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ECONOMY OF THE NORTH EUROPEAN SATELLITES

5 April 1951

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COLONEL RINDLAUB: Today we turn from our late study of the Soviet Union to a consideration of some of the other parts of the Soviet bloc. Professor Samuel L. Sharp, of the American University, has consented to come down this morning and speak to us on the "Economy of the North European Satellites." You all have his biography; so I will not take time from the period allotted to this lecture to discuss any further why we wanted to get him down here this morning.

You are very welcome to our platform, Professor Sharp.

PROFESSOR SHARP: I am afraid that within the time allotted us, the economies of Poland, Czechoslovakia, and Hungary--with the exception of eastern Germany the most industrialized countries within the European orbit of the Soviet Union--can be discussed only in the most general terms. I suppose it is a good idea to discuss them with particular reference to the contribution which these countries can make to the war potential of the Soviet bloc. Within these limitations it appears important that we not limit ourselves to a mere review of these elements which make up the usual definition of potential--such as natural resources, manpower, and technical facilities--but also that we touch upon the organizational framework and certain other nonmaterial factors which make the resources of these countries available to the Soviet Union within its mobilization needs and plans.

I think a word would first be in order about the political pattern of these countries. I would like to show why it is important and what its connection is with the subject under discussion.

We know that by now the government in eastern Europe is openly Communist, with the residual admixture of nominally non-Communist groups, described in official terminology as "useful transmission belts to the masses." In other words, the Communist Party, which controls the governments of the countries, thinks it is useful to do certain things in certain fields not directly through the Communist Party, but through what I think are very aptly described as useful transmission belts.

Now, this was not the case throughout the area in the immediate postwar period; it was characterized by an impressive amount of wishful thinking on the part of non-Communists and tactical camouflage on the part of the Communists. In the economic field this was reflected in the general impression that a so-called "triple decker economy" has come into existence in eastern Europe, composed of a socialized or

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state-owned sector, a cooperative sector, and a large sector of private initiative. It was presumed by a number of people, both inside and outside the area, that this mixed economy would be permitted to develop harmoniously or move very gradually into something described rather vaguely as socialism.

In the economic life of the countries concerned there was a considerable degree of tolerance of private enterprise in the initial postwar period, when the main aim was quick reconstruction and rehabilitation of the damage that resulted from World War II. Also there were continued political cooperation with the West and certain items of unfinished business which required the good will of the West--reparation claims, peace treaties--some of these countries had been on the side of Germany and peace had to be concluded with them--and UNRRA. We know that Czechoslovakia, Poland, and Yugoslavia received their first shot in the arm from UNRRA assistance, which, as you know, was mostly American-produced and American-financed contributions. All these things required a certain amount of western good will; and I think this kept the Communists from taking over too soon or too swiftly some of these countries.

In addition--and this is important for our purposes--the Soviet Union was not then in a position to assume the role of an economic leader and coordinator of the area. The reconstruction needs of the Soviet Union were given high priority; this involved rather indiscriminate "takings," as they were called, from ex-enemy and ally alike. The groundwork for Soviet economic influence in the area was then laid by the creation, on the basis of so-called German assets, of mixed companies for the exploitation of some vital branches of the national economy. In Hungary such mixed companies include bauxite, oil, steel and iron, chemicals, and aviation. Other interventions were limited to vital sectors which the Soviet Union secured immediately, such as, for instance, the uranium mines of Czechoslovakia. I think the availability of uranium in western Czechoslovakia was well known. However, in general, with the exception of a few vital industries, it suited the Soviet Union not to assume the responsibility for the coordination of the economic activities in the area as a whole, and, but for the ex-enemy countries, influence was rather indirect, through trade agreements which forced a partial revision of the trading pattern of such countries as Poland and Czechoslovakia.

The amazing thing about the Soviet orbit to many observers was the actual lack of coordination at a time when the existence of an over-all master plan for the area was rumored about in the West. To a large extent the Soviet Union came around to direct economic intervention as a result of developments in the international situation. The actual Molotov Plan of coordinated economic activities in the area (with which Molotov may actually have had little or nothing to do) began to be put into operation quite late--I am speaking of the apparent steps

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taken by the Soviet Union--to a large extent in response to the Marshall Plan. This Plan appeared to the Soviet rulers dangerously attractive to such countries as Poland and Czechoslovakia, to the point that the decision was made to forbid their participation in the Plan and its benefits.

