Towards Higher Labour Productivity in the Countries of Western Europe

by

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As evidence of the growing realisation that increased activity is the most promising source of higher living standards might be cited the recent establishment, at the instance of the Organisation for European Economic Co-operation, of national productivity centres in various European countries for the purpose of stimulating and developing efforts towards productivity. In the following article Mr. Fourastié, who as Chairman of the O.E.E.C. Subcommittee for Productivity Studies has taken an active part in this work, gives an account of the establishment and working of the various productivity centres.

DURING the past three years a new term has emerged in the economic and social sciences, or rather has come to bulk much larger than formerly—the term "productivity". Such a rapid development has naturally led to obscurities, misunderstandings and misconceptions. An instrument such as language, which has come down to us after slow evolution through the ages with changes which are so slight in the span of a single life but so radical in the span of human history does not readily lend itself to the widespread use of new words and even less to swift modification of the sense of old words.

The recent vogue of the word " productivity " results from the union of two fundamental currents of thought which require some analysis if confusion, absurdities and mistakes are to be avoided. On the one hand the notion of productivity has grown out of the study and researches of the engineers ; on the other hand it is the fruit of the study and researches of the economists and sociologists. These two streams of activities could only meet at a major cross-

roads : productivity is the Times Square or better still the Place de la Concorde of a great maze of streets and avenues representing the countless branches of the physical and human sciences.

The physical sciences, on which the work of the engineer is based and which are the driving force behind the technical progress which is changing the face of the world, have during the past 50 years evolved the theory and practice of scientific management. The aim of the engineer is to produce steadily increasing quantities at steadily decreasing cost, *i.e.*, with a constantly diminishing expenditure of energy and labour ; the success of the engineer is accordingly measured by the economy of the means used to achieve a specific object. It was in 1899 that the word productivity in this sense officially appeared in the language of industry, and in the United States this official appearance took the form of a statistical index established by the Bureau of Labor Statistics of the Federal Department of Labor. This index makes it possible to follow year by year and industry by industry the savings in time achieved by producers in the manufacture of a constant and specific volume of goods. Essentially, therefore, it is a technical check upon manufacture, designed and calculated by engineers for engineers and based on technological concepts of technical progress and scientific management. From 1899 to the present day this technological concept of productivity has been further explored and extended ; more sensitive methods of calculation have been devised and many different aspects of the general phenomenon have been isolated and analysed ; lastly, practical use of these measures has been made by an increasing number of firms, trades and nations. The oldest and most outstanding example of the application on a national scale of these technological measures on behalf of productivity is contained in the Soviet five-year plans, which began in 1929.

Parallel, however, with the researches of the engineers, although much later, the economists and the sociologists were coming, by another path, to perceive the key position held by productivity in their own fields. The engineers sought to improve their working methods, increase the efficiency of their firms, lower production costs and increase profits ; the sociologists sought to explain the world around them and to describe, and if possible understand and forecast, contemporary economic and social developments. Was there *a priori* the slightest relation between these two forms of research and preoccupation ? Most men were and still are sceptical, the engineer being unaware of the economist and the economist being unaware of the engineer. Experience, however, has settled the question : while many are still unaware of it, the fact remains that factory workers and office workers, labourers and intellectuals, men of action and men of thought, men of finance and men of law,

engineers and sociologists, coming from every quarter of the great city, have all met at the crossroads of productivity.

This meeting was certainly not fortuitous and was indeed the outcome of some of the most important forces in the world today, but this is not an aspect that calls for elaboration here.[1] Its consequences, however, require some analysis. If researches differing as widely in spirit and purpose as those which have been briefly linked with the words " engineer " and " sociologist " have finally demonstrated the vital importance of the same concept, it is obvious that this concept must be one of the keys to an understanding of the modern world.

The fusion of these two movements has in fact supplied the hitherto absent link between technical studies and social studies and between the physical sciences and the human sciences. The concept of productivity is, therefore, essential to an understanding of humanity itself.

First, however, this fusion of the technical and sociological movements had to take place and a careful comparison and synthesis made without doing violence to either element. This essential task was performed by the Subcommittee on Productivity set up by the Organisation for European Economic Co-operation on the initiative of the Working Party on Scientific and Technical Questions.[2]

This Subcommittee included engineers and men trained in scientific management such as Mr. Nicolaidis (Greece), Dr. Rossi (Italy), Mr. Chapuis (Switzerland), Dr. Harten (Germany) and economists such as Mr. Deurinck (Belgium), Dr. Rostas (Great Britain) and the writer of this article.

