

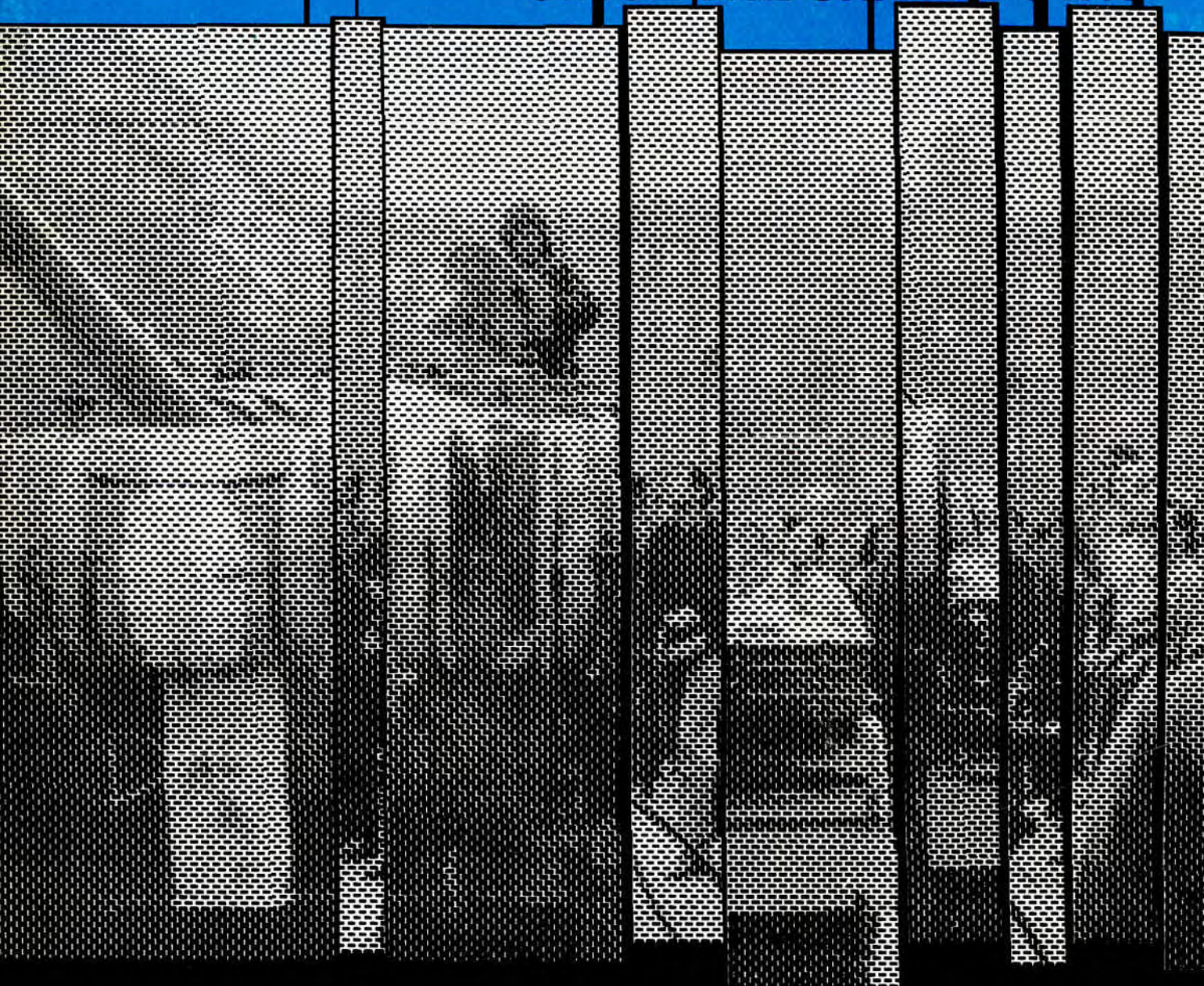


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**CZECHOSLOVAK SCIENCE
SINCE THE CRACKDOWN**



František Janouch

science under siege in czechoslovakia



Since the political crackdown of 1968 the atmosphere has become unbreathable, and the situation is getting worse; an emigré says the systematic persecution of scientists and intellectuals in Czechoslovakia should be a matter of concern to all the world

due to its geographical position, science in Czechoslovakia has always been international in nature, often influencing European and world thinking.

