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## DEMOBILIZATION AND THE ALLOCATION OF MAN-POWER

THE debate in the House of Commons on November 16, although taking place before the appearance of the second White Paper on the Re-allocation of Man-Power—that dealing with civilian employments—made it clear that, subject to one criticism, the scheme outlined in September for the re-allocation of man-power between the Armed Forces and civilian employment during any interim period between the defeat of Germany and the defeat of Japan (Cmd. 6548. London: H.M. Stationery Office) went far to meet the desiderata laid down in the various statements and reports on demobilization that had previously appeared. Mr. Bevin's speech in particular showed that in its proposals for the orderly unwinding of the man-power of the country, the Government has had the closest regard to such suggestions. It was equally clear from speech after speech that the proposed arrangements met the crucial test almost invariably proposed in such reports: they are readily understood and accepted as fair in the Forces. The debate itself should help to carry that understanding and acceptance a stage further; for no one who followed it could have any doubt as to the Government's determination that there should be no evasion of the principles laid down, or of the support from all quarters of the House for the view that only on the clearest grounds of public interest should there be any exception to the order of release laid down.

The one major criticism or reservation was that insufficient consideration was given to the claims of men who had served for a long period overseas without home leave. Those claims were pressed on the Government with great skill, sincerity and force, not merely by several serving members but also by others, sometimes perhaps with a zeal which tended to overlook the fact that what was under debate was not demobilization in the true sense, but as the White Paper emphasizes, the re-allocation of man-power. "General demobilization," it is emphasized, "either of the Armed Forces or of war industry, cannot take place until the end of the war against the Axis Powers and their total defeat throughout the world." The Government's plan is framed on the basis that hostilities will end first in Europe, and it relates solely to the interim period between the defeat of Germany and the defeat of Japan. It is governed by the paramount consideration that there can be no break in the war effort after hostilities cease in Europe, and that in association with the other Allied Powers at war with Japan there must be the maximum deployment of the forces needed to bring complete and final victory at the earliest possible moment.

It is, of course, true that if demobilization plans are to be understood and accepted as fair in advance, above all by those most concerned, namely, members of the Forces, they must be prepared and explained long before hostilities come to an end. Any misunderstanding on this point should be removed by

the Prime Minister's firmness and explicitness; but his subsequent announcement on November 17 of the new scheme for a system of short home leave for troops serving overseas goes some way to meet the major reservation in the welcome given to the re-allocation scheme. There are, however, other considerations of special interest here, not all of which were noticed in the debate on November 16.

That debate was under some handicap in proceeding before the publication of the second White Paper (Cmd. 6568. H.M. Stationery Office, November 1944, 2d. net.), and before discussing these particular points the two schemes must be briefly summarized. As an essential part of the re-allocation of man-power, the first scheme proposes to continue the compulsory recruitment of men for the Forces in order to bring relief to the men who have served for long periods and enable more of them to return to their homes. It will also be necessary to maintain the requisite control over industry and labour during the interim period, in which there will continue to be heavy and over-riding demands for munitions of war and other essential production.

Until the requirements for the continuation of the war against Japan and for the garrisoning of occupied countries are finally known, the level at which the Armed Forces must be maintained cannot be determined precisely. While re-allocation between the Armed Forces as a whole and industry will clearly be possible on a substantial scale, the Government affirms that military requirements must over-ride all other considerations. The arrangements must also not be too complicated for practical application, and the Government takes the view that a fair and reasonable scheme can best be secured on the basis of release according to age and length of service. It will also be necessary to make limited provision for certain urgent work of reconstruction on which a beginning must be made in the interim period.

The plan accordingly provides for two separate methods of selecting men for return from the Forces. Class *A* will be selected according to age and length of service; Class *B* on account of their qualifications for urgent reconstruction work. No man will be released or transferred from the Forces if his retention is considered necessary on military grounds, though the Services will make every effort to release men in their turn in whatever theatre of war they may be serving. Men due for release or transfer will be given an opportunity to volunteer for a further period of service.

The number of releases in Class *A* will correspond with the reduction in the strength of the Forces and will be increased in consequence of the calling up of further recruits. Except that men of fifty years of age and more will be treated as a priority class to be released first if they so desire, men will be released by a combination of age and length of war service, on the basis that two months of service is equivalent to one additional year of age. Release will commence as soon as practicable after the defeat of Germany.

The men in Class *B*, who will be specially transferred from the Forces, will be those identified as

belonging to particular occupational classes specified by the Minister of Labour and National Service as required for certain urgent reconstruction employments. The Class will also include a limited number of individual specialists, for whose transfer application may be made through Government departments in accordance with existing arrangements. The transfers in this Class will be few compared with the releases in Class *A*, and the number will be determined from time to time by the immediate requirements for reconstruction, and the extent to which those requirements will be met by releases in Class *A* and by transfer from munitions and other work at home. The men will be liable to be recalled individually to the Forces if they discontinue their reconstruction employment.