It was from the first two years of the Subcommittee's studies and discussions that the modern concept of productivity emerged to stimulate the effort now undertaken by all the nations belonging to the O.E.E.C.

This effort will be briefly described here in three sections. The first outlines the general principles behind the effort ; the second describes the administrative machinery employed ; and the third, after noting the common features of the 17 European national productivity centres, gives a cursory indication of the features peculiar to certain nations.

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[1] Cf. Jean FOURASTIÉ : *Le grand espoir du XXe siècle*, Third Edition (Presses universitaires de France, Paris).

[2] Particular tribute should be paid in this connection to Dr. Alexander King, British delegate and Chairman of the Working Party, to Mr. Patrick C. Young, Secretary of the Working Party, and to Mr. James Silbermann of the Bureau of Labor Statistics, who is mentioned later.

General Principles behind the European Effort for Higher Productivity

It will be clear from the foregoing that this effort is neither technocratic nor even technical but is based first and foremost upon social and human values.

This is clearly brought out not only by the discussions of the committee itself but also by the decisions, instructions or recommendations sent by it to the national centres. It is demonstrated, for example, by the recommendation to Governments on the teaching of productivity and above all by the establishment of working parties on human relations, work study and the distribution of national income, etc. (An I.L.O. representative sits as an observer on the first two of these working parties.) Lastly, as will be seen later, this concern for social and human values determines the methods and objectives of the national centres.

Technique itself is never regarded as the end of the action undertaken. Technique is no more than a means of stimulating economic progress, and economics are not an end in themselves but merely a means of achieving social progress.

The sole purpose of the European effort towards higher productivity is thus the achievement of social progress. No problem or method is examined solely from the standpoint of its technical or economic effects ; the heart of the problem is the individual, and the consequences of any action must be studied not only as they affect the individual at work but also as they affect him away from his work. In other words, the viewpoint of the engineer and the technician must always be supplemented by that of the economist and the sociologist.

Social progress involves first and foremost a rise in the living standards and purchasing power of wage earners. On this point our ideas are now quite clear. We know that higher over-all national productivity is essential under both capitalist and collectivist systems if purchasing power is to be expanded and we know, too, that this progress does not simply involve a general and widespread improvement in living standards but has, in varying degree, direct and definite repercussions upon all production and all consumption. We know, for example, that there has been no increase in purchasing power in any nation in terms of such items of tertiary consumption as a man's haircut, because productivity in this case is the same all over the world as it was 50 years ago. We know on the other hand that there have been very substantial gains in purchasing power with regard to items of secondary consumption, in which increases in productivity due to technical progress have been very sharp, of the order, for example, of 1 to 40 in France between

1895 and 1952 for a unit of electricity. We also know that the course of evolution has brought about geographical differences, so that while the barber's failure to progress means that purchasing power is identical in New York, Paris and Moscow (a haircut costing a labourer one hour's wage), the swift increase in productivity in the electrical industry has resulted in the purchasing power of a labourer's wage in terms of lighting units being 10 times as high in Ottawa as in Paris and three times as high in Paris as in Budapest.[1]

Despite the importance of this objective of raising living standards and the definite effects exercised by productivity on purchasing power, social progress cannot be measured by this yardstick alone. Account must be taken not only of the standard of life but also of the way of life.

Any study of ways of life will deal with such consequences of higher productivity as the living conditions of the individual outside his work—housing, transport, recreation, hours of work, education, family and social life, etc. This is a vast and almost unexplored field which the productivity centres are now carefully studying in the course of their practical experiments ; there is no net progress if a technical improvement in the factory leads to adverse human consequences in the town.

Above all, however, investigations into ways of life will deal with the behaviour of man at work. The discussions on this subject held by the Organisation for European Economic Co-operation often showed strong signs of the influence of our leading sociologists, such as Mr. Georges Friedmann.[2]

It was clear from the first that higher productivity must be accompanied by a constant or diminishing degree of fatigue [3] ; an increase must never be obtained at the price of greater fatigue or a faster working pace ; otherwise there would be no genuine social progress ; moreover, any economic progress which might be secured would not be permanent.

