ever, and which we should pass on to the next generation.

The "virtual coin" is the largest intangible life asset that we obtain from our years at AUC. It is an imaginary symbol or token that each graduate from this institution carries with him throughout his life. It is the coin that will pay off many of the problems we will inevitably face in our future; it is the key that will open up many of the closed doors; it is the torch that will light up the path towards success during the darkest times that we suffer in. In fact, the "virtual coin" is the true result of the years spent at AUC. It is simply the combination of respect, honor, appreciation, dignity, humbleness, faith and knowledge that we all have implanted and engraved amongst us during our lifetime at AUC.

Respect: for one's self, for our parents, friends, professors, neighbors, work, society and country. Honor: in the sense that, "It is better to die on your feet than to live on your knees" as Emiliano Zapata revealed. Appreciation: which is the gratitude and understanding towards others' situations, efforts and contributions. Dignity: where we have self-respect, forcing others to respect and appreciate us. Humbleness: simply knowing that you are one human among 6.5 billion other humans, that have the same rights you have and the same duties on your shoulders, and all these 6.5 billion live on one small planet being a part of one of the million solar systems in our milky way galaxy which is one of the several billion galaxies in this continuously expanding universe. Faith: the strong belief in certain principles and traditions, where "Those who stand for nothing fall for anything" as Alexander Hamilton mentioned. Knowledge: to believe that "Real knowledge is to know the extent of one's ignorance" as Confucius stated. All this is one package that we obtain through the "virtual coin" acquired during our time spent at AUC.

Now we come to a critical point, that is, since any coin has two sides, then what are the two sides of the "virtual coin"? They are definitely not heads and tails, or else that would be a normal coin; in fact, the two sides are: Sciences and Humanities. The combination of those two areas has become a crucial and required aspect in our lives. Even though we are in the era of high specialization, where each person chooses one small area in science or humanities to delve deeply into, we still need to know something about the other areas. To reach what I would call "close to perfect human being" (since perfection is only for God), it is best to know something about everything and everything about something. In fact, earning the "virtual coin" is only possible when we get to acquire both sides of the coin. One side is simply not enough. The wonderful combination of Sciences and Humanities we as AUCians are subjected to, makes us indeed eligible candidates for the "virtual coin". Actually, if we do not have both sides, we cannot have the coin, and consequently, could never have the wonderful combination of respect, honor, appreciation, dignity, humbleness, faith and knowledge. Or in other words, we have really wasted our time at AUC.

If the world nowadays is heading towards economic globalization, regional integrations, and common interest collaborations, then we should definitely head towards knowledge globalization and integration as well. What AUC tries to offer, is the path towards this integration. The idea of having a core curriculum along with the major courses, with the electives we choose, with all the possible activities we get engaged into, creates the cornerstone for integrating Sciences and Humanities to build and construct a useful and successful personality. A personality that could be proudly introduced to the society knowing that it will construct and not destruct. It is definitely true that "Knowledge is power" as Francis Bacon mentioned. Where knowledge in this case is the ability to merge the diversity of education in the fields of Sciences and Humanities, to produce new, fresh and revolutionary ideas that should reflect positively on our society when we graduate. In fact, those with the strongest knowledge are the new rulers and controllers of the next era, or as Winston Churchill once stated: "The empires of the future are the empires of the mind."

After taking the "virtual coin" with all its values and assets, do we reach the end of the story? Does our role stop at this point where we take the coin that differentiates us from many other graduates in many different places? Indeed not. We actually come to the second question raised in the beginning, that is, what should we do after that? In actual fact, we move to the most responsible role we start to carry on as individuals, which is what will we give or add to our society.

The whole idea or point behind education and knowledge is the final aim of adding benefit to the society in any form. In other words, the "virtual coin" obtained, may be considered as some sort of investment in us, that society ultimately expects to make profit from. We all know that "the roots of education are bitter, but the fruit is sweet", as Aristotle claims, and these fruits should be picked out and eaten by the society and us. In fact the big trap that many of us may fall into is the thought or belief that we as individuals cannot do much to our society, or in other words, the famous statement: "I will not change the universe".

The interesting topic I would like to bring up here is something that I realized while conducting my senior graduation project in the computer science department. The new concept of distributed systems and parallel algorithms, where we now rely on many computers networked together, or multiprocessor workstations, has become the prevailing and dominating trend towards computing technology. The need for strong huge computing storage, speed and power is dominating due to the huge variety of applications emerging. In our project, we actually succeeded in implementing what we call a cluster of distributed computers. The idea here is simple, but its implementation is troubleso me. We actually got to configure, install and build an eight-node cluster to act as one unit or entity. The node here represents a normal pc which many of us are familiar with. What really attracted me are the results of our project and the way clustered or distributed systems act. There is simply a task that is divided and distributed in a parallel manner over the nodes of the cluster. After the task is finished, statistics are generated to show the percentage of work each node was responsible for. The percentages ranged from 2% to 40% for each node according to the speed, memory and hard disk space on each of them, where their speeds ranged from old 486's to 233 Pentiums.

So what does all this have to do with our society and what we should start adding to it? The point I am slowly developing here is the great analogy between our cluster and the way society would perfectly be. Even though we are not a bunch of machines, but the idea of giving as much as you can depending on our true capabilities is the attracting and interesting point. Despite the weakness of the 486 machines compared to the other nodes, they never said "no" or "what difference would I make", but it simply gave all what it could, which ultimately helped in accomplishing the task faster. If we as individuals have the true profound belief that we could always be useful, knowing that we could definitely make a difference, then our society and consequently us, would undoubtedly prosper and advance more and more in all fields. I certainly agree with Charles Horton Cooley when he stated that: "Our individual lives cannot, generally, be works of art unless the social order is also."

We certainly owe a lot to our society, and it would be ungrateful if we do not pay what we owe. As AUC graduates, we also have something special that makes us more qualified and able to add to our society; we have the "virtual coin" with all its assets and values, with the two sides of Sciences and Humanities. This makes us the Pentium nodes in our clustered society, and we should give according to that. In fact, our responsibility towards our society does not end by only giving to it, but by passing our "virtual coin" to the next generation, by engraving and implanting all the positive values we acquired from merging Sciences and Humanities in our lives and studies, by making sure that this coin passes on to the next generations to ensure higher speed of technological development and more importantly higher social development, since without true social advancements and development, all this technological boom will end up in nothing if we as humans do not improve, evolve and adapt faster with these current high frequency of changes.