

Enver Hoxha

THE COMMITTEE OF SCIENCE AND TECHNIQUE SHOULD EXERT INFLUENCE ON THE DEVELOPMENT OF SCIENCE AND ON THE PRACTICAL APPLICATION OF ITS ACHIEVEMENTS

*Article from the contribution at the meeting of
the Secretariat of the CC of the PLA*

May 6, 1981

This meeting examined the report «On the work done for the post-graduate qualification of cadres and the problems which emerge in this field to accomplish the targets set by the 8th Plenum of the CC of the Party», presented by the Committee of Science and Technique.

At the start of the meeting, Comrade Enver Hoxha asked the comrades of the Committee of Science and Technique a number of questions in connection with the accomplishment of the

targets of the 8th Plenum of the CC of the Party, inquired about the organization, functions and competences of the Committee of Science and Technique, about its relations and cooperation with the Academy of Sciences, with the University and with the other scientific institutions of the country, etc. After listening to the answers and the contributions of the comrades in connection with the question on the agenda Comrade Enver Hoxha said among other things:

The development of science in our country is pleasing, but I am of the opinion that we should not employ superlatives to describe it. In our country the foundations have been laid and successes have been achieved in the development of a number of sciences and vistas have been opened to even the most advanced sciences and their branches.

In these conditions it is our duty to know how to manage and employ our material, physical and mental forces, not groping in the dark and not on occasional problems of the moment, but

methodically and with first priority in those branches of science and technique which lead to a greater positive transformation and which, naturally, also require a higher level of technology, more profound knowledge and more advanced methods in theoretical studies and application.

Besides organs of the state administration which in fact run the work, there are also study institutes as well as other organisms at the centre and at the base which employ many forms and methods in scientific–research work and applied sciences. Among these forms and methods some are advanced (but are still backward compared with the most advanced ones which we have to achieve), some are artisan forms and methods and, finally, there are outdated forms and methods. We must recognize and acknowledge this unevenness of the situation. Each government department, scientific institution and enterprise must not only acknowledge this unevenness, but must also take effective measures and strive to improve the

situation through persistent effort and in planned ways.

Hence the need for recognition of the situation by the Committee of Science and Technique which we set up.

It must set itself tasks and provide orientations for the development of science and for the strict application of scientific achievements in practice.

Science and technique have their source in the activity of man, in social practice. Technique leads to further development in science and science carries technique forward.

They are closely linked together. This is a dialectical process which we must understand and apply.

In the questions which I asked I wanted to find out how world experience is studied, because science has become a question of all countries and peoples. Here I am not referring to the secrets of special technology, but to the sciences, in general, which have become necessary for all and from which all can benefit,

provided the knowledge and practical application of them is organized properly. In this direction we face major tasks.

I think a number of concepts and tendencies exist in our country which existed among other countries in the past.

The technical–scientific revolution is, in fact, a process which brings about profound changes in the life of society, in the development of the economy and culture. It seems to me that this is its meaning and purpose. And this meaning and purpose must be materialized through sound planning and precise methods. On this issue there is often a naive or primitive understanding which is unable to distinguish between pure science and a minor technological improvement.

We need the two, both pure science and technical improvement, even if it is only a minor improvement. But pure science is not something ordinary, it is a high–level synthesis of protracted experimentation, which opens up broad fields of knowledge and application for the present and the future.

Therefore, our people, wherever they work and struggle, must have a correct appreciation both of the pure scientific work and of the work for the application of achievements of science in practice. The application of science begins with experimentation within or outside the laboratory, and is then extended to large-scale production.

The experiments in the mines, in agriculture and in the laboratories are the origin of scientific syntheses which carry science ahead.