The action undertaken is essentially long-term and often very long-term. It will require more than a few months or even a few years to raise a nation in the present position of Greece, Portugal or France to the level of the United States. Not only must care be taken not to lose with one hand what is gained with the other but it must be appreciated that social progress cannot be the work of a minority : the people as a whole produces what it consumes ;

[1] Cf. Jean FOURASTIÉ : *La Productivité* (Presses universitaires de France, Paris), p. 26.

[2] Cf. Georges FRIEDMANN : *Problèmes humains du machinisme industriel* (Plon, Paris).

[3] Cf. O.E.E.C. : *Terminology of Productivity* (Paris, December 1951).

it is impossible for a minority to produce enough for all. This means that the mass of the workers as well as the élite must steadily improve its production methods and with this in view it must acquire technical education, adopt modern methods, abandon its Malthusian outlook and acquire a spirit of initiative and a scientific attitude. The habit of routine, which is usually all the more serious because it is unconscious, and the conservatism of the employing class form obstacles which are particularly difficult to remove.

Particular attention must therefore be paid to the attitudes of the individual at work, not merely in their transient manifestations (suffering or satisfaction, hopes or fears, confidence or discouragement, pride or humiliation, fatigue or normal activity) but in their more lasting manifestations (initiative or routine, faith or fear respecting the future, disillusionment with society, etc.). As I was privileged to state during Swiss Productivity Week at Zurich, action must be pervaded by the realisation that a man does not merely work in a factory for a wage but spends two-thirds of his waking hours there and, willingly or not, expends there the better part of his energies and performs his main social function in life : a man does not merely earn his living in a factory, he lives in it.

Administrative Machinery of the European Productivity Centres

The purpose of the productivity centres is, therefore, social progress on a national scale. They are chiefly concerned with human values, and their desire to give full weight to scientific, technical, economic, moral and sociological values has led them to adopt all more or less the same forms and methods.

In constitution the European productivity centres are frequently non-profit-making associations comprising private individuals and trade unions (as in Austria, Belgium, Switzerland, etc.) ; several, however, are public bodies (as in Italy and Denmark) or have a mixed constitution, with a public policy-making body and a private executive agency (*e.g.*, in France). From the social standpoint, however, the essential fact is that all the centres are guided and administered by committees, which may be bipartite (employers' and workers' organisations), tripartite (Government, employers' and workers' organisations) or quadripartite (Government, employers' and workers' organisations and persons from academic life).

In all cases the trade unions have substantial representation in these centres ; usually the most representative trade unions do in fact play an active part ; in France and Italy, however, the big left-wing union organisations have refused to participate.

Their refusal is due to the American inspiration of the European drive for higher productivity, and it is true that one of the most important aspects of the work of the centres has been the despatch of missions to the United States, while quite often the budgets of the centres receive substantial contributions from the counterpart funds of United States assistance (E.C.A., now M.S.A.).

It is also true that the majority of the European productivity centres were set up under the impulse of United States technical assistance. This is proved by the fact that despite this assistance and the information made available over the past three years the centres of some nations are still in their early stages (Greece, Portugal and Turkey). There is no doubt that but for United States assistance few centres would have come into being, and it would have been extremely difficult to bring home to Governments and to public opinion the importance of the problem and the need for energetic and concerted action.

Before the start of technical assistance in 1949 the only European countries to show interest in this question on a national scale were Britain (from 1941) and France (from 1946, when the Productivity Subcommittee of the Central Planning Commission was set up). Even then France was still at the exploratory and preparatory stage.

On the whole, therefore, it can be said that United States aid acted as a stimulant or at least as a catalyst. The mission of Mr. James Silbermann, of the Bureau of Labor Statistics, to Europe in 1948 aroused curiosity, defined requirements and stimulated action. The decision which was then taken to organise large-scale visits of productivity teams to the United States marked the birth of the European drive for higher productivity. Mr. Silbermann's clarity of perception, the enthusiasm with which he put forward his ideas and secured their acceptance, and the generosity and disinterested desire for social welfare which lay behind them were such that, when I look back on those days, I think of him and his chief, Mr. Ewan Clague, as two great men of the kind this world sorely needs.

United States dollars and the visits by teams to the United States made it possible to accelerate the movement in France and Britain and to start it in other countries in a way which would otherwise have been inconceivable. After the urgent repairs and reconstruction of war-damaged property a vista of economic expansion opened up before us.

