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THE ACADEMICAL SCHOOLS AND THE COMMANDS OF LIFE

by BOGUSŁAW LEŚNODORSKI

IN OCTOBER of the present year a decree of the government has been issued referring to the organization of science and academical schools. It was drafted by the representatives of the Board of Higher Schools of the Ministry of Education (the members of this Board are chiefly scientific workers) and of Trade Unions. The collaboration of about two hundred professors of academical schools gives the guarantee that considering the present conditions in Poland the thing was done in the best possible way. Its aim is to combine reasonably the freedom and autonomy of science and the needs of the state, and to encourage the positive efforts of all nations towards mutual friendship and understanding.

The first article of the decree states that the scientific researches educate and train the candidates for the theoretical scientific work as well as the candidates for the practical professions who would yet be capable of independent scientific investigations. According to the rules of two-stages-education the Higher Schools can educate on the first stage professionals without any scientific aspirations. The graduates of higher technical schools who intend to deepen their knowledge and take a scientific degree may after passing the supplementary examinations enter the academical schools. The idea of democratization of higher schools finds its realisation in the officially legalized practice of admitting to the university of all those who, without having finished the grammar school, acquired a high standard of general knowledge and passed some required examinations. Another new point is the responsibility placed on the academical schools to diffuse and popularise knowledge and to contribute in the mass education.

As to the organisation of academical schools the autonomy of particular universities has been restricted in favour of the Chief Board of Science and Higher Schools appointed (15 members) by the President of Poland. The chairmanship of the Board is granted to the Minister of Education. The Chief Board is to inquire into the organisation of science and higher schools, and to plan the further development, finance matters, etc., on a national scale. All more important decisions of the Minister of Education concerning science and education are to have an approval of the Board. In exceptional cases the Chief Board can carry out the habilitation of lecturers which in due course should be done by the authorities of respective university faculties. The Chief Board ratifies the appointments of the professors and is allowed to present its own candidate after consulting the university in question.

The Rectors of the Higher Schools are appointed by the President of State on the advice of the Minister of Education who must be seconded by the Chief Board. The Chief Board chooses one of the three candidates presented by the given university. The Senate remains the chief governing body of the university. It is enlarged by the admission of the representatives of the lecturers and assistants. The administrative manager is responsible to the rector and his duty is to superintend the administration and the finances of the school. Besides the professors, also the representatives of lecturers, university clerks, and students take part in the general meeting of the school. At least once a year the rector presents a report to the general meeting which stands for a body expressing opinions.

The author of the article points out that the realisation of this reform and the general development of science in Poland depend in a great extent on the collaboration of the scientists themselves, on their social sense and on the activity of the scientific associations. Science and higher schools should serve the purpose of spreading scientific humanism in the truest sense of the world.

STUDIES AT THE UNIVERSITIES
EDUCATIONAL ACTIVITIES OF THE UNIVERSITIES
by WŁODZIMIERZ ANTONIEWICZ

THE UNIVERSITY studies often take too long and that for four reasons: 1. Programme-difficulties, 2. impossibility of granting the conditions required for efficient studies, 3. shortcomings in equipment and organisation, 4. bad financial position of the students.

As to the programme, the difficulty arises from the twofold purpose of the university: a stress must be laid on providing as much theoretical education as possible, but on the other hand, practical training for professional activities should not be neglected. The programme therefore should be so set up, as to consist of two stages, which is the case in all European and Overseas countries. The first stage should provide professional training, while the second be destined only for future scientists. This plan has not yet been started in Poland, the division between experts and scientists seeming too stiff and mechanical. Prof. Antoniewicz tries to defend his point, suggesting various details of programme and organisation to be reformed accordingly.

The shortage of professors and lecturers in Poland checks the efforts of organising efficient studies. Even in the pre-war times the ratio between professors and students was 2—5 times lower than in other countries. The personal losses during the last war reduced farther this unsatisfying proportion. In order to complete the scientific staff we should create an atmosphere of studies, attractive for young, outstanding scientists. The first necessity is to secure the independence of the research-workers, i. e. free choice of subject and method. This, of course, by no means excludes the rational planning and the existence of priorities to be granted for certain problems.

Secondly, the urgent problem of salaries must be solved. The scientific activity should become the chief occupation, and not, as it is the case with the majority of lecturers, a secondary one.

The most important postulate of the new reform is the highest possible efficiency of studies. The author suggests the setting up of permanent boards for each University faculty, to supervise the progress of studies and make suggestions for their improvement.