In the 15th century the religious reformer Jan Hus formulated the ethical groundwork of scientific thought, and was tried for heresy, condemned and burned at the stake at Constance for his search for and defense of truth.

In the 17th century, John Amos Comenius, the founder of modern pedagogy, was forced to emigrate from Czechoslovakia and spend the rest of his life abroad because of his beliefs.

The foundations of modern physiology were laid by the Czech schol-

František Janouch, a physicist, is now working in Stockholm. Formerly, he was head of the theoretical nuclear physics department at the Nuclear Research Institute in Prague, associate professor of theoretical physics at Charles University and Vice-Secretary of the European Physical Society.

ar Jan Evangelista Purkyně, who lectured for many years at Wrocław University in Poland and who, in his later years, was a very active Deputy in the Provincial Diet in Prague. Bedřich Hrozný solved the riddle of Hittite cuneiform inscriptions. Jaroslav Heyrovský, the only Czechoslovak Nobel prize winner, laid the foundations of a new science, polarography.

The doors of Czech universities were always open to foreign scholars. Johannes Kepler, from Germany, and Tycho Brahe, from Denmark, worked at the royal court in Prague; Johann Gregor Mendel, working in Brno, laid the foundations of modern genetics, and Ernst Mach lectured for nearly 36 years at Prague University, as did, for a shorter period, Albert Einstein.

Even this brief and far from complete list indicates that Czechoslovak scholarship has always been deeply socially committed and that international contacts and cooperation have always played an integral part. Up to the end of World War II, however, the work tended to be carried out by ill-paid eccentrics in what were, to say the least, modestly equipped university laboratories.

The importance of science in the modern age was demonstrated with the development of the atom bomb, and this led to the worldwide scientific boom from which Czechoslovakia, too, was not immune.

Sovietization, both forced and voluntary, carried out under the slogan "The Soviet Union our model" did not yield only negative results. In 1953 the Czechoslovak Academy of Sciences (CAS) was founded on the model of the Academy of Sciences of the Soviet Union. Its foundation undoubtedly had a positive influence in stimulating the advance of Czechoslovak science as a whole, despite the grave damage to modern

genetics and cybernetics inspired by the Soviet model.

Within a few years the CAS grew into a mighty institution incorporating some hundred laboratories and several thousand qualified scientific workers. A number of new branches of science were introduced—among them technical microbiology, biochemistry, cybernetics, nuclear physics and the physics of elementary particles.

The training of large numbers of young scientific workers at Soviet universities also contributed to the development of Czechoslovak science. In retrospect, however, one sees that the one-sided orientation toward Soviet science, coming at a time when all contacts with western science had been broken off, was none too fortunate. In some fields, and especially in instrument technology, this led to a situation in which Czechoslovakia greatly lagged behind developments in the West.

Of course, there were problems. The promising start suffered a setback in the second half of the 1950s owing to the so-called class-political screenings which removed many notable and experienced scholars from the Academy and universities, and served for a long time to poison the atmosphere in scientific institutes. The shortage of foreign currency needed for the purchase of modern equipment and western literature was a constant problem. Funds were also lacking for international contacts, the establishment of which, especially with the West, also encountered considerable obstacles in the form of ideological policing.

In the course of the 1960s the majority of these difficulties, mis-handlings and ideological interventions had ceased. A normal atmosphere and normal conditions were

created in the CAS; foreign contacts and cooperation developed in many directions and a number of notable results were achieved (as just one example, Academician Otto Wichterle's gel contact lenses). The CAS also succeeded in winning some measure of autonomy and it began to gain social and political influence. Work started within the framework of the CAS on economic reform (Academician Otto Šik's team), on reform of the Czechoslovak constitutional and legal system (the team headed by Assistant Professor Zdeněk Mlynář), on a more objective approach to recent Czechoslovak history, to mention a few. Many scholars occupied important posts in political life; the CAS provided the government with expert opinions and assessments and presented alternative projects for the country's development.