But, once they interfered actively in this manner, the Soviet rulers could not avoid the consequences of this step. More propaganda about Soviet aid was not enough; the Soviet Union, with limited and heavily taxed resources, actually had to take over the responsibility for economic coordination in the area, which of necessity included some forms of financial and material assistance to the countries of the area. It is no doubt an exaggeration when a British economist of known leftist tendencies, Miss Doreen Warriner, writes: "Certainly Russia is putting more into eastern Europe than it is taking out"; but it would also be a mistake in a realistic appraisal to accept without qualifications the other extreme, which pictures economic cooperation in eastern Europe as a one-way proposition, with the Soviet Union bleeding its satellites white. I think the picture is much more complicated than that.

Attempts of the Soviet Union to effect integration and a rational division of economic functions within the orbit of its influence and responsibility were opposed to some extent by planners and economic leaders in the countries concerned; they included Communists who had come to think in terms of the national interest of their respective countries rather than in cooperative terms of the area as a whole. (One must admit that Soviet methods, even more than Soviet aims, make one dubious about the cooperative nature of any undertaking which involves Russia.)

The most spectacular opposition came from Yugoslavia. We know from statements and materials published since the break that one of Tito's grievances was the apparent assignment to Yugoslavia of the function of a predominantly extractive producer of raw materials. But similar, though less spectacular, objections were apparently voiced also in other countries. Czechoslovakia, for instance, felt that its economic aims would be much better served by the production of articles which could find markets in the West and secure in return vital machinery for the modernization of the country's plant, rather than by having to make, say, tractors for Bulgaria. However, the Soviet leaders apparently felt that what they termed the division of the world into two opposed camps required tighter political and economic controls over the activities of fringe countries. From this there was only one step to the imposition of the Soviet pattern as an obligatory model to be fully and faithfully copied everywhere in the area. Thus we have no mere socialization of the economies. If by "socialism" we mean state ownership, then the process is complete for all practical purposes. But we see in the area no mere socialization; we have the Bolshevization pattern.

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What are the consequences of this "Bolshevization"? It means the adoption of certain principles and techniques in organization, planning, and production, with a view toward building up rapidly the industrial components of military strength and achievement of the highest degree possible of self-sufficiency.

In the field of planning and executing investment and production policies, this means the discarding of certain traditional notions of harmony. This is especially true about notions that industry must gear its development to the needs of the agricultural part of the economy so as to satisfy the demands for industrial goods of the peasantry; otherwise it will be impossible to make the peasants produce and deliver the food required for the growing cities. From the point of view of Soviet experience, there is no need that such harmony be maintained. From that point of view, if the resistance of the peasantry to the delivery of food without getting a reasonable equivalent in industrial goods is an obstacle to the rapid development of heavy industry, the thing to do is to overcome this obstacle; it can be done by so organizing the peasantry that it will be forced to surrender its grain at prices and on conditions dictated to it by the government, not in accordance with what it could obtain on a free market in a period of increased demand for agricultural produce.

To some extent this is also true of the problem of labor. Instead of considering the demands of labor in a period of expansion as a constant which has to be reckoned with in calculating costs, the thing to do, if one accepts the Soviet pattern, is to organize control over labor in such a fashion, either directly by legislation or indirectly through government-controlled trade-unions, that it will surrender its contribution without obtaining a fair equivalent in real wages. This is not to say that the labor policy is all stick and no carrot; the latter is provided whenever it cannot be helped or when it can be safely done without endangering plans for the production of heavy equipment. The Soviet system of wages--of remuneration for extra production and punishment for nonfulfillment of quotas--and so-called emulation drives are being introduced in the area against considerable resistance.

This question arises: Why is the Soviet pattern being imposed so thoroughly and rather crudely? Is it merely a matter of toadying before the Soviet Union and the genius of its leader? It would be dangerous to think that these patterns are being imposed only for prestige reasons, without regard to their economic importance. The truth is that, within certain limits, the Soviet experience has been successful if one disregards the human cost, the discomfort and privation caused, and realizes that all this was done in order to achieve a rapid increase of production in branches considered vital from a military point of view.

There is a considerable degree of resistance in the area, not only among workers but also among planners and government leaders, to the acceptance of Soviet patterns. The people there may be thinking, even

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if they do not dare argue, that they have a longer tradition of technical experience than the Russians. This line of thinking oversteps the limits of economic considerations. It is a psychological and emotional problem. The way I see it, whatever shortages there are in the area, there is an abundance of one commodity--conceit--mixed with contempt for other nations.

