## Editorial

## Art, Science and Women

I shall try to simplify this intricate heading by recalling a casual talk I had, about this same topic, with Dr. Salwa Nassar, the well-known Lebanese physicist, as we sat on a hillside in her village, Dhour-el-Shweir, one summer afternoon. Instead of admiring the beauty of the landscape, we started a somewhat serious discussion about art and science. We were still students at the American Junior College (A.J.C.). I was going through a period of infatuation with science... the fad, the idol of the time. Everybody thought he had the right to declare, in an ostentatious manner, that "science leads the world, all other knowledge is trash!" When I first met Salwa at College and told her about my perplexity regarding the major I would choose, she encouraged me to take a science major and promised to help me solve math problems. But I was afraid of venturing into a field for which I was not thoroughly prepared in high school. I was not sure that I was really talented for it.

- I have found out, I said, that art and science have to meet in the long run. I have heard a philosophy teacher say that advanced philosophy and art require a deep knowledge of mathematics.

-True, said Salwa, mathematics is at the basis of all knowledge. Art and science interdepend, but I would not consider one of them superior to the other. They both depend on one important element: imagination or creativity. Both scientists and artists have to be creators, otherwise they have little or no credit. A scientist creates new methods for solving problems, just as an artist creates new ways of expression. They both see what other people don't see. They both must have original ideas.

- I know that you like to encourage women to major in science. Why?

- Because I like to fight the myth that women are not capable of taking science majors. Why? I believe that science and art should have the same requirements, the same preparation. One who is capable of majoring in art should be capable of majoring in science and vice versa.

Following that conversation, as I knew Salwa more and more, I noticed that her aptitudes were not limited to science; she enjoyed music, she succeeded in acting and singing, and in performing social work. At the college, I knew a brilliant physics teacher who could write poetry and also excelled in dramatic art. As I won more experience, I learned what Salwa meant when she said that science and art are interrelated. The dream of an artist can inspire a scientist and the discoveries of a scientist can inspire an artist. A wide, unrestricted knowledge is necessary for both. Specialization is a myth. Limitation to one narrow field of knowledge cripples one's imagination. Great artists like Michelangelo and Leonardo da Vinci were also great thinkers and philosophers. Poets like Shakespeare, Racine, Goethe, Al-Ma'arri, were also philosophers or mystics. Scientists like Darwin and Teilhard de Chardin were also philosophers. Though we live in a scientific age, art can flourish by cooperating with science. This cooperation has made possible the creation of new arts: the cinema, television, modern architecture, and modern art. In the long run, I have learned to admire artists as I admired scientists in my early college days. My old infatuation was gone.

Considering women and their role in this respect, I have realized that Salwa Nassar was right in her point of view. Women in the past, with the exception of Marie Curie, had no chance to deal with science. They produced artists because the practice of art was the only field open to them, though in a limited manner. We all know about women poets like Sappho, al-Khansa' and others. We hear of women prophetesses in the Bible, of women priestesses in ancient Greece, of women singers and dancers who flourished in the Far East, in India, Iran and in the Caliphs' courts of Baghdad and Andalusia. In our days, women's talent for singing and dancing is being revived, acclaimed, and encouraged. They still excel in the delicate arts of embroidery, dressmaking and decoration, though their distinction hereby is not sufficiently recognized. As actresses, the great screen-writer and producer, declared acting to be a woman's art.

Since women have recently had access to higher education, the number of women poets, writers, musicians, painters and sculptors has steadily increased. Science is to them a newly opened field but, as I tried to show that both art and science can join hands and require equivalent preparation and capacities, it is safe to presume that women can equally succeed in either field. The choice of a major depends more on orientation and environmental influences than on an inherent bent. Specialization is usually a final stage, but a wide, preliminary, general culture, including both art and science is necessary in this age in which art and science have become inseparable.

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