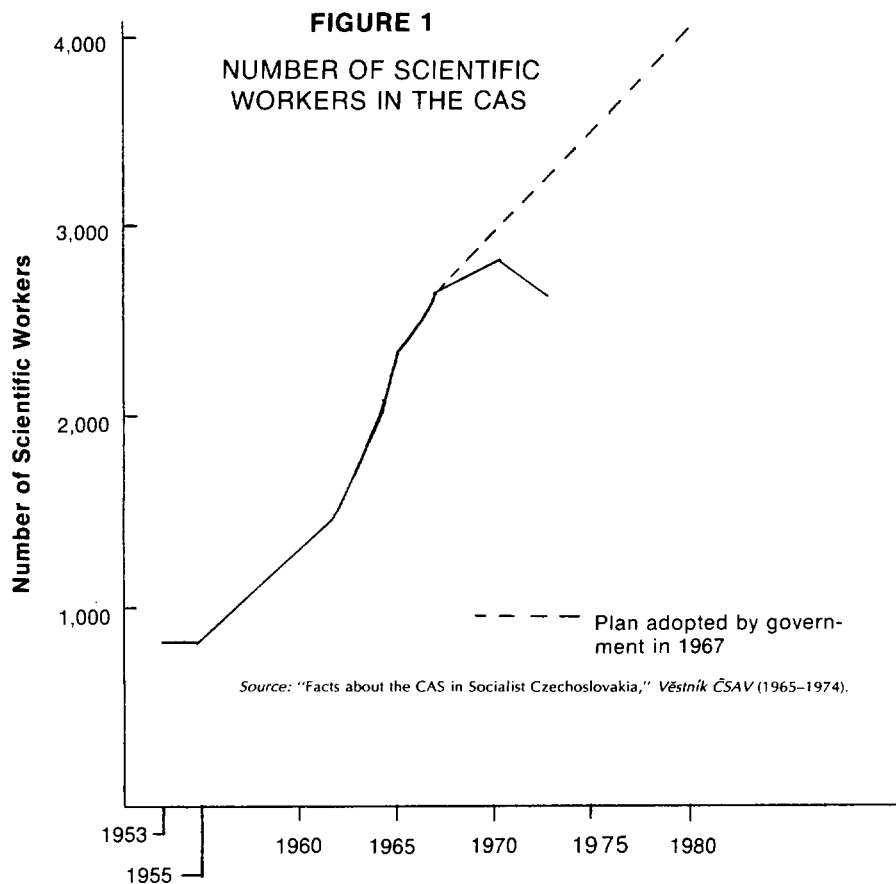
August 21, 1968

Because Czechoslovak science had become a strong political force during 1968, it is not surprising that the CAS figured on the list of "sharply watched" institutions. On the day after the fraternal occupation of Czechoslovakia by Warsaw Pact troops, the CAS was closed by order of the commanding officer. It is worth recalling the exact wording of what was, in the history of science, an unprecedented order:

Order

I, representative of the troops of the Warsaw Pact, First Lieutenant Orlov Yuri Alexandrovitch, order all staff and members of the Presidium of the Czechoslovak Academy of Sciences to stop work on 22 August 1968 by 13 hours and to clear all premises of the Academy of Sciences of the ČSSR.

In those momentous days the Academy upheld the good name of Czechoslovak scholarship with honor. On Aug. 28, 1968 the Presidium



of the CAS adopted a statement which said:

What we have experienced in the last few days can never be erased from our memories, although perhaps, we shall be forced to be silent about our feelings and our thoughts. In our future work we shall continue to be guided by the principle that the duty of learning and of scholars is to seek truth, and truth alone, and steadfastly to defend that truth.

Comparing the years from 1963 to 1968 with the subsequent five year term, 1969 to 1974, the latter period appears as a time of unprecedented decline and destruction of Czechoslovak science.

The late Josef Smrkovský frequently insisted in the last years of his life that lists of all persecuted intellectuals and experts ought to be compiled and presented as an indictment of Gustav Husák's "normalized" regime.* Alexander Dub-

*Smrkovský was chairman of the Czechoslovak Parliament in 1968 and a member of the presidium of the Communist Party in Czechoslovakia.

ček expressed a similar idea in his letter to the Federal Assembly, "I could mention the names . . . of national artists, academicians . . . writers, actors and musicians. . . . But how to find the time and space to compile a list of all the political and creative forces that have been stifled?"

Although we have no such lists as yet, I will try nevertheless to contribute to an objective analysis of the current situation in the CAS.

