

EDITORIAL

THE MISSION OF ACADEMIA IN THE AGE OF SCIENCE*

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Historical Context

Historically, when human groups began to live in communities, the education of children gradually emerged as an important privilege, greatly aspired to by parents belonging to the upper echelons. In ancient Greece, children were tutored by well-paid Sophists who taught rhetoric and logic for the pursuit of self-interest and monetary gain. As alternatives to the sophists, the "philosophers" appeared, in search of truth. Ironically, Socrates, the most prominent of the "philosophers", was executed for 'corrupting the young'. In 387 BC, Plato, a pupil of Socrates, established the first "Academy" outside the city walls of Athens, thus maintaining its independence. Over time, Plato's Academy came within the city of Athens, and academicians began to be involved in daily politics. The mission of Plato and the Academia was extended by Aristotle and saw the spread of a variety of disciplines worldwide. The Byzantine Emperor Justinian closed the Academy on the grounds of its pagan ideology in 529 AD. The second group of Academies was established in Baghdad during the reigns of Caliph Harun al-Rashid and his elder son Al-Mamun. The third generation of academies was established in 1603 in Italy (Accademia dei Lincei), then later, in the second half of the 17th century, in France (Académie des Sciences) and England (the Royal Society). The other academies of the world followed these examples.

In Turkey, there have been numerous endeavours to organise the establishment of a science academy, such as the Encümen-i Daniş Cemiyeti (the Consultative Committee) in 1851, and the Cemiyet-i İlmiyye-i Osmaniyye (the Ottoman Science Society) ten years later. The Tarih-i Osmani Encümeni (the Ottoman History Council), founded in 1909 after several stages of evolution,

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was transformed in 1935 into today's Türk Tarih Kurumu (Turkish Historical Society). The Turkish Academy of Sciences (TÜBA) was established in 1993. The main mission of the Turkish Academy of Sciences is as follows:

1. Selection of the best scientists for inclusion in the Academy under the Young Scientist, Associate Member, Active Member and Honorary Member programmes. The age limit for Honorary Members is 70. The Young Scientist programme is open to promising young scientists under the age of 37 or 38 for three years.
2. Consultancy to the government and public at large.
3. Provision of support to society to motivate especially children, teachers and young scientists.
4. Support for education through special programmes to nurture the development of a science society, such as:
 - a. Dictionary of Science;
 - b. Science education for preschool and school children;
 - c. Translation of university books into Turkish and the provision of financial resources for the best publications on science and teaching;
 - d. Open course ware;
 - e. Education of the society.
5. Special working groups in the Academy:
 - a. Cancer group;
 - b. Stem-cell group;
 - c. Environmental group;
 - d. Restoration;
 - e. Cultural inventory.
6. University conferences.
7. Social activities such as forestation, etc.

Contemporary Aspect:

In today's world, academies should distance themselves from daily politics and focus on global humanitarian and environmental issues. We live in the so-called "information and knowledge society", in which all the vital areas of society are controlled by the actors in the market economy, namely by large companies. In the meantime, "scientific knowledge" is continuously accumulating, but the lack of "scientific thinking", which is necessary for the proper and humanitarian implementation of this knowledge into our daily lives, raises deep ethical problems. In order to overcome this situation, we propose a special con-

sensus and collaboration between the actors in the market economy, scientists/academia and decision-makers.

The importance of the large private sector companies in the world economy cannot be denied. It is a fact that such companies have an important role in conducting and sponsoring research and development activities. However, it is also obvious that the aim of such companies is to generate profit. Sometimes this aim is over-emphasised, deviating from what is "ethical", and needs to be balanced or controlled. Nowadays, in the immediate wake of the economic crisis, we witness that companies force society to be a part of consumption, while the production materials and activity are usually dictated by select companies. Especially women and unprotected children, exposed to media advertisements, are used, even forced, to become consumers for the market economy. There is no doubt that science, research and development contribute greatly to our contemporary society in the areas of transportation, telecommunications and informatics. Nevertheless, we have overwhelming problems related to "Science and Technology", such as environmental pollution, global warming and a lack of understanding of the true nature of phenomena. Instead of promoting production with regard to environmental issues, we prefer using women and children to transform our homes and environment into virtual "trash bins". This dilemma is reflected in many areas:

- In the education sector, information is easily obtainable, with fast and easy communication available to the masses. As a result, we are creating computer-dependent generations, instead of learning through simple games.
- We boast the level of urbanisation in our cities, but recognise that with big cities and mega-apartments we lose the characteristics of the "street" and neighbourly relations. Instead of walking to school, children usually spend their valuable time being transported between home and school. People are generally not interested in sports, healthy nutrition and living healthily. With the help of sports, children and young people can learn the necessity of teamwork and self-confidence indirectly. But in this century, some particular sports have emerged in popularity and are under the domination of the market economy. Consequently, certain values specific to the performance of sports have virtually disappeared.
- Regarding health, the average lifespan has increased. We are creating wonders in the transplantation of organs, including the heart, kidneys, and pancreas, etc., but as a result we now live in a geriatric society.
- The young age group is generally interested in consumption and making money with as little effort as possible.
- The production and use of cosmetics involve a huge economic turnover, but the motivations are disputable. Reconstructive surgery can correct malformations or disfigurements. Instead, people turn to "cosmetic sur-

gery" to attain a physical appearance considered "ideal" by popular culture or to delay the signs of ageing.

- We see the use of high technology in medicine, but the costs are beyond what ordinary people can afford; therefore, governments are expected to cover the costs. Consequently, medical budgets of governments are in collapse worldwide. While governments are very enthusiastic and interested in the treatment of certain specific diseases, preventive medicine and health education are not popular topics of interest.
- High technology is also prominent in the food sector: GMO's (Genetically Manipulated Organisms) are on the market, but who can be sure of their effects on our health in the future?
- Ironically enough, technology enables mankind to produce napalm bombs, landmines, and biological and nuclear weapons for use against its own kind. As the war industry flourishes, we see wars going on around us: thousands of people are killed and their cultural heritage destroyed. No one seems to say or do anything against this drama as the war industry flourishes.

Our aim is not to create a disaster scenario. From all these arguments, we can derive a sense of responsibility for ourselves. We have to recognise our responsibility as science academies on the world stage. Now we can ask the core question for humanity, the world and academicians: who will serve as the conscience of humanity in this age? My personal belief is that scientists, science academies and well-educated intellectuals with vision should/will be the conscience of humanity and should guide people, policy- and decision-makers and companies in order to create a world that benefits humanity. We should realise that this can be a new and realistic mission for academia.

In carrying out this mission, science academies should collaborate with intergovernmental and international organisations such as the United Nations, UNESCO, UNICEF, WHO, FAO, etc. on solutions to global problems such as healthcare and nutrition, alternative energy sources, poverty and disease mitigation, science education, the protection of children, and racial/gender discrimination.