This feeling of superiority over other nations is a reality in the area; it is especially true of the attitude of some of these nations toward the Russians, whom they consider as barbarians. This attitude may be historically justified and it may have been reinforced by the behavior of some individual Russians during and after the war. But I think one has to be careful in classing current Soviet methods in production and organization as backward by comparison with those of Poland and even Czechoslovakia. The Soviet Union has had a unique experience in rapid industrialization under extremely difficult conditions. In sheer volume of production it has been on the whole a successful experience if we bear in mind what they wanted, and that is, that not welfare and not any other consideration but military preparedness was the aim. It is no doubt true that the problems of eastern Europe can be solved in a different way, and, above all, at a more reasonable human cost; but, once the Soviet pattern of thinking is accepted (or imposed), the problems facing Poland, or Czechoslovakia, or Hungary, are not different at present from those which confronted the Soviet Union in its period of rapid industrialization. Consequently the methods used could not be basically different, even if the planning offices and key economic organizations in the area had not been heavily staffed, as they seem to be, with Soviet specialists.

The result of Soviet influence and pressure on eastern Europe is increasingly reflected in the stepped-up production goals of the current economic plans of the area; in the stress on maximization of production at all cost; in the subordination of all other aims, including those of social welfare, to needs of a military-industrial nature; in the utmost utilization of resources; in adapting production to poor-grade raw materials which, however, have the advantage of being available locally or within the exchange area of the Soviet bloc, and so on. There is no point in saying that Swedish ore is better than local Polish ore, because the plans call for a situation where Swedish ore may not be available. In the drive toward greater self-sufficiency, especially in raw materials, elements of cost are subordinated to the main goal. This is the result of both immediate needs (such as the shortage of copper caused by the cessation of imports from Yugoslavia) and a basic outlook as a result of which the outside world is viewed as committed to hostility toward Communist states.

This attitude is reflected, above all, in the raw material policy of the area, where the principle of enlarging the existing domestic raw material base plays an important role in current endeavors. The Soviet

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example is not wholly applicable in the area, because in the case of the Soviet Union it was only in part a matter of starting or enlarging the exploitation of available and known resources. Energetic geological surveys of Asiatic Russia have led to the discovery of mineral resources not previously reckoned with. Poland, Czechoslovakia, and Hungary have been extensively surveyed; their endowment in natural resources is incomparably poorer than that of the Soviet Union. There the problem is of exploiting known resources previously neglected because of the non-economic nature of the exploitation by comparison with the availability of the same products on the world market.

To cite one example, which I have already mentioned, copper is recognized as a rather important metal. All three countries that we have under consideration have been importers of copper, from the United States and also from Yugoslavia. But there are at present obvious difficulties in this respect, and as a result we see a wild scramble for copper, which is known to exist in Poland and in Hungary. Poland had long abandoned the exploitation of the copper in the hills of central Poland, around Kielce, because of a very low copper content of the rock. Now there is much talk about copper, described as "Poland's newest raw material" and "the pet of our mining industry" by Hilary Minc, the economic boss of Poland. In addition to the long-abandoned mines in central Poland, there are at present within the territory of postwar Poland copper-yielding slates in former German territory, in Lower Silesia. According to official Polish figures, Poland is to reach a copper-ore extraction of 3.2 million tons yearly at the end of the current planning period (that is, 1955). This figure is, of course, by no means as impressive as it may appear, because of the extremely low-copper content. Actual progress was described as disappointing in January 1951; but care should be taken not to be misled by such statements, which may be aimed at goading on the workers to higher production.

Since we are on the subject of copper, one should mention that Hungary, too, has some copper deposits, near Szekesfehervar, southwest of Budapest, in addition to the Recsk mine southeast of Budapest, in the Matra Mountains, which produced small quantities of copper before the war, less than 2 percent of the quantity imported by them.

Of course, if we turn our attention to the mineral resources of the area, the main mineral asset of the area is coal. It is concentrated mainly in the wedge-shaped area stretching from somewhat west of Cracow in Poland toward Gliwice in former German territory and Olomouc in Czechoslovakia. The reserves of this so-called Dombrowa-Silesia Basin (or the Polish Basin) have been estimated at anywhere from 67 to 95 billion tons (depending on the depth included in the estimates: 1,000 meters in the first case, 1,200 in the second). In addition to the Ostrava-Karvinna fields on the Czech side, which are part of the Polish Basin, Czechoslovakia has some coal in the areas of Kladno and Pilsen in western Bohemia. A larger percentage of the Czech coal is made into coke than is

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the case with Polish coal. Both compare unfavorably with the quality of western German coal. Some of the mines acquired by Poland in former German territory have a high percentage of coking coal. Poland has produced 5.8 million tons of coke in 1949 and Czechoslovakia 6.5 million tons. A substantial increase seems to have been achieved in Poland in 1950.

Now, the coal situation in Hungary is very different from that in Poland and Czechoslovakia in that the deposits are scattered rather than concentrated, the deposits being divided over 14 districts. Hungary has predominantly brown coal and lignite rather than bituminous coal. Only the coal from the Mecsek (or Pecs) fields in southern Hungary is suitable for the making of metallurgical grade coke.