Institutionalized Ignorance

The destruction of Czechoslovak science in the 1970s has proceeded slowly but systematically, not lacking, however, a "legal" basis. The catastrophe started with seemingly innocent and, at first glance, insignificant changes in the laws. By the original law on the Czechoslovak Academy of Science and its statutes, the Academy enjoyed considerable autonomy. These provided that membership was by election of its General Assembly and only approved by the government; the

Academy was directed by a Presidium, elected by the General Assembly; members of the Presidium had to be members of the Academy and the chairman and vice-chairmen had to be full members; the scientific staff had permanent contracts of employment; and the director of the CAS was to be a leading, active scientific worker.

The amended law on the CAS and the new statutes, from 1970, deprived the Academy of a substantial part of its autonomy, and also legalized the downgrading of the qualifications of its members. According to the new provisions, the vice-chairmen are no longer required to be full members of the Academy, and the general secretary is not even required to be a member; the director of a scientific institute is no longer required to be a "leading, active scientific worker"; and scientific workers were no longer to be given permanent contracts. In fact, the 1970 law provides that workers be engaged for no more than 4 years.*

The Academy's loss of autonomy and prestige has, in fact, been greater than might be supposed merely in the light of the changes in the laws. Outright opportunists have found their way into the Academy, ready to obey political instructions without a murmur.

In place of Academician František Šorm, Academician Jaroslav Kožešník was appointed as Chairman of the Academy, the positions of vice-chairmen were occupied by Academicians Bohumir Rosický and J. Poulfk, both members nominated by the Government. Poulfk, an archaeologist, is known to the public chiefly on account of various servile articles and speeches; he has referred, for instance, in *Rudé právo*, the daily newspaper published by the Communist Party in Prague, of Feb. 20, 1973, to the primitive propaganda pamphlet "Lessons of the Crisis Development" as a source of "perma-

*The law on the Czechoslovak Academy of Sciences was written in 1963 (no. 54 Sb) and the statutes of the CAS were approved by the government on Dec. 20, 1963 (no. 1071).

The amended law was written in 1970 (26/1970 Sb) and the new statutes approved by the government on Oct. 25, 1970 (no. 254).

nently valid ideas and theoretical lessons" for scholars in all fields.

The post of general secretary of the Academy was filled by Ing. Karel Friml, who at the time of his appointment held no postgraduate degree. Of the eighteen Presidium members appointed by the government in 1970, eleven were Academy members only by virtue of government nomination.

The increased concern for the ideological purity and political blamelessness of academicians was displayed, for instance in the affidavit which all Academy members had to fill out in 1971:

I declare that (a) none of my relatives, or my wife's nearest relatives are resident since 1968 abroad; (b) there has been no change in the case of myself and my wife (or children) since 1968 in membership of the Communist Party of Czechoslovakia. Alternatively, amend in accordance with the facts.

At the end of 1971, seven Academy members were deprived of membership because they had emi-

grated. At the same time, the government nominated 20 Academicians and corresponding members, which amounted to about 10 percent of the total. On Nov. 17, 1972 this deformed Academy "elected" as foreign members seven Soviet scholars and seven from the so-called socialist countries—evidently as a token of gratitude for the occupation of the CAS in August 1968. The number of foreign members of the Academy was thereby inflated from 22 to 36.

The less strict provisions regarding the management of institutes were rapidly employed in purging them; all directors of CAS institutes were removed from their posts by June 30, 1970. And to leave no doubt, *Věstník ČSAV*—the official journal of the Academy—announced that "the final appointments to the posts of institute directors will be made according to the designated list and in close association with Party organs."