It is important that we understand (and this is the line of the Party) that it should not be the apparatuses and those people who are stuck to their desks who decide the future of the development. The apparatuses which the Party has set up have been created according to our Marxist-Leninist ideology. Without them there could be no state of the dictatorship of the proletariat, without them there would be anarchy, anarcho-syndicalism and revisionist self-administrative decentralization. But our state apparatuses and the cadres who work in

them must be revolutionary apparatuses, staffed by skilful , devoted, just men, they must be enemies of «sleep», of bureaucracy and routine and must be supporters of the new, the innovative and science. Our ideology itself is science and it is precisely this science which leads all the others and guides them in the interests of the development and the complete construction of socialism.

Our Marxist–Leninist science is neither a dogma in theory, nor is it a dogma in practice. The correct conception and application of all sciences and their methods in all fields of our life will depend on the proper understanding, the proper assimilation of Marxism–Leninism. The Committee of Science and Technique, in particular, must bear in mind these questions which constitute capital problems for our country, for science and technique.

Science is a social phenomenon, as are art, literature, law, etc. Science does not sprout from civilization as an isolated epiphenomenon, but, on the contrary, is deeply rooted in the social,

political, economic and ideological terrain. It has emerged in a given historical epoch and its development and use are conditioned by the character of the social order.

We observe, for example, that the birth of rational thinking of the ancient Greek philosophers burst the confines of mythology and ushered in the era of cosmogony.

This is linked with the lay and the liberal spirit of Ionians, in the time of Anaximander, Anaximenes, Xenophon from Colophon, and especially, Thales from Miletus, and later, of outstanding philosophers such as Democritus, Aristotle, Epicurus and others. A similar explanation can be given of the Cartesian method which triumphed in the 17th century, which was the product of this historical stage which freed philosophical thinking from church authority. The theory and method of Descartes was an advance in astronomy, biology and physics for that epoch. His method was a rational method which was adapted to the progressive

thinking of the time. In the same way, the work of physicists like Amper, and chemists like Gay-Lussac, and others, is linked with the genius of Romantic writers and with the bourgeois revolution.

Hence, the development of science is linked with different stages of civilization, which constitute a chain. Each stage of science is part of the stage of civilization and develops together with it, while preserving the bases of achievements in past stages. It is the efforts of the society which develop the science.

The development of science in our country is linked with the stage of the construction of socialism, with the dialectical materialist concepts, and not with the deterministic concepts of 18th century Europe.

As the history of science shows, mechanics was born and developed on the basis of former achievements and, through its rapid progress, arrived at the principles of kinetics and thermodynamics. In that period science was

pervaded and dominated by mechanics. Later other great qualitative changes were made in science, which left behind the stage of mechanicism and forged ahead, differentiating and confirming at every step the dialectical materialist development of the world. Rigorous discipline characterizes present-day world science in its advance. We must never forget this.

I have pointed out at other times, too, that mathematics as a separate science is extremely rigorous, a very exact science. There can be no man of learning who does not assert that any science, especially the natural sciences, must be expressed in mathematical form in order to reach perfection. We have read that this applies even in biology, since the struggle for survival is expressed in equations.

The economy, also, proceeds on this course and uses the mathematical apparatus in order to solve its problems.

Electricity is the motor of the modern world and the main characteristic of present-day civilization is the production and use of electrical

energy. The greater part of our daily existence takes place under the standard of the power of Volta, Oersted, Amper and Faraday. The technique and technology of modern production are inconceivable without the direct or indirect use of electric power. The level of the material development of the society depends directly on the amount of electrical energy which is consumed in all fields. Without electricity there can be no progress. I have spoken more extensively about the importance of energy in general other times, and in all its Creative work and auxiliary activities the Committee of Science and Technique must give first-rate importance to knowledge and use of mathematical methods and the problems of energy.

Science develops thinking, liberates it from the shackles of idealism, superstitions, and religious mysticism. It discovers and elaborates the best and most rational methods of thinking and acting. By developing science, by transforming nature and society, man also changes and develops himself. The more rapidly and the

further science advances, the more the fog and darkness of religion and mysticism will be left behind and be dispelled.

The natural and social sciences comprise that system of knowledge created historically by different people and civilizations, the accuracy of which is confirmed by social practice.

