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(ARTES LIBERALES)

# Artes Liberales

*An Association for the Furtherance of Liberal Education and Democratic Values in Post-communist Societies*

**Artes Liberales** was founded in Prague in January 1997 as a cooperative endeavour of educational leaders from Central Europe, the Baltic States, and Ukraine. As a regional educational association, **Artes Liberales** sponsors regular professional exchanges and other collaborative programs to promote liberal education and democratic leadership among scholars and institutions of higher learning in post-communist countries. **Artes Liberales** encourages colleges and universities to adopt innovative liberal arts curricula as a counter-weight to the premature and often excessive specialization typical of communist and post-communist pedagogy. **Artes Liberales** is actively engaged in expanding cooperative ties with other liberal arts institutions, both in the region and in the United States.

Members of the **Artes Liberales** steering committee: Samuel Abrahám, Director, Society for Higher Learning, Bratislava; Jerzy Axer, Director, Centre for Studies in the Classical Tradition, Warsaw; Agnes Erdélyi, Eotvos University, Budapest; Serhiv Ivaniouk, Rector, University of Kiev-Mohyla Academy, Kiev; Nikolai Kopasov, Smolny College, Sankt Peterburg, Russia; Peteris Lakis, Rector, Latvian Academy of Culture, Riga; Rein Raud, Rector, Estonian Humanities Institute, Tallinn; Jan Sokol, former Minister of Education, Czech Republic, Deputy Director, Institute of Fundamental Learning, Prague; and Julia Stefanova, Executive Director, Bulgarian-American Commission for Educational Exchange, Sofia; Stasys Vaitekunas, Rector, Klaipeda University, Lithuania.

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**ADAM YARMOLINSKY**

*November 17, 1922 - January 5, 2000*

It was with great sorrow that we learned that Adam Yarmolinsky, one of the U.S. founders of Artes Liberales, died on January 5th, 2000. Nicholas Farnham, who worked with him in developing the contacts in Eastern Europe that resulted in the creation of the association, spoke about him at his memorial on February 26th in Washington DC.

I had the rare pleasure of knowing Adam for the last sixteen years of his very full life. Together we developed together the Educational Leadership Program, a program of week-long seminars and shorter conferences for college leaders that came to have a national, and eventually international reputation. During our association he taught me a great deal about the connection between liberal education and the elements of leadership, justice and civic responsibility in democratic society.

Adam was matchless as a moderator in our Educational Leadership seminars. He could tactfully encourage silent participants to speak, gracefully probe insufficiently explained positions, challenge inconsistencies, amusingly weave stories and anecdotes into the discussion, all without ever intruding into the general conversation. It was a performance that never failed to induce awe and at the same time provoke thought and elicit creative responses. Even though he had moderated well over 100 sessions of Plato's Allegory of the Cave, he frequently used to say that he was surprised by someone's new way of looking at the text. But it was his way of moderating that made each session a unique experience. Very few seasoned college leaders ever left a seminar feeling that they had not benefited in lasting and unexpected ways. Because of Adam's moderating skill I came to expect that after each seminar we would receive letters proclaiming this to be the most important professional experience of a person's career.

Adam inspired not only admiration, but also great affection. He had a gentleness and respect for the humanity of others, combined with a certain toughness. There was also his seemingly boundless enthusiasm and appetite for adventure. Whether it was leading a group of college presidents on an afternoon hike, or planning a new program in Eastern Europe, he brought an amazing energy and determination to any project. Obstacles would seem to vanish under his scrutiny and determination. This was certainly the case at the end of his life when, last November despite his illness, he was determined to carry out a long-planned Polish project – leading a group of the brightest University of Warsaw students through a set of leadership readings, a feat that turned into a badge of pride for the students selected for seminar, and a gratifying event for Adam.

In our work over the years we carried on a continuing dialogue about the meaning and value of liberal education—in the seminars and out. We edited a book about it. "What is liberal education?" Adam would challenge seminar participants. Is it what the famous Professor Hopkins at Williams College said it was, simply a young man on one end of a log and the professor on the other? Or should it best be defined the way Justice Potter defined Pornography? "You can't define it but you'll know it when you see it". At other times Adam would, with bemusement, call up the image of the college professor sitting on the front porch of his modest house in the typical college town, sipping tea and ready to exchange ideas with passing students. Is that the essence of it? Whatever the idea of liberal education, Adam focused not so much on the substance as on the process of it. The process, not the content, is what makes it an idea in which everyone can share, and what makes it the hope for democracy. I miss already and will continue to miss greatly having Adam

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around to discuss that process, to remind me of its incredibly important implications. If not on the opposite end of a log or across the porch railing, then always available at the end of a telephone wire. But I will miss Adam most of all because he was a fine human being, a most sympathetic teacher and a loyal friend.