Visits by productivity teams to the United States remain the most effective aspect of the work of the European productivity centres. In the first place the teams, which visit United States factories in a spirit of lively curiosity and receptiveness to new

ideas, bring back a host of ideas and suggestions, and the reports published by these teams on their return, the interest aroused by their trips in their own trades and the ensuing action all continue to prove the technical value of these journeys.

The human interest of these visits, however, exceeds their technical interest ; the tripartite structure of the teams (employers, engineers and workers) is the keynote of the effort towards higher productivity ; the centres have merely needed to continue and foster this atmosphere of collaboration between social classes which have hitherto been separated by barriers of money, habit, distrust and misunderstanding. Of course many obstacles have had to be overcome and many more remain. There will doubtless be mishaps and failures, but the practical framework of the studies and their definite purpose provide the best chances of success in this process of mutual education in which employers and workers are in turn teachers and pupils. Hundreds of tripartite productivity teams have already returned from the United States to Europe and not one has proved a failure ; each has issued a joint report signed by all its members. These reports are nevertheless substantial and, far from confining themselves to technical matters, deal at some length with the most delicate social questions.

This tripartite composition of the centres and of the teams has naturally led to tripartite studies, researches and decisions. The work of the centres has accordingly had the general support not only of managements and of technicians but also of trade unions and Governments.

Apart from study missions to the United States and to various European countries, the work of the centres has taken many forms. In some cases the centre acts directly, using its own facilities, and in others it encourages or subsidises action undertaken by an association, a trade or a firm. As an example mention should here be made of five forms of action : technical studies, pilot plants, pilot trades, statistical measurement and publicity.

The studies and publicity measures are designed to inform first the specialists, then all those most closely concerned and finally the public itself of the problems connected with productivity and their modern solutions. However, as has been stated, productivity is a new problem. It follows that there has been, and still is, room for a thorough analysis of its main technical, economic and social aspects. Among the questions which have been studied in this way, in the first instance by scientists, and gradually brought to the notice of the public, at least in the most advanced nations, should be mentioned the definition and calculation of productivity, human relations within the undertaking,

wage systems designed to arouse the interest of workers in productivity, work simplification, design simplification, full employment and transfers of the working population from declining trades to expanding trades, the incidence of taxation, the effect of restrictive practices by employers and distribution. These studies have been carried out and information about them disseminated by means of committees or working parties, the publication of reports and the organisation of conferences, discussions, congresses and study groups. Several centres already publish a monthly review. The Italian review *Produttività* was the earliest, the French review *Productivité française* the second. In addition to about 100 reports by productivity teams, the French centre has already published an almost equal number of other studies. All have enjoyed a large sale and many have been sold out in a very short time.

Several centres have already set up a productivity service. Such a service is available to managements, but operates in 10 or 12 factories simultaneously in the same trade; the work is performed by the engineers of the firms themselves; the statisticians at the centre confine themselves to imparting knowledge of the methods required and ensuring that these methods are strictly comparable as between one factory and another. This process always reveals substantial differences between the results achieved by the various factories; one factory, which leads in operation "A", is last in operation "E" or "X"; each, including the best, has something to learn from the others. The engineers are surprised by these differences and at first find them hard to believe. They go into the definitions and begin their measurements and calculations again; and so they gradually discover the extent and potentialities of a problem which at first they considered theoretical rather than practical. The measurement of productivity acts as an alarm bell and is a tremendous stimulant. The productivity service has enjoyed, and is still enjoying, remarkable success in France.[1]

All these centres are responsible for visits abroad by trade productivity teams. Many, however, have taken advantage of the interest which they have aroused, and of the technical services thereby made available, to experiment with their own pilot plants or pilot trades. In the pilot plants, whose experience must be made generally available, the centres supply systematic and substantial assistance in various ways—training of supervisors,

[1] An idea of the effectiveness of the system can be gathered from one of the reports of the French productivity service, which is directed by Mr. Remery, on men's footwear: *Chaussure masculine*. At present this service is overwhelmed with requests.