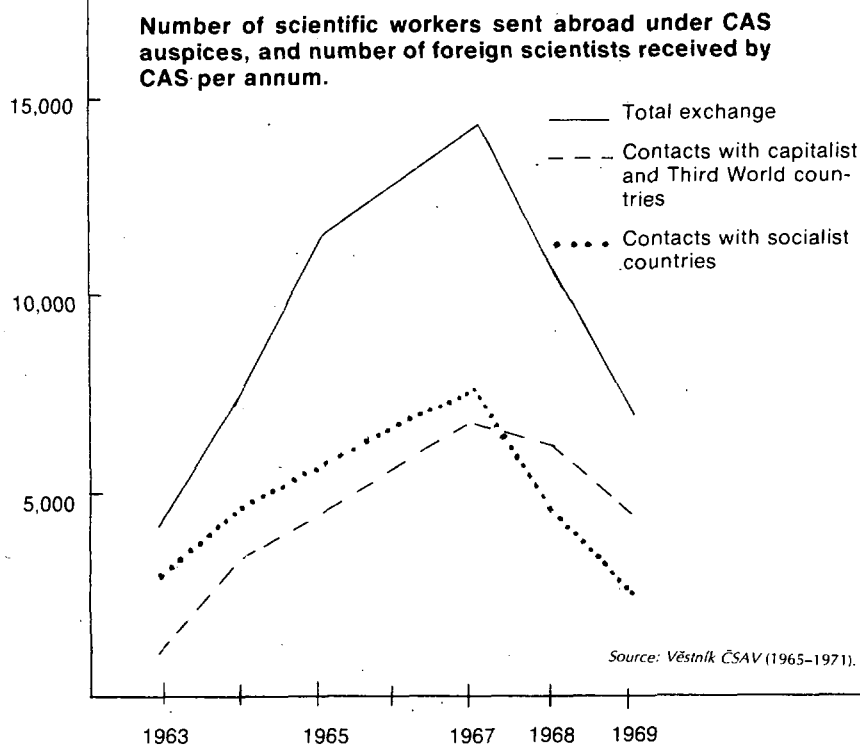
The new director of the Institute of Nuclear Physics, Jaroslav Pro-

cházka, will undoubtedly be remembered in the history of Czechoslovak science for the oft-repeated remark: "I would throw out even Einstein if his political views were not quite in order!" At the head of the Microbiological Institute of the CAS is an engineer, Vladislav Zalabák, whose fraudulent attempt to acquire an academic title was investigated and condemned prior to 1968.

The newly-introduced provision on contracts of employment created a formal legal instrument for unprecedented harassment of Czechoslovak scholars. The provision amounted to the mass dismissal of everyone, from holders of Ph.D. degrees to full members of the Academy and professors. This unparalleled measure, which was in contravention of Czechoslovak labor legislation, created an almost grotesque situation. Whereas the administrative and technical staff and also the younger scientists who had lacked either time or ability to acquire academic titles retained their permanent contracts, the status of the older, experienced scientists and scholars was comparable to that of seasonal workers in agriculture. The prime considerations in deciding the length of contracts were political views and activity during 1968 and 1969; officials of the Party had the main say. Scientific work and results played little or no part. Only a few workers, Communist Party members who had passed the screenings, were given four-year contracts. Those who had been expelled or struck off the list of Party members were hired on contracts of 6 to 12 months or for 1 to 3 years.

A number of internationally known scholars were ignominiously retained at their workplaces year after year on the basis of contracts covering a few months, at most a year, finally to be driven into retirement with the aid of the contract mechanism. We may cite the sinologist Academician Jaroslav Průšek, microbiologist Academician Ivan Malek, biochemist Academician Šorm, chemist Academician O. Wichterle, historian Academician Josef Macek, corresponding member Jiří Hájek, corresponding mem-

FIGURE 2
SCIENTIFIC CONTACTS OF CAS
WITH OTHER COUNTRIES



ber Karel Raška and many others.

The contract system remains in force; the older scientists have no social security whatever, as any attempt at an independent attitude or critical thinking may earn them the swift punishment of withdrawal of contract. It should be emphasized that the system of employment contracts in socialist countries, where all institutions concerned with science are under the central control of the Party—and Czechoslovakia is, in addition, a small country where some branches of science are confined to a single institute, and there is no possibility to seek work abroad—do not serve in any way, as they do in the West, to stimulate scientific work. On the contrary, they serve solely for repressive purposes.

Another mechanism has been used for dismissing people. In 1970 and 1971 several social science institutes of the Academy were disbanded (and at the universities, *all* departments of Marxism-Leninism); only obedient and politically-

screened staff were admitted to the newly established or reorganized institutes.

Statistical Data

Although statistics about the situation in the CAS have been carefully concealed since 1970, some interesting facts can be gleaned from official statements and other publications. I have relied mainly on the CAS yearbooks, the journal *Věstník ČSAV* (1965-1974) and also on the remarkable pamphlet, "Facts about the CAS in socialist Czechoslovakia" which was published by the Academy in November 1971 as material for the election campaign.