In the last paragraph of his article the author examines the educational activities at the Universities, especially the so-called „University Lectures for Everybody” which were provided by Kraków and Lwów Universities. Their number being far from sufficient nowadays the author stresses the necessity of setting up permanent centres for adult education at all the Universities. The lectures being addressed to laymen a synthetic and comprehensive way of presenting problems should be used and discussions would be much to the advantage of the audience.

There is a need of reforming not only the programmes but also the methods of studies. The training of lecturers for adult-classes is all-important.

HISTORY OF NATURAL SCIENCE — A SUBJECT FOR EVERYBODY

by F. SHERWOOD TAYLOR

IT IS an authorized translation of the article in HUMANITAS vol. I, NO. 3, 1947. The original title is *History and the Study of Science*.

The division between the humanities and the natural science caused among the students a growing avoidance of problems out of their specialised line of studies. It is most deplorable, because an incomplete education gives an incomplete outlook. We should therefore find a sphere of studies combining the humanities and the natural science.

The history of nature and methods of the natural science seems to be the most adequate. It should, be considered, however, not as a study of things but of man's relation to things in the humanities and will no doubt be of interest for the historians of the natural science. Its value is clear enough. The history of man's relation to the surrounding reality is worth studying not only for naturalists and humanists (specially historians) but also for theologians and politicians. The natural science not only supplies a model of the universe, but also offers an insight into the history of human efforts. The importance, of such an insight may be fully appreciated from a historian's viewpoint.

The author continues by discussing in some detail the programme of the proposed studies and the qualifications to be required from the lecturers, who should know several languages, especially Latin, be keen on natural science and have a fair command of historical and philosophical problems.

LIBRARIES AND THE POLICY FOR LIBRARIANSHIP IN CONNECTION WITH THE NEEDS OF SCIENCE

by MARIAN ŁODYŃSKI

THE POLISH libraries are now entering a new stage of development, characteristic for some changes in organisation and for a new attitude of the reading public. War-time losses in books and staff made it impossible to the Polish Libraries to cover all the scientific requirements in a pre-war scale. This state of things imposed upon the Government the task of taking special care of books. By means of setting up some special institutions and appointing several supervisory bodies (The State Institute of Book, The State Board of Libraries, The Chief Direction of Libraries, The College for Librarians) the authorities induced the men of science to influence the libraries' development and encouraged the publishing activity. Moreover, by making adequate regulations, the State managed to secure the proper revindication and distribution of books among the scientific centres.

The librarians themselves should adapt their way of working to the new, difficult conditions, and as soon as possible bring their old libraries up to the standards required for modern scientific centres. This aim cannot be

achieved until a proper collaboration among the libraries is organised, i. e. exchange of books. Special libraries for each sphere of knowledge should be founded and scientific information centres set up to meet the new demand. Besides local indexes and catalogues, the more general bibliographical works should be issued such as central catalogues, indexes, libraries' guides and so on.

The services of the Bureau of the International Exchange might be very valuable for the libraries' development, so far however it has not reached a proper standard of efficiency and supplies of material from abroad are still poor and rather irregular. This state of things should be improved by a closer collaboration with the scientists, concerning the choice of books to be imported.

The aim of the above article was to emphasize the importance of closer cooperation of State, scientists and librarians.

THE NATIONAL LIBRARY, WARSAW

FACTS AND OPINIONS

SPECIALIZATION AND GENERAL EDUCATION. The present time requires a great number of thoroughly qualified professionals. To provide them is the task of the Higher Schools as well as of the Universities. It is, however, a good thing that in many countries the Higher Schools' students are to be given a general education while training for a chosen, practical job. It is intended to develop the scientific thinking and a scientific attitude towards various aspects of history and modern life.

Prof. R. C. Oliver, in his article published in UNIVERSITIES QUARTERLY No. 2/1947 supplied information for our description of two courses in general education, now compulsory at the American Universities: Harvard and Columbia and of the similar postulates now advocated in Great Britain. In Poland a compulsory intercolleges study was introduced lately in each University centre. It is called „The Study of Knowledge about Poland and the Modern World". Among many other subjects, the role of science in the development of the modern world is taken into consideration.

SEVERAL REMARKS ON THE SO-CALLED POLICY FOR LINGUISTICS. The magazine THE POLISH LANGUAGE (No. 2 1947) started a discussion on the possibility of a scientific conception of linguistic policy. Professor Lande, theorist of law and disciple of Petrażycki thinks it possible to carry on a rational and consequent policy aimed at fighting against the linguistic mistakes, preserving the richness and purity of our present language, and preventing or encouraging various tendencies towards modifications.