supply of technical advisers (often American), careful explanatory work among the staff, and finance. The pilot trades consist of trades in which a number of pilot plants are started simultaneously. One of the first and most remarkable has been what is called, in France, " the foundry experiment ". This scheme, which at first covered nine factories but now comprises 50, was organised by the Foundry Trades Technical Centre and directed by a 35 year-old engineer, Mr. Christa. Systematic use has been made of the " seminar " method : managers, their deputies in charge of the experiment, engineers, trade unionists, supervisors and workers meet, first as separate groups and then together, for periods ranging from a few days to a few weeks, at a pleasant hotel in a secluded and peaceful village by the Seine on the edge of the forest of Fontainebleau. Here they listen to lectures by technicians and sociologists and exchange experiences. After their first stay they begin work in their own factories and then return to compare results and to complete their training. The delightful village of Fontaine-le-Port has thus taken its place in the social history of Europe.

The centres also have a number of other means of action at their disposal. Some organise or sponsor travelling exhibitions, permanent exhibitions, stands in current exhibitions, or congresses (a European Productivity Exhibition at Strasbourg is planned for 1954). Others have set up or subsidised associations or university institutes for the scientific study and teaching of certain techniques inadequately understood in their own countries. Others have founded chairs in universities and technical institutions or have encouraged the formation of study and working groups in parliamentary and university circles. They have also encouraged scientific research and have expanded technical documentation. Almost all possess information departments for use by interested firms, which work in close collaboration with scientific organisations in the United States and Canada ; they also supply advisers, lecturers, technical films, etc.

In so vast an undertaking it can only be claimed that the first trails have been blazed ; each nation's advance has been governed by what appeared to be its most urgent requirements.

Some National Centres and the Central O.E.E.C. Committee

Despite the previous statement that the efforts for higher productivity in the various countries of Western Europe are based on uniform principles, the reader will readily appreciate that the

differences between nation and nation are sometimes very marked. The centres are sometimes organised along widely differing lines, and some of them were founded such a short time ago that they have scarcely taken shape, while others are nearly two years old which, for them, may not represent old age but does at least mark the beginning of adolescence.

Almost all the centres, in principle at least, owe their existence to a recommendation by the Council of the O.E.E.C. The O.E.E.C. Productivity Working Party, which was set up in May 1950, is older than most of them and its main objective was the establishment of national bodies. Subsequently, this working party has become the Subcommittee for Productivity Studies and functions under the auspices of the Productivity and Applied Research Committee. The chairman of the Committee is Mr. Nicolaidis (Greece) and the vice-chairmen are Mr. King (Great Britain) and Mr. Chapuis (Switzerland); the secretary is Mr. Igonet, assisted by Mr. Ter-Davtian and Mr. Walstedt. The vice-chairmen of the Subcommittee are Mr. Rostas (Great Britain) and Mr. Bardoschia (Italy); it comprises representatives of all the European centres or, failing this, persons designated by their Governments as being most representative.

The Subcommittee first set out, as has been stated, to increase its own members' awareness of the problem and to define a common concept on the basis of their various experiences and tendencies. It has examined, and continues to examine, all the difficult or little understood problems involved from the standpoint of the action required and also of the need for scientific knowledge, *e.g.*, terminology, measurements, human relations, the broad functions of national centres, work simplification, taxation, etc. These studies, which are performed in some cases by experts and in others by working parties, are intended to stimulate and compare various forms of action at the national level. The Subcommittee has organised or sponsored a number of European missions, the annual conferences held by the centres and meetings of experts and statisticians. It has arranged for the publication of several reports in English and French and of a year-book of the centres in the countries belonging to the organisation. It also compares experiences, is informed of any new action and often issues instructions which at last overcome the inertia which is too prevalent in our old and cautious civilisations.

The Council of the O.E.E.C. also issued an important recommendation to member States regarding the inclusion of productivity problems in various educational curricula; and indeed, though this is merely a passing phase, it is absurd that so much energy and money should be expended in presenting such

a simple and fundamental idea to adults when its principle is easily grasped by children between the ages of 12 and 17. Lastly, the O.E.E.C. has organised or subsidised a number of productivity measures of European interest: inter-European missions (such as those of statisticians specialising in productivity and scientific research) and international exchanges of technical publications and technical information.

Something should be said about the features peculiar to each national effort. As has been mentioned, while the general principles are common the methods employed vary substantially from nation to nation. For instance, certain countries such as Sweden cannot be said to possess a productivity centre; instead, several bodies take a joint interest in the problem and obtain a fairly close degree of co-ordination through personal contacts. On the other hand some centres are virtually dominated by Governments while others are entirely private. Some embrace agriculture, industry and commerce, while others cover industry alone, which naturally constitutes a serious drawback. These national efforts differ even more widely in their operative features than in their legal status.