Figure 1 shows the trend in the numbers of scientific workers of the CAS. Although the government approved in 1967 a planned level of 4,000 scientific workers for 1980, the curve shows a clear break after 1970, caused not by economics but by purely political actions: emigration, dismissals and reorganization in the Academy.

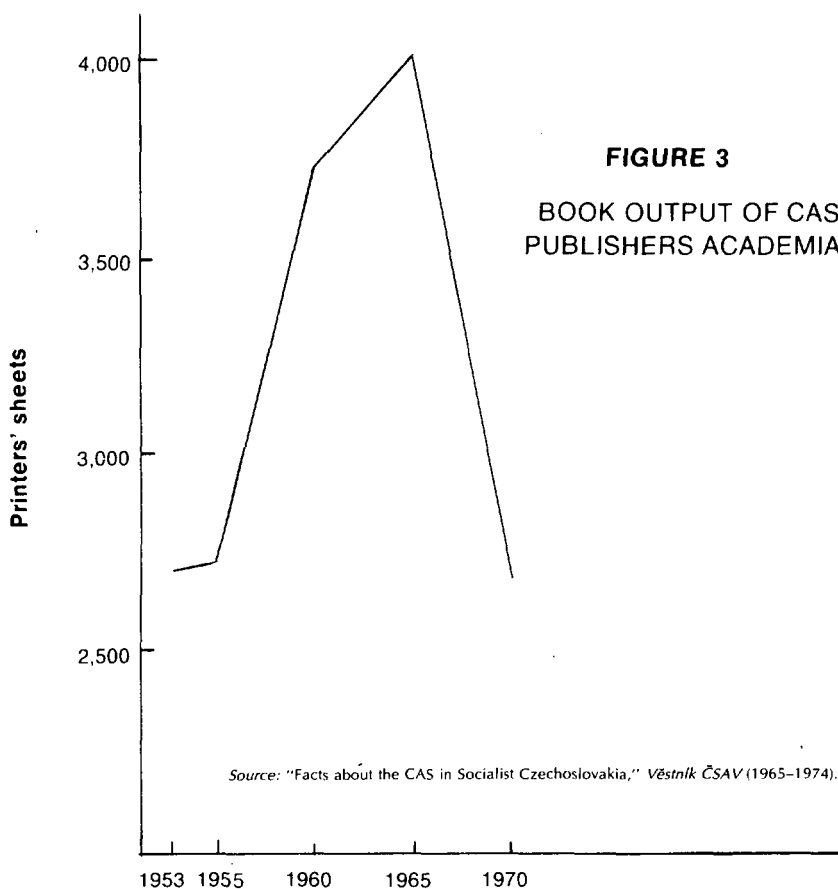
Typical is the graph showing for-

eign contacts. Figure 2 illustrates the number of scientific workers exchanged in both directions within the framework of the CAS annually. Following the occupation of Czechoslovakia, even contacts with the so-called socialist countries were drastically restricted. Unfortunately we have no figures for 1970 to 1972 when the main administrative limitation in the area of foreign relations came into force; there can be no doubt that they would show an even more drastic picture.

The substantial limitation of Czechoslovakia's scientific contacts with other countries can also be documented. Whereas Czechoslovak scientists participated in almost all the major foreign congresses up to 1968, in the years 1970 to 1973 there was no representation at all at many important conferences. For instance, at the 5th International Conference on High Energy Physics and Nuclear Structure (Uppsala 1973) there were 10 representatives from the Soviet Union, 16 from the socialist countries, but *not one* from Czechoslovakia. Similarly at the International Conference on Nuclear Structure and Spectroscopy (Amsterdam 1974), where the Soviet Union and the other socialist countries were represented by 20 scientists, there were again *none* from Czechoslovakia. Some of the big international scientific congresses due to be held in Czechoslovakia have been transferred elsewhere. For example, the third Europhysical Congress was to have met in autumn 1975 in Prague; it has been held in Bucharest.

The election pamphlet referred to above ventures to show the consequences of normalization also in relation to the output of the CAS publishers, Academia, which, evidently as a result of the restrictive measures and the reintroduction of censorship, sank in 1970 below the 1953 level in numbers of books published (see Figure 3).