Needless to say, the drive to increase the extraction of coal in the area looms large in current plans and is the subject of special attention. Stepped-up Polish plans call for the extraction of 100 million tons in 1955 (against an estimated 75 million actually mined in 1950); Czechoslovakia is to mine more than 50 million tons by 1953, and Hungary 18.5 million tons by 1954. The production goal is to be attained by raising productivity of labor (which admittedly has not yet reached the highest prewar level), by the introduction of new methods and machinery, and finally by opening to exploitation new mines.

The Soviet example may be quite useful in this field, in which Russia has achieved, to quote an American expert, "a major technical revolution." (According to Harry Schwartz, by 1938 the USSR claimed that 99 percent of its coal was mined by mechanical methods.) As is frequently the case in the Soviet Union, this mechanization relates to the main process, while many activities continue to be executed by hand. There has been a mention of the introduction in Poland and elsewhere in the area of Soviet-type "coal digging combines." It is also pointed out currently that the mechanization of some functions will make possible the employment of women in what has ceased to be hard labor, at least in the Polish propaganda. We will return to this new privilege of Polish women in a moment.

Let us first pass in quick review the other natural resources of the area.

Iron ore is insufficient and of low grade. The area is a traditional importer of iron ore for the needs of its steel industries. Current efforts go in the direction of retaining as long as possible imports of high-grade ore from Sweden, of developing imports from the Soviet Union, but also of developing the exploitation of domestic ores. Poland, for instance, aims at reaching the goal of 3 million tons of iron ore by 1955, which means almost four times more than was mined in 1949. Plans call for the activation of 35 iron ore mines. Czechoslovak plans for

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iron ore extraction were initially less ambitious; within a scheme for division of labor within the Soviet bloc, Czechoslovakia was to concentrate on development of the manufacturing facilities of its engineering industries rather than on extraction; however, the possibility that Swedish ore might not be available and the transportation problem connected with the long haul of iron ore from the Soviet Union have caused a shift in the direction of stepping up targets for iron ore extraction in Czechoslovakia. With all this, it will require an effort to reach the target of 1.4 million tons for 1953. Current production is estimated at about 1 million tons. New mines are being opened, mostly in south-eastern Slovakia. In Hungary about one-half the need for iron ore was satisfied domestically in the last five years before the war. An increase in the targets of steel production will necessitate further development of domestic mines and increased imports.

Now a word about oil--Poland has lost its main oil fields in eastern Galicia to the Soviet Union, but there are some fields in the central Carpathian region. Attempts are being made to bring the production of crude oil up to 394,000 tons annually by 1955; however, Poland will have to rely for the solution of its liquid fuel problem on imports from Rumania and the Soviet Union, in addition to the further development of synthetic fuel production for which the Germans have laid the technical foundation by building a plant, which was left undamaged in Silesia, at Blachownia. Czechoslovakia satisfies its needs from the production of the synthetic gasoline plant at Mosty, whose output is a secret. I have the figures for 1948; the production target was 82,000 tons, and it apparently was not met at the time.

Now, the development of the production of oil in Hungary (which, incidentally, was done primarily by an American company, a subsidiary of Standard Oil of New Jersey, and by American skill) made impressive progress in the late thirties and during the war. The main field at Budafapuszta produced an estimated 2 million barrels in 1941, while the nearby field at Lovaszi produced about a million barrels in 1941. The fields are connected by an eight-inch pipeline with the capital and the industrial center of Budapest, a distance of some 130 miles.

Of other important raw materials in the area, one should mention Polish zinc and Hungarian bauxite. Poland has the most important zinc deposits in Europe and large lead deposits. They have been increased by the acquisition of former German territory, which brought the entire Giesche complex (once American-controlled) under one sovereignty. Maximum production before the war (1930) was 462 thousand tons for zinc and lead jointly. In 1949 actual production had not reached the comparatively low level of production for 1938. The capacity of the existing mines is more than 1.2 million tons a year.

Hungary is believed to possess the largest bauxite reserves in the world, estimated in 1938 at over a quarter of a billion tons, to which must be added the deposits discovered during the war in the Boerzoeny

Mountains, on the Czechoslovakian border. Production reached a million tons in 1943, but dropped considerably in the postwar period and has been slow in picking up. In 1948 it was some 340,000 tons. Of course we have no more recent figures. This is in part due to the fact that there is a Soviet-Hungarian company in control.

