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THE INTERDEPENDENCE BETWEEN HUMANITIES AND NATURAL SCIENCES AND HOW TO MASTER THE COLLABORATIONS – A PERSONAL VIEW

Abstract: At the present time the humanities are understood as set of academic disciplines including languages, literature, history, philosophy, religion, music and theatre, etc., often regarded as social sciences. The word "humanities" can be traced back to Coluccio Salutati, one of the most important political and cultural leaders of renaissance Florence, who used in 1369 the term "*studia humanitatis*" to describe the studies of grammar, poetry, rhetoric, history, and moral philosophy The ideal of "*humanitas*" was first brought to Rome by Scipio and further developed by Cicero as a style of thought, allowing the man to becomes "godlike" by refining himself.

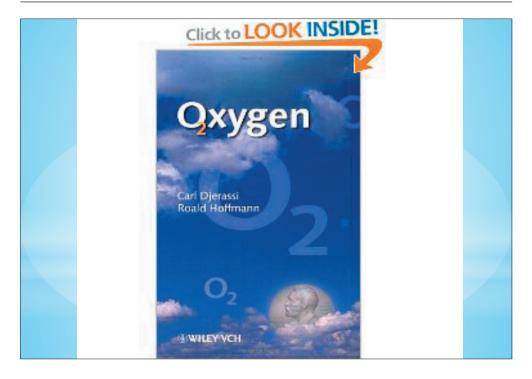
However, considering the natural philosophy in ancient and medieval times it is obvious that the knowledge in studying the nature has been acquired by thinkers practicing "*studia humanitatis*". The ideas of the renaissance humanists and the development within the eighteen and nineteen centuries resulted in the philosophical interpretation of nature using scientific approaches and new methodologies of studying natural phenomena. Therefore the human activities described today with the terms "Humanities" and "Natural Sciences" were always in an intrinsic interdependence.

It seems that in the contemporary world there is a growing gap between the humanities and the natural sciences mainly due to the pragmatics and technocracy of the society. The approach in some American colleges and universities to practice "liberal arts education", which requires all college students to study the humanities in addition to their specific area of study, has obviously increasing number of critics with the arguments that the students are no longer prepared for the job market. On the other side the natural sciences have low popularity among humanity professionals. The origin of many problems might be in the conclusion that "…researchers tend to overvalue their own fields, and the intermediary must be able to confront this problem with his own critical ability…" (citation Prof. Singer in Frankfurter Allgemeine Zeitung 2001), irrespective whether we are looking at the activities of scientists from the humanities or natural sciences.

The present lecture deals with thoughts, examples and ideas how to approach the problems.

PowerPoint presentation delivered at the Conference.

Bulgarian Academy of Sciences





Charles Percy Snow, Baron Snow of the City of Leicester (born Oct. 15, 1905, Leicester, Leicestershire, Eng. — died July 1, 1980, London), British novelist, scientist, and government administrator.



As both a literary man and a scientist, Snow was particularly well equipped to write a book about science and literature, "The Two Cultures and the Scientific Revolution" (1959) and its sequel, "Second Look" (1964), constitute Snow's most widely known and widely attacked — position. He argued that practitioners of either of the two disciplines know little, if anything, about the other and that communication is difficult, if not impossible, between them.

"Hands up those who have both read a work by Shakespeare and can explain the Second Law of Thermodynamics"



Gerald Holton (born 1922 in Berlin) is Mallinckrodt Research Professor of Physics and Research Professor of the History of Science, Emeritus, at Harvard University.

He obtained his Ph.D. at Harvard in 1948. His chief interests are in the history and philosophy of science, in the physics of matter at high pressure, and in the study of career paths of young scientists.

In 1981 the National Endowment for the Humanities selected Holton for the tenth Jefferson Lecture – the U.S. federal government's highest honor for achievement in the humanities. Holton was the first scientist selected for this honor, and his lecture was entitled **"Where is Science Taking Us?"** Holton argued that Jefferson's vision of science as a force for social improvement was still viable, he opined that there had been a "relocation of the center of gravity" of scientific inquiry toward solving society's important problems, and cautioned that **science education had to be improved dramatically** or only a small "technological elite" would be equipped to take part in self-government.



JOHN BROCKMAN is a cultural impresario whose career has encompassed the avantgarde art world, science, books, software, and the Internet. In the 1960s he coined the word "intermedia" and pioneered "intermedia kinetic environments" in art, theatre, and commerce

"One of the great intellectual enzymes of our time. (An enzyme is a biological catalyst — an adroit enabler of otherwise impossible things.)" — *Stewart Brand*

In 1973, he formed Brockman, Inc., the international literary and software agency specializing in serious nonfiction. He is the founder of the nonprofit Edge Foundation, Inc. and editor of Edge (www.edge.org), the highly acclaimed website devoted to discussions of cutting edge science by many of the world's brilliant thinkers, the leaders of what he has termed "the third culture".



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