Another philologist, Professor Klemensiewicz expresses the opinion that the development of a language is never based on the conscious notion of right, the notion which is fundamental for every policy in every sphere.

None the less, grammarians can influence the language of their time by means of rational pedagogy.

Mr. J. K. (from LIFE OF SCIENCE) commenting on the discussion holds that pedagogics, conceived as a conscious function of each scientist should be relevant in all spheres of science. This is, he says, the proper way for science to influence the society.

SOME INQUIRIES CONCERNING THE PSYCHOLOGY OF THE SCIENTISTS. In 1938 *Centre National de la Recherche Scientifique* in Paris under the chairmanship of prof. M. Pieron started a series of inquiries, to facilitate the selection of young research workers by means of finding out their capabilities, interests and particular characteristics. M^{es} Irene Leziné, lecturer of the above Research Centre wrote about it in Annal IX of the French magazine *LE TRAVAIL HUMAIN* under the title *Enquête sur les goûts, les intérêts et les méthodes de travail des chercheurs*. Unfortunately, out of 150 questionnaires forwarded to the scientists from various spheres of science, 70 only have been filled and sent back. The experiment itself, as well as the contents of questionnaire and the answers were met with great interest. Mr. Stanislaw Lem, reviewer of LIFE OF SCIENCE adds some critical remarks referring to the order and kind of questions. Many of them, he says, are ambiguous. It seems that the enquiry did not bring the expected results. Anyway, it is an attempt worth continuing in spite of the still existing difficulties.

THE PROPER ATTITUDE TOWARDS PSYCHOLOGY. In the Calcutta magazine SCIENCE AND CULTURE (vol. XII, No. 1) appeared an article by S. C. Mitre, in which the author discusses the problem of the proper attitude towards psychology. The article has been summarized and discussed in our paper. The author emphasizes the importance of planning for each sphere of life and social activities. He holds that each plan, however logical and accurately executed, must prove a failure if not adapted to the psychology of the people for whose benefit it was issued. That is the reason why the psychology becomes at present an indispensable basis for every line of planning. Hence the necessity of revising our attitude towards psychology. The traditional philosophical attitude does not lead to positive results. We should therefore change our general tendency and keep to the purely scientific and practical way of approach to modern psychology. The value of science is appreciated nowadays for its ability of explaining phenomena (which up to the present time was also considered the purpose of the psychology) but also for its practical applications. The latter criterion leads to the abolishment of the individualistic attitude and gives priority to the social psychology (i. e. inquiries into the influence of customs and traditions, the behaviour of social groups, the importance of leadership, etc.). The main task of psychology should be to find out, by means of interviews and tests, what social function suits best the personal dispositions of given individuals. By assisting people in choosing a proper career, psychology can no doubt contribute very successfully in the restoration of order in our chaotic

SCIENCE IN POLAND

CONFERENCE OF RECTORS AND PROFESSORS OF THE ACADEMICAL SCHOOLS. A three days conference of the Rectors of the Polish Academical Schools and representatives of various spheres of knowledge was held recently in Warsaw. The Minister of Education, Dr. Skrzeszewski and the President of the Board of Higher Schools, Włodzimierz Sokorski, M. P., presented the main points of the lately passed decree of the Government, concerning the organisation of science and Higher Schools. They also discussed some further plans of the Government authorities, relating to the future development of this organisation. (These points of the decree have been discussed by Bogusław Leśniodorski in the present copy of LIFE OF SCIENCE). Papers were read on following subjects: New programme of education at the Higher Schools, by prof. Jaroszyński; planning in science, by prof. Świętosławski; future development of Higher Schools, by prof. Kulczyński; relation between science and state, by prof. J. Drewnowski. When these problems have been thoroughly examined, the urgent need of setting up a general plan for the further development of science on a national scale was clear to everybody. The plan should be prepared carefully and submitted to the Great Congress of the Polish Scientists, which will meet in Spring 1948.

SCIENTIFIC COLLABORATION OF POLAND AND CZECHO-SLOVAKIA. On the initiative of the West Institute under the chairmanship of prof. Z. Wojciechowski a Congress of about 100 Polish and Czech scientists met in Osieczna (Western Poland) in a castle belonging to the Institute. Its aim was to recapitulate the principal achievements of Polish-Czech collaboration in the past and to set up plans for the organisation of future work. The West Institute started the publication of a series of scientific papers on Czechoslovakia, while Melantrich, a publisher from Prague, undertook the task of publishing the works on Poland.