To sum up this sketchy review of the raw material situation: The countries under discussion are not very richly endowed in raw materials, certainly not to the point of making them self-sufficient. One striking exception is coal. There is a noticeable effort to enlarge the raw material base of the area, to produce synthetically substitutes for not-available resources, such as gasoline, rubber, synthetic fibers, etc.

If we turn now from mining to the output of manufacturing industries, the problem which commands our attention, in connection with the possible use of these industries to the Soviet Union, is that of their location. I think that is a problem to which we should give some thought. If we look at the map, we can realize that the industries of Poland and Czechoslovakia and also those of Hungary are vulnerable by definition.

There is a very interesting piece of speculation as to why the Soviet Union should help develop the industrial potential of these countries. I am afraid that all I would engage in would be an extremely uninformed and not very scientific speculation. Therefore, I will abstain. I think it is a very fascinating question, however. If I were engaged in military planning, I would devote some attention to finding an answer to why and to what extent the Soviet Union has developed the industrial potential of an area in which everything is so strikingly vulnerable to attack. But since the war you will find that, quite apart from the Soviet plans, there is within the area the problem of exactly what effect the development of the industries is going to have on the social resources as well as the economic and strategic picture.

Various tentative answers have been given to this question. It has been suggested that plans may be based on the assumption of an offensive advance into western Europe; the Polish-Czechoslovak industrial region would then be a very useful advanced industrial base. Another consideration may be the assumption of a certain period of peace during which the plants, favorably located from the point of view of availability of coal and of skilled labor (even if deficient in ores) may make an important contribution. Still another, and to my mind a most plausible assumption, is that the element of vulnerability is being disregarded almost completely, for the very simple reason that technological advance has made the creation of an even relatively sheltered industrial area anywhere in Europe an impossibility. In other words, classic considerations, without the element of vulnerability, seem to determine the locational policies in the area.

Within these limitations there is, however, noticeable trend toward a more even distribution of industrial facilities (especially those not

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dependent on the proximity of bulky raw materials) within the countries concerned. The reason is at least in part of a social nature, since the Communist leaders believe that the industrial proletariat is their main ally and the industrialization of a region means therefore the possibility of enlarging the popular base of support for the regime. This is the case, for instance, in Czechoslovakia, where plans call for the building-up of the industrial facilities of the more backward Slovak part of the country. In Poland long-range plans call for the building-up, outside the present highly industrialized regions (which comprise Upper and Lower Silesia and the city of Lodz, the main textile center), new industrial regions--(a) around Cracow, specializing in metallurgical and chemical (synthetics) production; (b) in and around Warsaw, whose industrial facilities in metal and electrotechnical industries are to be restored and enlarged; (c) the region of Czestochowa, with metallurgical establishments and ore mines; (d) the Kujawy industrial district, based primarily on chemicals; and (e) the Kielce region--mining and metal works.

We are unable to go here into a detailed analysis of the manufacturing facilities of the countries under review. I want just to make a few general comments.

The accent is, of course, on the development of heavy industries. In the revised versions of the current plans, which are obviously geared to a stepped-up industrial mobilization program, the ratio of the planned output of capital goods as against consumer goods has been raised. In Czechoslovakia it was originally 66:50, but it was changed to 88:50. For the year 1950 the output of heavy industry was scheduled to increase by 25 percent, but the target was revised and raised to 34.9 percent. Of course, one could probably squeeze out a lot of water from these official figures, and I am in no position to check their accuracy and the degree of fulfillment. I cite them as indications of a trend. In Poland the part played by the production of capital goods is supposed to rise from 59.1 percent of the total industrial output in 1949 to 63.5 percent in 1955; for machine building the index of growth in the current version of the plan is 364 (with 1949 as 100), an admittedly ambitious and difficult task, which includes plans for the production of a number of items of equipment not previously produced in Poland. In Hungary the gross output of engineering industries is supposed to increase 2.8 times over 1949 and more than 4 times over 1938 (in the latter figure there may be concealed an element of inflationary bias which requires deflating in order to give the real picture). The share of the industries producing means of production is to be 70 percent of the total production value of industry.

At the basis of the current attempt to build up heavy industry there is the drive to increase the steel output. Steel production in Poland was 2.3 million tons in 1949, and the target for 1955 (after upward revision) is 4.6 million tons. Czechoslovakia's steel output

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was 2.65 million tons in 1948, and the target for 1953 is 3.5 million tons. Hungarian output was reported at 890 thousand tons in 1949, and the plan calls for 1.6 million tons in 1954.

