Mismatches between Human Needs and Scientific Objectives

Address by Dr. Ali Rezaian

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at the World Congress of Universities

Dear Ladies and Gentlemen:

I have the pleasure to convey the warmest greetings from a nation that has made huge sacrifices and experienced immense sufferings in pursuit of justice and truth. Inspired by the message of Almighty God when he made the pen and other writing instruments sacred, and inspired by the teachings of Prophet Mohammed, when he released his miracle of Quran, I would like to open my address with a quotation from Bertolt Brecht, the great twentieth century playwrite. In the ninth scene of his magnificent play, the "Life of Galileo", Brecht declares:

"The aim of science is not to open the door to everlasting wisdom, but to set a limit to everlasting

error. Philosophy for the most part is limitless, wild and indefinite, but truth is restricted and contained in small examples.

A main cause of poverty in the sciences is the illusion of wealth. We only conquer nature by obeying her. Whatever counts as a cause when we are observing counts as a rule when we are putting something into effect. By observing the small errors on which the great philosophies are erected we arrived in the course of the summer at all kinds of concepts which have been obstructing the advance of science ever since Aristotle's time. Such as cold and thinness, dampness and length, from which some people think they can construct a whole world if they put the words together the right way".1

Each member of this audience is familiar with the various aspects of the mission and goal of the university: within the constraints of its political environment, to improve the educational and intellectual life of the community. I hope I am not repeating the prevailing knowledge when I elaborate on some of the major concerns of the scientific community and of society as a whole.

The inquiring mind of a person who has suffered from the assault of advanced technology designed for destructive purposes places these questions in front of the university administrators and directors of research institutions:

1-Is the intellectual and educational life of society pathological today? Is it inflicted by a fatal wound? In shaping the human soul, what is the true purpose of the educational system?

2-Will there be a cure for the intellectual sickness while the diagnosis is unknown?

For years scientific investigators, through scientific research and statistical tools, have tried to provide answers. To our dismay, much of these quantitative analyses yield no solutions to suffering of human beings when advanced technology is used for destructive purposes. Let's not forget that until the present century, the main function of science was to analyze the laws of nature only for discovering new and improved ways of serving humanity. It was indeed for this very sacred objective of serving human needs that universities and scientific institutions were considered as the most cherished establishments on planet earth. As Max Planck asserted:

"Any body who has been seriously engaged in scientific work of any kind realizes that over the entrance to the gate of the Temple of Science are written the words: 'Ye must have faith'; It is a quality which the scientist cannot dispense with".²

In the recent past, however, particularly after World War II, scientific inquiry took a drastic departure from its traditional path, serving human needs, to a new task which served the material needs of capitalistic societies. Scientific endeavors that did not promise immediate profits were abandoned.

Most universities have changed their scientific missions to cater to the ever-increasing needs of the capitalists for profits from science and technology. They leave no place in the university for the search for truth. In this milieu, faculty emerge as endentured slaves, offering their minds and souls to a few capitalists who aspire to control the masses. Demoralized, faculty find the purpose of life less meaningful than ever before.

A huge gap between the basic needs of the community and scientific orientation of Western university programs has been created. Every new discovery summons a cry in those who want to learn whether it can destroy people more efficiently. At this important juncture of technology and humanity, when so many people suffer from destructive power of new discoveries, no one seems to dare ask what is the ultimate goal of scientific inquiry. How splendid it would be to divert our attention from a preoccupation with minute technical details of university planning and focus on the broader, more

relevant, issues. The question becomes more pertinent when we realize that, by pushing a button, no trace of humanity remains.

Until World War II, the mission of science was to supply humanity with analytical tools to discover the laws of nature. Exploring the splendor of the nature was motivated on for researchers endeavoring to untangle knots in our knowledge of universe. With this splendid purpose, researchers had a serious view of their mission and considered the human cause of their investigations. In those glorious days, the principal goal of research was to save humanity from pain, suffering, and misery. Alas today, there is no room for searching for the truth.

Throughout the history of mankind, for two reasons, science has been vulnerable to misuse and corruption.

1-Only in the last two centuries could science present itself as a bonafide profession. Until then, supported by patrons, science was engaged in only by the curious amateur. Science from this amateur status failed to provide an environment of accountability for its actions toward mankind. In the context, this may seem regretable, but the reality is that being in a state of informality, it had less potential to damage humanity. It is unfortunate, too, that in those rare cases when science accepted a commitment to achieve a discovery its results have been generally damaging to humanity. The commitment of the alchemist to transform copper into gold supplies a good example.

Since the amateur Period of science was to satisfy the curiosity of the scientist, and not provide an answer to a recognizable need of society, be it economic or intellectual, the preoccupation with science did not evolve into a scientific profession. For a researcher to make a living, he had either to engage in teaching (as was the case for Zakaraya Razi) or join the royal courts in order to recite flattery poems for the king (as was the case of Aboureihan Birouni).

2-The second reason for the vulnerability of science was the liberal orientation of the investigator, who, in many instances, had to question the validity of ideological doctrines of his society, or the fundamental beliefs of various classes in his Innovation, the genuine community. most phenomenon of science, has a natural tendency to clash with the ideological foundations of the community. The results have been often disastrous to the researcher. The scientific investigation, like all other intellectual activities, begins its task with posing questions and raising doubts in the validity of the prevailing beliefs of the society, and then moves forward in search of a certainty which it can no longer achieve.

In response to the second question, we argue that as long as the university is at the disposal of forces who unjustly want to dominate, society will not rest in peace.

1-Stefan S. Brecht, Bertolt Brecht Collected Plays Vol. 5.

New York: Pantheon Books. 1972, P. 280.

2-Max Planck, Where the Science is Going? 1932.