In Sweden questions of technical assistance are dealt with by the Technical Information Service and by the Swedish Royal Academy of Science. But there are a number of bodies which are concerned with productivity, such as the Productivity Council for Swedish Industry, the Institute for Industrial, Economic and Social Research, the Swedish Standards Association, various specialised associations and certain educational bodies.

In the United Kingdom the functions usually performed by a productivity centre were exercised before June 1952 by a number of government departments and private organisations. The Board of Trade is responsible for co-ordinating government activities in this field. Among the official organisations concerned should be mentioned the Monopolies and Restrictive Practices Commission, the National Research Development Corporation, the Department of Scientific and Industrial Research and the Personnel Management Advisory Service. Among the bodies jointly financed by the Government and private industry are the British Institute of Management, the British Standards Institution and several university foundations. Publications and films are the responsibility of the Treasury Information Unit. As already stated, the drive for higher productivity began in the United Kingdom during the late war: an Anglo-American Council on Productivity was then set up and a number of visits were organised to the United States; this Council was wound up a short time ago, after having performed an enormous task, and in June 1952

its place was taken by the British Productivity Council, which since that date has operated, in effect, as a national centre.

Industrial, commercial and agricultural productivity in the United Kingdom before the war was less than half that of the United States, but it was, nevertheless, among the best in Europe.[1] At the end of the war it was higher than that of any other European nation with the possible exception of Sweden. At the moment it is being overtaken by Western Germany, where productivity is now rising rapidly.

The German productivity centre has developed out of an earlier body, the Standards Office (R.K.W.) ; its ancestry was thus wholly technological, but widespread attention is now being devoted to the economic and social aspects of these problems and this will, I think, develop even more in the near future. Administratively the organisation of the R.K.W.-P.Z.[2] is highly centralised, but regionally it is highly decentralised ; the seven local offices are extremely active and this regional organisation should serve as a model to other nations. The centre publishes a monthly review and has issued an excellent film and a large number of reports by productivity teams and by individual researchers ; one of its series is entitled *Der Mensch im Betrieb* (Man in the Factory).

The Austrian centre (O.P.Z.)[3] has a very large budget when account is taken of the size of the country. It has set up a large number of subcommittees dealing, among other subjects, with agriculture, forestry and domestic science. It has issued a number of excellent and influential publications.

The Belgian, Swiss, Danish and Netherlands centres each possess certain original features : the Belgian centre, like the Austrian, is a private association with a council made up of equal numbers of employers and workers ; it has already aroused a great deal of interest in Belgium. The Netherlands is the only country which has set up a Ministry of Productivity, the centre[4] being administered by a council comprising representatives of employers, workers, the distributive trades, science and various economic organisations ; there is great activity in all fields. The centre at Copenhagen *(Productivitetsudvalget)* is administered by a council made up of three Government representatives, four manufacturers and four workers ; it has had conspicuous success in its

[1] Cf. L. ROSTAS : *Comparative Productivity in British and American Industry* (Cambridge University Press, 1949) ; and " International Comparisons of Productivity ", by the same author, in *International Labour Review*, Vol. LVIII, No. 3, September 1948.

[2] Rationalisierungs-Kuratorium der deutschen Wirtschaft — Produktivitäts-Zentrale (Frankfurt-on-Main).

[3] Österreichisches Produktivitäts Zentrum (Vienna).

[4] Liaison Group for Higher Productivity (The Hague).

productivity measures in the footwear and clothing industry; it has also organised a remarkable exhibition on productivity in textiles and has issued an excellent film on self-service.

The Italian National Productivity Committee is responsible to the Prime Minister's Office. It is made up of 35 members, including eight representatives of employers, eight of workers, four of small-scale industry and independent farmers, three of supervisors and engineers and six of government departments. The total of 35 is completed by six experts. This Committee was not set up until 22 October 1951 and only began to function in 1952. It publishes an excellent monthly review which was founded in 1950. It has an efficient regional organisation and has issued a number of outstanding publications. There are six subcommittees dealing with human factors, vocational training, technical progress, market studies, sales organisation and productivity measures.