If we consider the total steel output of the Soviet Union, this would mean a considerable addition, percentagewise, to the steel produced by the area as a whole. Unless, however, the problem of raw materials is solved by the countries under consideration, there is an element of plausibility in the argument advanced by Dimitri Shimkin of Harvard University (in two articles "Steel behind the Iron Curtain" in "Iron Age," 3 and 10 August 1950) that the development of steel production in eastern Europe will constitute a drain on Soviet resources. For instance, Czechoslovakia was to receive, according to Shimkin, about 1.3 million tons of iron ore from the Soviet Union in 1950. Along with Soviet blueprints for the building of a new steel plant in the Cracow region (widely publicized as the export of Soviet know-how) there goes no doubt also the imposition of Soviet steelmaking methods, which, in spite of certain shortcomings, may nevertheless be advantageous to the increase of production. If I may once more refer to Shimkin's data, productivity of the Soviet steel industry, estimated at 43 percent of that of the United States, is quite high by comparison with other branches of Soviet industry, where it is only about 20 to 25 percent of the United States. These countries have, in spite of the small output in reference to the United States, profited somewhat from the Soviet experience.

Is there a clear pattern of integration and regional specialization in the area, or does each of the countries concerned expect to produce everything, as it may sometimes appear from propaganda statements? An effort at coordination was started in 1947 by the conclusion of an agreement between Poland and Czechoslovakia; one of the purposes of the agreement was the avoidance of duplication of effort, the common utilization of some resources and joint building of plants, such as power stations and so on. There are indications that eastern Germany is being drawn into these coordinated plans. However, uncertainty over the political future of Germany may make a short-range, predatory exploitation of its facilities more desirable from the point of view of the Soviet bloc than a long-range integration, which would necessitate a shift in Polish and Czechoslovak plans, based in part on the elimination of Germany. In general Czechoslovakia is apparently expected to be the main producer of heavy machinery and of precision instruments in the area, in addition to putting the full capacity of its armament works at the disposal of the Soviet Union. Poland is to increase its steelmaking capacity, possibly to the point of supplying the needs of the other smaller countries of the area in addition to its own. The textile industries of Poland and Czechoslovakia are already engaged in production for the Soviet Union, mainly on the basis of agreements whereby the Soviet Union delivers raw materials, which are processed in the Polish and Czech plants; payment is in the form of retaining a certain percentage of the raw materials for domestic use. Hungary seems to concentrate on the production of electrotechnical equipment and on building up its chemical and

pharmaceutical industry. The latter is true also of Poland, where the relative importance of the chemical industry is to grow from 8.8 percent of total industrial production in 1949 to 13.1 percent in 1955. This growth will be due mainly to the development of various synthetic materials.

The manpower problem is, of course, of basic importance in determining the war potential of an area; we can only say a word or two about it. The general population picture for the area as a whole is favorable. Poland belongs to the group of countries with a rapid, although slowing-down, population growth. It is true that Poland has lost to the Soviet Union the area of highest population increase (the eastern half of the country); but postwar statistics, although fragmentary, suggest for the time being a continuation of the prewar trend rather than spectacular change. The general population of Poland has decreased from over 34 million in 1939 to some 24.5 million now, but this loss is (with the exception of the extermination of the Jewish population) not a net loss for the area as a whole, because the Soviet Union has acquired what Poland has lost.

Czechoslovakia's population has decreased from over 15 million in 1937 to a little over 12 million in 1947, mainly as a result of the expulsion of the Sudeten Germans and of the detachment of the Carpatho-Ukraine by the Soviet Union. In Czechoslovakia this change in population has created a real problem in terms of effective manpower in industry, because of the loss of the skills of the Sudeten-German population. Hungary's population was a little over 9 million in 1937 and it was reported as 9,201,000 in the census taken at the end of 1948.

The manpower problem of the area is not one of absolute availability of labor, but of the transfer from agricultural and other nonindustrial pursuits to industry. This process began already in the interwar period, and it has been accelerated after the war. However, there are various obstacles, such as the low cultural level of part of the rural population, inertia, lack of attractive incentives, and so on. The mining industries seem to have a particularly difficult manpower problem, but its sources appear to be largely the same as elsewhere in the Western World—the reluctance of young people to go into the mines. The shifting of occupations is an important problem; and the existing, still largely voluntary, controls may prove insufficient to check it.

A trend recently accentuated in the area, in addition to the intensive training of young people in technical skills, is the movement of housewives into gainful employment, either directly into industry, or to release men for industrial occupations. As usual, these organized drives have their serious and less serious aspects. Thus I read in a Czechoslovak publication that "as part of the drive to release men for important jobs in industry there has been opened in Prague a school to train women barbers. Seventy girls are now learning the fundamentals of haircutting and shaving." Yet this is merely a funny-side product of a general trend to draw women into employment.