*Nicolas Farnham*



*Adam Yarmolinsky in Bratislava 1999 at the opening ceremony of the Society for Higher Learning. Above: in the centre. Below: with his wife Sally, next to Adam sits Tom Darby with his wife Kay.*

## THE UNITY OF KNOWLEDGE: IS IT STILL POSSIBLE?

VARTAN GREGORIAN

*Presented at the Institute for Human Sciences (IWM, Vienna), at a colloquium following the 1999 Hannah Arendt Ceremony  
Permission for publication granted by author*

**W**e are in the midst of an Information Revolution that may well parallel the Industrial Revolution in its impact and far-reaching consequences. We are told that the total amount of collected information doubles every four years, yet we are unable to use ninety to ninety-five percent of the information that is currently available. Nowhere is this more apparent than at the University, where the daunting arrival of information in the form of books, monographs, periodicals, film and videotape has been compounded by an accelerating electronic torrent from thousands of databases around the world.

While it is true that attention to detail is the hallmark of professional excellence, it is equally true that an overload of undigested facts is a sure recipe for mental gridlock. Not only do undigested facts not constitute structured knowledge, but, unfortunately, the current explosion of information is also accompanied by its corollary pitfalls, such as inflation, obsolescence and counterfeit information.

One of the greatest challenges facing our society and contemporary civilization is how to cope with and how to transform information into knowledge. Our universities, our colleges, our libraries and learned societies, indeed our contemporary scholarship, more than ever, has a fundamental historical and social task and responsibility to ensure that we provide not training but education, not education but culture as well, not information but its distillation, namely knowledge, in order to protect our society against counterfeit information disguised as knowledge. This is not an easy task. For, in addition to an explosion of information and

knowledge, we also face dangerous levels of fragmentation of knowledge, dictated by the advances of science, learning and the accumulation of several millennia of scholarship.

Writing about the fragmentation of knowledge and the advent of specialization, it was not so long ago Max Weber criticized the desiccated narrowness and the absence of spirit of the modern intellectual specialist. It was the phenomenon of the modern specialist that prompted Dostoevsky to lament in The Brothers Karamazov about the scholars who "...have only analyzed the parts and overlooked the whole and, indeed, their blindness is marvelous!" In the same vein, Ortega y Gasset, in his Revolt of the Masses, as early as in the 1930s, decried it as the "barbarism of specialization." We have today, he wrote, more scientists, scholars and professional men and women than ever before, but fewer cultivated ones.

The University, which was to embody the unity of knowledge, has become an intellectual multiversity. The process of both growth and fragmentation of knowledge underway since the 17th Century has accelerated in our century and will intensify in the 21st Century. Today's University consists of a tangle of specialties and sub-specialties, disciplines and sub-disciplines, within which specialization continues apace. The unity of knowledge has collapsed. The scope and the intensity of specialization is such that scholars and scientists have great difficulty in keeping up with the important yet overwhelming amount of scholarly literature of their sub-specialties, not to mention their general disciplines. Even the traditional historical humanistic disciplines have

become less and less viable as communities of discourse. As Professor Wayne Booth put it wistfully in his 1987 Reyerson Lecture:

*"Centuries have passed since the fateful moment, was it in the 18th Century, or the late 17th Century, when the last of the Leonardo da Vincis could hope to cover the cognitive map ... since that fatal moment ... everyone has been reduced to knowing only one or two countries on the intellectual globe ... [in the universities] we are smitten in our pride ... when for one reason or another, we discover just what a pitifully small corner of the cognitive world we live in."*

*"The knowledge explosion,"* Professor Booth says, *"left us ignorant of vast fields of knowledge that every educated man or woman ought to have known."*

The growth and fragmentation of knowledge and the continuing proliferation of specialties are in turn reflected in the undergraduate and graduate curricula of our universities. Many major research universities offer over eighteen hundred undergraduate courses. This, in turn, has led to the phenomenon that our students often learn to frame only those questions that can be addressed through the specialized methodologies of their particular disciplines and sub-disciplines.