ANNALES UNIVERSITATIS MARIAE CURIE-SKŁODOWSKA. Under this general title the M. Curie-Skłodowska University in Lublin is publishing a series of scientific papers of its members. In accordance with the character of the University, which has become already an important centre of the natural science, all the papers directly or indirectly connected with this sphere of knowledge are taken into consideration. ANNALES will appear in 6 sections: mathematics, physics and chemistry, geography, geology, mineralogy and petrography; biological science; medical science; agricultural science; philosophy and humanities. Several treatises already appeared and it is worth mentioning an important essay by prof. Łubnicki: *Theory of Knowledge of Dialectic Materialism and Motives of Negative Reactions* by T. Tomaszewski. In this section appeared also the following papers: *Full Three Value Account of Sentences* by J. Ślupecki and *Trial of Axiomatization of Traditional Logic* by J. Łoś.

SCIENCE ABROAD

SCIENCE AND THE POST-WAR ECONOMIC CRISIS. It is a problem that has been discussed by the Executive Committee of the British Association of Scientific Workers under the chairmanship of prof. J. D. Bernal. The final conclusion of the Conference was that if the British Nation wants to close the dangerous gap between imports and exports, it must increase the home production. This depends, however, on the industrial and agrarian developments, which again should be improved by introducing more economic methods, based on scientific researches. Both science and technique must contribute to this purpose and all the efforts must be coordinated and organised, according to a plan. The Memorandum of the Association also pointed to a number of most urgent problems and a few detailed suggestions have been made.

THE DEVELOPMENT OF THE SOVIET SCIENCE. On the thirtieth anniversary of the October Revolution, Polish magazines published numerous articles on Soviet Russia. The LIFE OF SCIENCE presented the vital development of science in that country and stressed its particular importance for the general social well-being. The Minister of High Schools in U. S. S. R., Sergiusz Kaftanow wrote in the LIFE OF SCIENCE about the development of the Soviet Higher Schools, the President of the Polish Academy of Science and Letters, prof. K. Nitsch expressed his „admiration for the power and energy of the newly organised society, which, immediately after having suffered most terrible war devastations, continues its scientific researches”, prof. Pienkowski discussed the main centres of scientific researches and the achievements of the Soviet physicists, especially those of the most eminent professors: Kapica, Joffe and Lebiediev.

INTERNATIONAL SCIENTIFIC UNION FOR PURE AND APPLIED PHYSICS. It has been founded in 1922 in Brussels under the auspices of *Conseil International de Recherches* (C.I.R.) and includes representatives of 19 countries. Its aim is to organise the international collaboration in the sphere of physics. After an agreement with UNESCO and thanks to its financial aid the Union is developing rapidly since 1947. Lately (October) an International Congress of research workers in the field of Cosmic Rays has met in Cracow, Poland.

THE INSTITUTE OF APPLIED ECONOMY IN PARIS. By Stefan Kosko. In January 1944 a group of young French scientists under the leadership of Dr. François Peroux, professor at the Sorbonne, set up the Institute of Applied Economy in Paris. Its official purpose was to facilitate the contacts among the French economists but the real aim was rather to find a scientific solution of the actual economic problems in France, such as the international monetary plans, policy of wages, social insurances and calculations of French social income. The Institute is a private organisation, its expenses being

covered entirely from the collections of the members. Among the publications issued in duplicate by the Institute are THEORIA, PRAGMA and a quarterly bulletin.

THE UNITED STATES OF AMERICA ARE GOING TO MAKE ISOTOPES AVAILABLE FOR SCIENTIFIC RESEARCH. President Truman declared lately that in order to facilitate medical and biological investigations, the U.S.A. are willing to grant a free access to the radioisotopes to the scientists from foreign countries. This promise concerns 20 most important species applied in medicine against cancer. The U.S.A. will supervise the researches in order to prevent the eventual abuses.

From No. 21—22:

THE SCIENTIST AND THE UNIVERSITY IN THE LIGHT OF SOCIOLOGY by *Danuta Dobrowolska*. The scientific world, however aloof from the everyday life, is strictly conditioned by the social factors, among others by its social environment: the University.

Among the first attempts to analyse these problems is the paper by Logan Wilson, entitled: *The Academic Man* (Oxford University Press, New York, 1942), on which the authoress comments in her article. She successively examines separate problems, such as: structure of the University, social position of the University workers, criteria of the estimation of their value, etc. In conclusion she mentions the question of the University reform, asserting after L. Wilson that it ought to be based upon a scientific and objective examination of the actual state of the Universities.

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