In Czechoslovakia the number of women in industry already constitutes about 32 percent of the total manpower; in Poland (on the basis of social insurance statistics for March 1949) it was 26.9 percent. Recently the Women's League of Poland was enlisted in a campaign to convince women to take up gainful employment. This is, of course, presented as a privilege and achievement of equality by women; it was triumphantly announced that women will henceforth be "entitled" to work in such occupations as mining. Existing laws for the protection of women were changed to make this possible.

One of the most effective devices used by the governments of the area to force women to take up employment is, in addition to propaganda and social pressure, the manipulation of wages and costs of living so that more than one member of the family is forced to work for a living. In this respect, too, the countries under consideration have adopted tried methods of the Soviet Union, where the enlistment of women in industry has helped considerably to solve the manpower problem, especially during the war. (In 1942 women constituted 52 percent of the total employed in the Soviet Union.)

This concludes what I frankly consider a most unsatisfactory and very general review of the problems connected with the economic development of some of the European satellites of the Soviet Union. The main point I was trying to make is that, for better or for worse, the area is adopting the Soviet way of solving the problem of rapid industrialization, and that the program is being carried out against some residual resistance, which the governments can overcome. I have left out many points which should be discussed in more detail. Some points probably have to be answered by more qualified observers with more up-to-date information; others I shall try to answer if they are brought up in the question period.

QUESTION: You covered what we might expect these satellites to contribute to the Soviet bloc. Can you turn the thing around now and tell us what in your view are the major weaknesses of the Soviet Union proper irrespective of these particular countries, things which they may have to get along without or get from outside the satellites?

PROFESSOR SHARP: I think it would be unfair to ask me that question. It would get me into another course of lecturing.

If I were to think of the weaknesses within the Soviet bloc, I mean, the weaknesses which the contributions of these satellites could help to overcome, I could think of the contributions of some medium or light industries, for instance, textiles.

This is very important, for instance, in the labor problem of the Soviet Union. It has been noticed by recent observers that the standard of living of the Soviets has gone up considerably. One of the explanations of that is that the Soviet Union, because of its ability to exploit

the industries of Czechoslovakia and Poland, is increasing the supply of consumer goods, such as shoes and textiles, which is a very important contribution in the production of defense goods in the Soviet Union.

QUESTION: I wonder if you would tell us something about the transportation system in this area with particular reference to the question of the ability of the two systems to be matched, that is, the broad-gauge and the narrow-gauge railroads.

PROFESSOR SHARP: The transportation system of Czechoslovakia, for instance, which, so far as I know, is essentially rail transport, is being reoriented so as to improve its connections with the Soviet Union. It is not an easy problem, because of the mountains and so on.

Now, broad-gauge and narrow-gauge railroads can relatively easily be either broadened or narrowed, as the case may be. In this case they would be broadened. There was, as a matter of fact, one line down into southern Poland which was in exploitation. Whether the gauge has been changed back to standard width I don't know. The general rehabilitation of transportation in this area, I think, is progressing quite satisfactorily. From my own observation when I was in Poland in 1948, there was a very striking shortage of rolling stock; yet generally the lines were all repaired and the rebuilding of bridges was being tackled. The Soviets were channeling their efforts, from what I saw, into replacing the bridges over the Vistula on a concrete reinforced basis, which would show a certain concern with east-west traffic.

Of course, detailed information is nowhere available. Among other things which they adopted from the Soviet Union they also adopted their way of expressing everything in percentages. As a result the current joke at present in Poland is: "When does the train for Cracow leave?" "It leaves 20 percent later than the train for Lodz."

QUESTION: Would you venture a guess as to whether, despite the trade with the Soviet Union, any development of industry is visible in Rumania?

PROFESSOR SHARP: Yes. I think it has been agreed that I am not supposed to talk about Rumania. But I would say, yes. There are within certain patterns signs of industrial development in Rumania, within the over-all plan. I think, for instance, the steel capacity of Rumania is supposed to be built up. There are some extractive possibilities, too. I think the most neglected industrially, if I may venture out of my limited field, is Bulgaria, not to mention Albania. Bulgaria would probably be the most neglected. Of course Rumania is still trying to increase its oil output, but it has not been very successful so far.

QUESTION: Is industry in Poland such as to mostly provide Russia with finished products that it can stockpile, or is it of such a nature

that its capacity is becoming more and more necessary for Russia if it should have to fight?