Today, the faculties of our universities are confronted with the difficult choices of balancing analysis and synthesis, methodology and the relevant value of course content, thus placing more and more responsibility on the students to form the synthesis. In our universities, the triumph of the "monograph" or "scientific investigation" over synthesis has fractured the "commonwealth of learning" and undermined our sense of commitment to the grand end of synthesis, general understanding and integration of knowledge. *"Specialization,"* as Profes-

or William Bouwsma put it, *"instead of uniting human beings into a general community of values and discourse, by necessity has divided them into small and exclusive categories/coterries, narrow in outlook and interest."* This, in turn, tends to isolate and alienate human beings. *"Social relations ... are reduced to political relations, to the interplay of competitive and often antagonistic groups. Specialized education makes our students into instruments to serve the specialized needs of a society of specialists."* In his insightful essay on "Models of the Education Man", Bouwsma noted the obvious consequences of the above developments, that

*"... the idea of an educated man has been deeply affected by the "knowledge revolution" out of which has emerged the conception of education as preparation for research. As long as knowledge was limited, relatively simple, and not very technical, education could be fairly eclectic. Although it regularly emphasized the formation of character, it could attempt at the same time to discipline the mental faculties, provide a common culture and supply a minimum of substantive knowledge. Yet, obviously, the sheer bulk of the knowledge now deemed necessary for an educated man, has squeezed out of education and for the most part even out of our understanding of it... One result has been a broad decline in the idea of a general education, which for all practical purposes has become little more than a nostalgic memory. Indeed the body of requisite knowledge has become so vast that no one can hope to master more than a small segment of it. So in the popular mind, an educated man is now some kind of specialist: and in a sense we no longer have a single conception of the educated man, but as many conceptions as there are learned specialties."*

Nowhere is this better reflected than in the concept of literacy. It, too, has lost its unity. It, too, has been fragmented. According to the Oxford Unabridged Dictionary, "literacy" is the quality or state of being literate, of possessing education, especially the ability to read and write. Today, however, we are using the term literate as knowing a specific subject matter: we have proponents of technological literacy, civic literacy, mathematical literacy, geographical literacy, scientific literacy, ethical literacy, artistic literacy, cultural literacy, analytical literacy, etc.<sup>1</sup>

Our concept of civilization was once conceived of as a single, unique and astonishing achievement of the human species. It used to stand for the distillation of all cultures. Now, instead of a single world civilization that transcended many cultures and part civilizations, and embodied the collective achievements, creativity and aspirations of mankind, we see a multiplicity of them. Samuel Huntington's, Clash of Civilizations, describes civilization as a "cultural entity" defined by such common objective elements as language, history, religion, customs, institutions and by the subjective self identification of people. According to him, a civilization may include several nation states or only one. His lists of major civilizations include the West, Islam, Latin America, China and Japan. According to Huntington, in this post-Cold War period, "the clash of civilizations" will dominate global politics. The fault lines between

civilizations will be the battle lines of the future. The next world war, if there is one, will be a war between civilizations...

Today, throughout the world, including the United States, we witness once again the rise and self-assertion of ethnicity and nationalism, conflicts between secular and religious values and rights; the politics of identity and the larger sense of community, the quest for "cultural empowerment," understanding and appreciating our nation's ethnic and cultural diversity while maintaining its historic, social, cultural and political bonds of unity. These developments, naturally with national ideological and pedagogical theories, tensions and conflicts, are reflected in the curricula of secondary and higher education. Proponents of multiculturalism or cultural pluralism have done a good job in studying the unique experiences and contributions of different ethnic groups that have made the United States a microcosm of humanity. Yet even here the particular historic and cultural identities and entities have to relate to universal norms. Otherwise, multiculturalism may inadvertently marginalize the role, contributions and uniqueness of many ethnic groups, in the history and development of the United States and its civilization. True globalization, by necessity, has to involve the universalization of particulars and not just the particularization of universals.