Marxism teaches us that the sciences reflect the objective laws of nature and society in the human mind. The theoretical knowledge which science provides us with is distinct from the practical or empirical knowledge which people gain every day in life. Science gives a conscious character to the practical activity of people. It not only explains, but also foresees.

Science and technique are closely linked with each other, although they are two different fields. There are theories and discussions about the question of which came first and which second, that is. did science give birth to technique or was technique the source of science? I am not going to deal with this question. Our great classics made it clear long

ago. Marx gives tools, technique and technology their proper value, but he acknowledges that the main force which creates them, which sets them in motion and makes them more perfect every day is man.

Bourgeois theoreticians elevate technique to a fetish, and thus, develop technicism. They separate technique, make it independent of social life, make it the product of a few inventors of genius, or an elite of scientists, therefore, we should be careful in this matter. In fact, however, despite the great role which outstanding individuals play, both science and technique are born and developed on the basis of social practice, of the experience of the broad masses of working people.

I stress these things, comrades, because our people who are building and producing, must be equipped with science and should develop modern technique, should know and understand these things theoretically from the angle of our Marxist–Leninist theory, because only in this way will they avoid falling into capitalist–revisionist

interpretations and deviations.

Now let me come concretely to the question under discussion. From the report presented to us on the problem of post-graduate qualification, it emerges that «the work done has not responded to the needs of various sectors,» etc., etc.

I pointed out above why this occurs and that this work must be done better and in more organized ways. But I want to stress that it would be a mistake to think that the Committee of Science and Technique alone will carry out this work, while the others will fold their arms and, without making timely studies of the problems on the basis of sectors, on the basis of development, will simply ask for the number of people required in the given speciality and name them, which would be quite inadequate. This has occurred and is still occurring. The Committee of Science and Technique must not be an adjunct of the State Planning Commission, but must be a committee attached to the government.

Despite the shortcomings that we have, the number of people with schooling in our country is good. The interest in learning also is good and it cannot be said that there is no rise in the level of knowledge in our country, but the conclusion stated in the report is meaningful, therefore, from now on the negative causes which exist must be examined more deeply and what is more important is that measures must be taken to put this situation in order and to advance.

The report speaks about «mass participation in the qualification of higher cadres,» etc. In my opinion this mass form can be effective only when the control, management and requirements for qualification are extremely rigorous.

The awareness, the complete conviction must be created in everyone that wherever he works, fights and produces, it is necessary to learn, to gain qualification and not just to raise his grading, but to become able to produce the maximum and of the best quality.

I think we should struggle hard for quality, first of all, in the qualification courses.

The report speaks about the preparation of a five-year plan about specialization, etc. This is right and should be done. But I want to give some advice: the plan made for this purpose should be realistic, and not exaggerated by desires beyond our possibilities. We should not weaken the higher schools and production by withdrawing cadres from them allegedly to give them post-graduate specialization.

Well-considered and reasonable specialization can be successful and be done soundly only when the base is not weakened. Both are important, but the base, production, has prime importance.

This plan must be worked out very rigorously. If the base does not work seriously on this problem, the work from above by the Committee of Science and Technique, the State Planning Commission and the Ministry of Education and Culture will be crippled.

It has been decided that this plan shall be approved in June this year. However, I ask: is this time-limit well based? Have the University and

the departments compiled the plans and programs, have the cadres been allocated, taking into account the work load, the profile, their quantity and quality?

It seems to me that for our conditions, I am referring to our present conditions, taking into account the level of science in our country and its needs, as well as our teaching, theoretical and experimental force, the three-year period set for specialization is too long.

These are the things I had to say. Now I would like you, leading cadres of the Committee of Science and Technique, the comrades of the government, on which this Committee is dependent, and the respective sectors of the Central Committee, to bear in mind the observations and comments which were made here in the development of the activity of the Committee.

«Reports and Speeches 1980–1981»