PROFESSOR SHARP: I think it is both. There are certain arrangements for deliveries between Poland and the Soviet Union, which, insofar as has been announced, until 1958 show no interest in short-term exploitation of whatever finished products could be produced. It would be building up capacity. As I say, additional capacity of 4.5 to 5 million tons of steel is no negligible asset in the face of total Soviet production. So, if I understand it correctly, your question is whether it is short-range or long-range planning. There is no indication that the Soviets have any doubt of their ability to hold the area. I think quite the contrary is the case. All the indications are now that there is a certain trend toward a long-range plan, which presumably is based on the possibility of retaining that area. Now, whether or not this applies to eastern Germany is again another problem. There are signs of the integration of eastern Germany. That is important, because this means drawing eastern Germany into this Polish-Czechoslovakian system, which was initiated in 1947. But there is a problem that eastern Germany may have to be abandoned, which would shift the emphasis on short-term exploitation rather than building up its capacity.

QUESTION: There are considerable armies in being in Poland and Czechoslovakia. Would you like to tell us to what extent these forces are being supported or can be supported by their own industries and to what extent they are getting their military supplies from Soviet Russia proper?

PROFESSOR SHARP: If I had the full information to answer that question, I probably would be a very valuable citizen in Washington, D. C. One can only say that in the initial period from all the indications they were using Soviet equipment throughout. That was for purposes of standardization. In 1948 it was a very simple matter to go into a book store in Warsaw and buy a book issued by the Ministry of Defense and entitled "Political Education of the Army." It was a two-year course. It contained a catalog of other publications available. I don't think it would be available now. The book was a list of training manuals from which you could obtain an idea of the equipment used by the Polish Army, and it was throughout Soviet equipment. There was work going on in Czechoslovakia and also some in Poland in armament plants; they were concentrated in the so-called "security belt" in the southern part of Poland. It was called before the war a "security belt" because in a war with Germany it was expected to offer the degree of security that you could have in any of these countries. There are some facilities which were used during the war by the Germans that have no doubt contributed considerably toward building up the Polish and other armies.

I would hesitate to call these armies considerable, even by comparison with their prewar level. I think, so far as armies go, this is the least of the troubles facing the Soviets now. They are more interested in different plans for manpower than in taking a large part of it

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into the army. It is not reliable. It is much better to employ them in industry. But I am just offering my private and uninformed opinions.

QUESTION: How do they stand in the agricultural field as to being able to supply certain things that they grow that would be vitally needed by Russia in time of war?

PROFESSOR SHARP: I have not mentioned the agricultural problem at all, because I felt that this was an entirely different field. The area is not a food-deficit area. It can take care of its needs; and can even under certain circumstances, but not always, export some.

Now, the collectivization of agriculture is definitely aimed not so much at increasing the absolute output, although it does that to some extent, but at making it possible for the government to control the output. They are being pressed by the Soviets in their plans to grow things which are important to them. For instance, they are beginning to grow cotton in Hungary. I don't know how successful it is. But the emphasis in eastern Europe is shifting from grain to industrial plants. The Soviet Union does not need their contributions. To some extent certain types of grain are still supplied by the Soviet Union to the area. I think the plan is to move as much manpower as possible from agriculture and concentrate it on industry. I think the Russians can take care of themselves in food and may even contribute some of their products to the area. One exception may be sugar, which used to be abundant in Poland and Czechoslovakia. That may be one contribution. We must not think in terms of the immediate postwar period, when Russia imported everything from everywhere, especially what it didn't have to pay for. I think that in terms of food the picture would be of little importance from the point of view of the Russians.

QUESTION: Do you think that there still exist today any strong revolutionary feelings within countries like Poland and Czechoslovakia? Has Russia been able to stamp out those divergences of opinions and views and ways of life that they might have against the Russians there?

PROFESSOR SHARP: No; it has not. This is a subject on which I spend much of my time. I am very much interested in it. It seems to me important not to be sober about it and not to mislead ourselves by overemphasizing the weight of this factor. You will find that the feelings of the people, no matter how strong, are of little or no value unless there is strong stimulation from the outside. What I am trying to say is that what the individual worker feels and how he thinks about it is not very decisively important in determining output. There are ways, maybe drastic ways, maybe Communist ways, but there are ways for a modern totalitarian government, and--for that matter--for any modern industrial state, to overcome the private feelings of its people. A very good illustration is this: We were surprised to find in World War II that the Czechs worked very nicely for the Germans. I don't say there was no resistance or that

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there was no sabotage, but on the whole the people worked very well. They did that because they had to eat and because the Germans had a way of organizing them so that they had to work. Therefore, unless, as I say, there is potent stimulation from the outside (for instance, if we should place a good part of General Eisenhower's army directly in front of Poland) I would not expect any substantial deficit in the output as a result of the feeling of the people.

COLONEL RINDLAUB: There will be further opportunity this afternoon for extending this discussion period. You will be able to ask more questions at that time.

I thank you very much, Professor Sharp, for laying such a wide and valuable foundation for our discussion this afternoon.

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