The challenges we face are many, but we live in exacting times. Science has expanded

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1) My favorite one, however, is "managerial literacy." According to *The New York Times*, this literacy consists of 1200 terms. We are told that if you score eighty percent or more, you should feel confident that you can engage in "meaningful conversations with other experienced managers..." One new word that I learned from the groups of words was "satisficing," which means acceptance of a satisfactory level of performance of many orders... Professor Herbert Simon, the author of "managerial literacy" informed me that "satisficing" was not a neologism. In fact, he says, as the 1<sup>st</sup> edition of the OED will testify, it is an old Northumbrian variant of "satisfying." And as the new edition of the OED will testify, I reintroduced it with a modified meaning (in a paper I published in 1956), to contrast with 'optimizing' (a term that benighted economists are fond of using in their erroneous description of human rationality). Apparently (like 'hopefully,' in its current meaning), 'satisficing' filled a gap in the language, and is not widely used, especially but not exclusively in economics. Editors, at least those who have access to the new OED, no longer question it." "...I thought it not improper, when I was developing the theory of bounded rationality, to borrow and polish up an old Northumbrian term whose Latin origins conveyed my meaning very well."

the horizons of our knowledge of nature beyond imagination. The limits of our physical world are no more the boundaries of our earth, and we do not feel enclosed within the infinity of dark space anymore. Space has become a new frontier. Our earth has become a small unit in a galaxy or cosmos. The internet has ushered in the death of distance, while the computers have overcome the routine and the monotony, providing time and opportunity for creativity. The marriage of computers and genetic science, on the other hand, has inaugurated new and revolutionary vistas. In the midst of all these wonders, we face a fundamental challenge: without opportunities for creative discourse among educated men and women, both within and without the University, without the broad understanding of the premises and assumptions of various academic disciplines, it is not easy for lay men and women, neither for student nor faculty, to pursue complex problems that cut across the artificial barrier between disciplines. Yet the reality is that at present there are too many facts, theories, subjects, specializations to permit the arrangement of all knowledge into an acceptable hierarchy. So what can be done? What must be done?

Clearly our age of excessive specialization and fragmentation of knowledge does not call for abandoning specializations or sub-specializations. After all, division of labor has greatly advanced the cause of civilization. Specialization has been an instrument for progress. It has been a source of general conception of excellence. Complexity by necessity has required specialization. As Professor Thomas S. Kuhn puts it:

*"Though the increasing specialization that often accompanies professionalization may be deplorable, I take it to be as unavoidable in cognitive development as in biological science.*

*Both necessarily produce branching trees, and intercourse between branches can at best be partial. In this respect, professionalism in science and in the humanities are alike."*

We can not and must not castigate those humanists and social scientists who avail themselves of scientific methods and attempt to provide rigid analysis of literary texts, social trends and historical facts. To condemn science as purely quantitative, while reserving for the humanities the sole jurisdiction of qualitative is to indulge in unwarranted snobishness. To scorn sociology for its jargon, which exonerating philosophy, philology, aesthetics and literary criticism from that "sin" is equally unwarranted. The scientific passion for verifiability, the habit of testing and correcting the concept by its consequences in experience, is just as firmly rooted in the humanities, social sciences as it is in the sciences. Nor can we castigate some knowledge and some scholarly disciplines as useless. Some fifty years ago, Abraham Flexner, a great educator, in his famous address "The Usefulness of Useless Knowledge" said that the truly great and ultimately beneficial discoveries of science were those made by scientists "who were driven not by the desire to be useful, but merely by the desire to satisfy their curiosity." In our time, Freeman Dyson has echoed this by writing that "unfashionable people and unfashionable ideas" have often been of decisive importance to the progress of science.

The real challenge which the universities face today is not the choice between pure research and practical application but rather the reconstruction of the unity of knowledge and the reconciliation of universal validity of reason and our understanding of the diversity of social and cultural experiences. The challenge calls for integrating and resynthesizing the compartmentalized knowledge of disparate

fields: the ability to make connections among seemingly disparate disciplines, discoveries, events, trends and to integrate them in ways that benefit the commonwealth of learning.

Today, within the university communities, we must create an intellectual climate that encourages our educators to encourage our students to bridge the boundaries between academic disciplines and make connections that produce deeper insights. Our scholars and, hence, our students must be skilled at analysis as well as synthesis.