Similarly other areas of the Academy's activity have declined. The numbers of scientific publications, of scientific books, of academic dissertations have all declined. Unfortunately, however, the precise figures needed to demonstrate this are



lacking.

The situation of the Czechoslovak scientists who have survived all the purges and the normalization and have remained in the Academy is not easy. The institutes have lost their autonomy, being centrally directed in all areas by the Presidium and its staff. They are hemmed in by complicated bureaucratic regulations and protracted procedures for endorsing projects. Existing foreign relations are hampered by dozens of official regulations—a visit abroad has to be planned 6 to 12 months ahead; receiving visits from foreign scientists in Czechoslovakia in transit or as tourists is forbidden; CAS staff are obliged to report any contact, even of a private nature, with a foreigner and every letter received from or sent abroad.

A complicated endorsement procedure has been introduced for all academic work before going to press; this applies even to duplication of pre-prints. Duplicators are guarded more strictly than plutonium. Some institutes permit publication in western journals only on the condition that the author has previously published one or more papers in the Soviet Union; in view of the long publication schedules, it is difficult to meet this condition.

Funds for purchasing books and periodicals from abroad, especially from the West, have been cut. Check-ups (that is, purges) in libraries, especially of the social sciences, are continuing. An increasing number of issues of western journals are confiscated and are unobtainable in any academic library. For instance, in 1974, of 50 issues of the leading British weekly *Nature*, about 15 were subjected to withdrawal of the right to delivery (as confiscation is euphemistically termed). Some issues of the *Bulletin of the Atomic Scientists*, *New Scientist*, and other journals have suffered the same fate.

The defense of dissertations is subject to prior approval by Party headquarters; failing this the proceedings are not permitted. Party authorities have to approve every journey abroad, the admission of every new employee, every appointment to a post. For example, the appointment of a research assistant

has to be approved by the Party district committee; the appointment of an assistant professor by the regional committee; the appointment of a professor by the Central Committee of the Communist Party.

No wonder, then, that these and other measures have created in the CAS an atmosphere which, with Enrico Fermi, we might term *aria non spirabile*—an unbreathable atmosphere. No wonder that in such an atmosphere—and history can provide plenty of examples and analogies—the sciences cannot prosper. No wonder that (here I quote a letter recently received in the West from a well-known Czech scientist, a member of the Academy) “this year’s Academy session [1973] was even drearier than last year’s. The address (here I quote the comment of an old, prewar and not-expelled Communist) was ‘on the level of a street organization of the Youth League and discussion was less than makeshift.’”

Extra-Judicial Persecution

But what happens to the scholars who are victims of the purges? The most widespread and also the most destructive form of oppression suffered by Czechoslovak intellectuals and scholars in the 1970s is the so-called extra-judicial persecution. The British journal *Nature* (July 12, 1974) printed a letter from the physician Bohumil Peleška which provides a shocking picture of a typical case of such persecution. Peleška writes:

Since 1970, after dismissal from the Directorship [of the Institute of Electronics and Modelling in Medicine], I have not been allowed to engage in research, experimental or teaching work of any kind, and since 1971 I am banned even from clinical work. . . . I was also banned from publishing anything whatsoever. Scientific papers in the press had to be thrown out, and where my name appeared on collective work it had to be deleted, or was deleted by the censors. Nor can my name appear in literary references.

By degrees I was expelled from all Czechoslovak professional societies, from membership of the editorial boards of scientific and popular-scientific journals, from the Collegium of Medical Sciences, from the Scientific Council of the Ministry of Health, from all technical commissions, and banned from lecturing at Prague and Brno Universities and at the Prague Institute for Further Education of Doctors and Pharmacists. I am officially excluded from participating not only in conferences abroad, but also in medical conferences and meetings at home. . . .

For a full four years I have endeavoured to find a place in society according to my qualifications. . . . All efforts have been in vain, and equally fruitless have been applications to employing organizations, where they always cite orders from superior departmental and political bodies. . . .

I have been subjected in recent years to a procedure which I consider to be not merely social discrimination, but also a form of protracted and total spiritual and intellectual liquidation against which I have at the present time no defense. . . .