The French centre is composed of the National Productivity Council, which is a policy-making body responsible to the Ministry of Economic Affairs, and the French Association for Higher Productivity, a private executive organisation. Both are made up in equal proportions of representatives of the Government, the employers and the workers. The Council has set up a number of committees and working parties.[1] The most noteworthy achievements of the Council have been the work of the committee on productivity and staff co-operation in factories and the committee on productivity and full employment; the scheme in the foundry industry to which reference has already been made; the productivity measures carried out in the footwear and other industries; the establishment of an inter-trade union study and research centre on productivity (C.I.E.R.P.); broadcasts; and the introduction of economics into the first part of the *Baccalauréat* examination and of several courses at the universities.

Such, in brief, are the efforts undertaken by the O.E.E.C. to increase labour productivity. They reveal an awareness of the vital nature of technical problems and of the extent to which social progress is subordinated to economic progress; the task is to disseminate knowledge of the technical conditions governing economic progress and consequently social progress.

Europe wishes to retain the poetry and stability of her traditional civilisation and also to acquire the high living standards of the most advanced nations. The reality behind the picture conjured up by the line " the lowing herd winds slowly o'er the lea " was that a pound loaf cost a labourer over two hours'

[1] Details are given in the first number of the review *Productivité française*.

work.[1] The drive for higher productivity does not entail forcing men to adopt certain measures but rather showing them the social and economic consequences of doing so.

This action is a very long-term matter, as can clearly be seen from the state of the world today. At present the technical level of the various nations of the earth varies widely; some have scarcely advanced since the era before the industrial revolution while others are leaving traditional methods behind them at an increasing rate. And yet the causes of this movement are well known. The men who created the scientific attitude and made the great discoveries not only refrained from keeping them secret but published them in works which were translated into every language and taught them in universities which were open to every nation. Moreover, those who thus created modern science have not only refrained from keeping it a secret but have themselves applied this science to industry and commerce and have made no mystery about their methods of doing so.

How is it then that the nations of the world have benefited so unequally from the same store of knowledge? How is it that some have proved themselves able not merely to apply it and reap the benefits but also to make new discoveries and achieve further advances while others have proved themselves unable even to imitate and to copy? This, in a nutshell, is the major problem involved in increasing labour productivity throughout the world. It shows that discovery is merely an essential prerequisite of progress. In dealing with nations, however, it is an immense task even to propagate knowledge of these discoveries.

In order to transform the economy of a country, the whole mentality of its people must also be transformed. The experimental attitude must be substituted for doctrine or dogma and enterprise must take the place of reaction and routine. And this must happen not only among the minority and the élite but also in the minds of the humblest citizens; for only the efforts of the masses can raise the living standards of the masses.

How, then, is it possible for me to pass judgment on these current experiments, as the reader no doubt expects? It is impossible to pass a short-term judgment on something that is meaningless except on a long-term view. Would it have been wise to judge the American economy during the winter of the Mayflower's arrival? Or the Soviet economy in 1920? Can we today judge the Chinese experiment? It is impossible to change the course of a great nation in a single year; it will take 20 years for China

[1] Cf. Jean FOURASTIÉ: *Machinisme et Bien-être*, Chapter II. With the introduction of tractors and combine harvesters the price of a loaf has fallen to less than one-sixth of a labourer's hourly wage.

to overtake the U.S.S.R. or for the U.S.S.R. to overtake the United States. I can therefore merely give my personal impression. I do not think that the experiment is anywhere developing badly. This European drive for higher productivity is still only three years old and cannot change the face of nations in five years ; in such a short time it will not affect living standards, working class conditions or the core of social problems. But it will bring about an appreciable increase in the rate of a development which, though slow, is nevertheless favourable ; it will give Governments a basis on which to plan their economic policies, and managements more efficient and coherent guiding principles; workers will more readily grasp the social consequences of production and labour and all men will arrive at a better awareness of human unity and the extent to which life is governed by the conditions of the physical world.

The important fact is that all those who have studied and examined the question closely have realised that productivity is a willing horse ; it knows neither country nor frontiers ; like science, it is universal and has the future stretching before it. It may stumble over an obstacle but it will rise again with renewed determination ; and long after we, the pioneers, are gone our children will find it still pulling vigorously and spiritedly at the ponderous chariot of human progress.

(Translated from the French.)