In the words of José Ortega y Gasset:

*"The need to create sound synthesis and systemization of knowledge - will call out a kind of scientific genius which hitherto has existed only as an aberration: the genius of integration. Of necessity this means specialization, as all creative effort does, but this time, the [person] will be specializing in the construction of the whole."*

*"The momentum which impels investigation to dissociate indefinitely into particular problems, the pulverization of research, makes necessary a compensative control - as in any healthy organization - which is to be furnished by a force pulling in the opposite direction, constraining centralized science into a wholesome organization - the selection of professors will depend not on their rank as investigators but on their talent of synthesis."<sup>2</sup>*

Paradoxically, the same information technologies that have been the driving force behind the explosion of information, growth of knowledge and its fragmentation, also present us with the best opportunity and tools for meeting the challenge of that fragmentation. If

the new information technologies themselves seem fragmenting, they are also profoundly integrative.

Technology is allowing us to radically modify the space-time constraints of the channels linking persons together. Computer communication and electronic communication networks provide new tools and opportunities for the scholarly community to share resources. After all, we must not forget that while microchips, lasers, and fiber optics are part of the technological elaborations, the raw input is still human speech and human ideas. Furthermore, the new technologies and their deployment at the University are, as often as not, an explanation and extension of new connections among the traditional disciplines. The growing specialization and differentiation by necessity generate broader and denser interdependence in our universities. They also engender growing worldwide interdependencies. As advances in artificial intelligence and voice recognition techniques permit computers to recognize human speech and parse and understand natural language, we will have a true man, machine symbiosis that will revolutionize the way we deal with information. Thus, the process of assimilating new information technologies can, in the right setting, help us think hard and deeply about the nature of knowledge and even about our mission as a University.

In the presence of the abovementioned developments and opportunities, higher education must develop and enunciate a clear philosophy of education, one that deals with the process and nature of learning, one that deals with the continuities rather than discontinuities and one that treats elementary, secondary, and higher education as a sixteen-year learning continuum, in which the issues of general education, unnecessary, wasteful duplication,

2) The Mission of the University, 1944.



coherence and integrity of our curricula are dealt with. We must also confront the reality that at the present time in order to become an expert in any field or sub-field, one requires an increasingly narrow focus to allow subject mastery, while the generalist's knowledge often tends to become increasingly superficial in order to allow broad coverage. Thus the need for breadth of coverage invariably conflicts with the need for coverage of depth. Often our own training, narrow and focused in an earlier age, keeps many of us from participating in the discoveries that are creating newer disciplines. That is not merely a problem for the present but a crisis for the future as well. This makes it necessary for us to re-examine the fundamentals of our liberal arts curricula in order to see whether or not they are providing a liberal learning in which the issues of criteria, process, values, standards, norms, logic, aesthetics, taste, discernment and organization of knowledge have a central focus and role.

Since some of the most promising areas of research and creativity are interdisciplinary not only in the physical and natural sciences but in the social sciences, the humanities and the arts as well, we have to develop creative multidisciplinary and interdisciplinary approaches in our liberal arts curricula in order to provide intellectual coherence through interdisciplinary themes. There is no reason why scientific, historical and literary themes can not be taught through team teaching as well as multiple and comparative perspectives and expertise, in order to provide our students with not only knowledge of disciplines but their interconnectedness as well.

Learning in college should be focused on its sources of information and knowledge that will continue to be available after graduation: e.g. books, monographs, magazines, film, video, television, computer databases. This is especially necessary since learning is, and will

be by necessity, a life-long enterprise. In addition, Universities must develop strategies of enabling their faculty members, steeped in different disciplines, to also have opportunities of interdisciplinary and multidisciplinary work and to develop a broad general education of their own.

Since this speech was written having the United States as its main point of reference, let me conclude by citing one of its founding fathers. Thomas Jefferson once described America as an idea, a "crusade against ignorance". He fervently believed that a nation can not be ignorant and free. This is true of other societies too. There are those of us today who are still optimists and who believe that societies become more democratic as people become more literate, numerate and knowledgeable. Our ability to generate, organize, distribute and use knowledge more effectively is beneficial for our respective societies. Political empowerment and economic opportunity stem from the same root: the spread of knowledge. Understanding the nature of knowledge, its unity, its varieties, its limitations, its uses and abuses, is necessary not only for the success of higher education and sciences, but the texture of our democratic societies as well, especially now when so many questions are being raised about the ascendancy of mass society, technological anonymity, perceived loss of ideals of nature, cultures, personality, and the loss of sense of place in a human-scale world.