In the so-called socialist

countries—where an absolute monopoly of political power is concentrated in the hands of a single party or even of a small group of people; with strict censorship of all communications media, with all areas of education, science, culture, industry, trade, administration and the media under state control—extra-judicial measures are incomparably harsher and more effective than in

and culture. And how else can a small country, poor in raw materials and energy resources, prove its worth except by its contribution to the common cultural fund and by its ability to help others with its experience and knowledge? But there are not, as yet, any definite signs of improvement.

Developments in Czechoslovakia cannot be compared with Hungary

“Truth.” Kosík also wrote that the police had started confiscating manuscripts from other Czechoslovak intellectuals. He suggested that April 28 marked the emergence of a new type of censorship which made the previous acts seem merely a ridiculous liberal game. “Was not April 1975 an attempt to impose on society a new custom, a new normality—the systematic confiscation of manuscripts? Might it not happen that authors themselves summoning the police to inspect their finished works may soon become, in the land of Franz Kafka, a custom, something accepted, a part of the doctrine?”

In an open letter dated June 25, 1975, Academician Ivan Malék, former vice-president of the CAS, former vice-president of World Federation of Scientific Workers and Lenin Peace Prize Winner, indicated that he “is being threatened by the way in which one now deals with the most valuable thing which exists in science, that is, with scientific cadres.” He is afraid that “the damages, caused nowadays, will have long time consequences and will lead to a catastrophic backwardness of our science.”*

Kosík’s appeal and Malék’s open letter refute the rumors about changes for the better in the fate of Czech scholars, and represent a serious warning for the entire civilized world.

Mankind stands today at the crossroads—threatened by hunger, depletion of energy and raw materials, over-population, pollution of air and water—not to mention stockpiling of nuclear weapons. Salvation lies solely in mobilizing and using to the fullest all the intellectual and moral powers of all peoples. Therefore the world should not remain indifferent to the systematic destruction of intellectual potential in Czechoslovakia or anywhere else—science and human knowledge are the concern of all mankind, and their preservation, salvation and defense should also be a matter for all people. □

*The letters from Kosík and Malék were published in nos. 5 and 7 respectively of *Listy*, a bimonthly journal published in Rome, by an opposition Czech socialist group.

Repressive measures did not start until two to three years after the occupation; the return to reason and tolerance is not even in sight today.

the western countries. Anyone caught up in the mechanism of extra-judicial persecution in the socialist countries has no choice of job other than unskilled manual labor. Apart from a few exceptions which can be counted on the fingers of one hand, Czechoslovak intellectuals have no opportunity to leave their country to seek work abroad. Their children are denied the right to secondary and university education. Their articles and books are not allowed to be published—under the shameful order by Czech Minister of Education J. Havlín, dated May 19, 1972, “it is not permitted to publish the works of authors who have been expelled from the Communist Party, dismissed from a university on political grounds, or who have emigrated illegally.”

Extra-judicial persecution means isolation from science and learning; in these days of rapid advance and frequent changes in all areas of knowledge, this is equivalent to professional disqualification and subsequent intellectual death.

The state of affairs which we have tried in this brief space to describe and document by the example of the Czechoslovak Academy of Sciences can hardly be permanent—if, that is, Czechoslovakia is not to be written off entirely from the list of countries with advanced science, technology

in 1956 to 1960. True, a number of very harsh reprisals were carried out in Hungary at the close of 1956 and the beginning of 1957, but the return to normal was already taking place in 1958 to 1960. It is known that many scientific workers or university professors who were sentenced in 1956 and 1957 to long terms of imprisonment, condemned for life or even to death, were by 1959 and 1960 back at the universities and were able to teach. In Czechoslovakia, in contrast to Hungary, the repressive measures were never so harsh; they did not start until two to three years after the occupation and their end, the return to reason and tolerance, is not in sight even today.

Rather, the contrary is true. The amended Labor Code, in force from July 1, 1975, makes dismissal from employment easier. It reduces the obligations of an employer to a former employee and also the employer’s responsibility for unfair dismissal.

The eminent Marxist philosopher Karel Kosík, unemployed since 1971, informed world opinion through a letter to the French philosopher, Jean-Paul Sartre at the end of May 1975 that on April 28, 1975 the police had searched his apartment and confiscated over one thousand manuscript pages of his philosophical works “Praxis” and