Further principles regarding re-allocation are laid down in the second White Paper, on re-allocation of man-power between civilian employments, which itself refers to some of the points made in that dealing with Employment Policy (Cmd. 6527. London: H.M. Stationery Office). The task will be to ensure that our limited resources are concentrated first upon those munitions required for the Armed Forces, and, secondly, upon those products which are most important to national recovery and to an improvement in the standards, not of those who can pay the highest prices, but of the community as a whole. The existing system of allocating man-power to the Forces and to the various industries, based on the annual man-power budget and carried out under the present system of priorities, will be continued. It is believed that the only way to avoid serious dislocation and dissipation of our resources on objects of secondary importance, and the production, so far as practicable, of necessities rather than luxuries, is to re-allocate man-power during this interim period on such a planned basis with some control over industry and labour, in accordance with certain established broad principles.

In the man-power sphere the aim must be to seek to mitigate the severity of the existing labour controls, to pay all possible regard to the natural desires of workers to seek work where they please, and of employers to engage labour freely, and to ensure that the workers which are available are employed in the places where, and on the tasks which, they are most needed in the national interest. Accordingly, the Government's policy endeavours to meet such wishes, especially that to return home, so far as is consistent with due regard for the general well being of the country. Subject to the same over-ruling consideration, it will also be the aim to transfer experienced workers back to their former industries. Release of persons in civilian employment cannot be determined purely by redundancy; over-riding priority will be given to certain classes who, on personal grounds, have a claim for specially sympathetic treatment in the matter of release for retiring from industry or to work nearer their homes.

When these priority classes have been released some establishments, mainly in the munitions industries, will still have redundant labour, while other

establishments will be requiring labour. The problem therefore becomes one of transfer of labour, with some of the vacancies of greater importance than others; and in this redistribution of labour it is proposed that, apart from the call-up for the Forces, the two main classes to be released first should be those needed for priority vacancies and those who have worked away from home for more than one year and want to return.

As regards men for the Forces, all men in the age groups 18-27 will be liable for calling up; but those in the range 25-27 will only be called up if there are insufficient men in the lower age-ranges to meet requirements. Deferments will continue to be granted for men with special skill. In the selection of workers for transfer to priority vacancies under redundancy, existing selection procedure, which includes consultation with representatives of employers and workers, will be followed, and a major objective will be to transfer as many persons as possible back to their homes. The priority orders will also be applied where necessary to the transfer of workers to industries which need to maintain or increase their labour force. Registration of young men and women for employment or national service will be continued.

While the Government's proposals aim at effecting the necessary redistribution of man-power on a voluntary basis as far as possible and at narrowing the field of compulsion to the strictest limits, a substantial measure of control over the movement of labour must be retained. The Government desires both to give employers as much freedom as it can in the engagement of workers, and to ease the position of as many classes of workers as possible, especially in the older age groups. Controls over juveniles are to be considered in relation to the whole question of juvenile employment and a separate scheme is being worked out in consultation with the interests concerned, the paramount object of which will be to assist juveniles to the maximum extent possible in the choice of employment with the view of giving them the best opportunities for a permanent and progressive career in life with due regard to individual aptitudes.

It is on this question of education and training that criticism of the two schemes as a whole may well centre. The Government recognizes explicitly that the position of those young people returning from the Forces, who have the first claim to resume their education, must be safeguarded, but neither in the debate nor in the White Papers are the full implications of this policy indicated. The significant omissions are references to the release of teachers, and particularly university teachers, and of students to resume their studies.

That the Government has made no pronouncement on this point is the more important because the case for concessions rests entirely on national grounds. It is supremely important that there should be full and widespread public appreciation of the necessity for Government action, and no room for misrepresentation as favoured treatment for a particular class.

Moreover, the demobilization of students of itself will be wasteful unless their release is timed with a view to resumption of their studies at the beginning of a course. Such demobilization, from the national point of view, calls for consideration as part of a national policy for youth, in which registration for national service and liability for enlistment in the Armed Forces must be placed in the long-term perspective in relation to educational policy. A decision on the question of a year or other period of national service as part of our national system must be taken at an early date. The Civil Service National Whitley Council has done well to direct attention to this point in its recent report on the staffing of the Civil Service during the reconstruction period.

The importance of higher education may well need some careful and painstaking explanation to the general public before its bearing on the national welfare is understood. Men released from the Forces cannot be accepted for re-training or for university study unless those required to instruct them are previously released from Government service; further, our whole expansion of scientific and industrial research depends on the orderly demobilization and re-allocation of scientific man-power, in which the release of teachers must have a high priority if the recruits required for industry itself are to be available in three or more years time. It must be remembered that for five years practically no male students have taken a university degree except in medicine and certain scientific subjects. Before the War, Sir Richard Livingstone has pointed out, British universities were training barely enough men for the national needs. In these last five years, except for the small fraction exempted from national service for reasons of health, they have been producing no graduates in subjects of such obvious immediate practical necessity to national life as economics, modern languages and the social sciences, in mathematics, history, law, literature, philosophy; and very few in scientific subjects such as botany, geology, and zoology.

While this gap remains, there will of necessity be grave weaknesses in the Civil Service, the professions, the executive ranks of industry and commerce, and the cultural life of the nation as a whole. The closing of this gap is one of the most important reasons for university expansion, and however swiftly the problems there may be solved and however generous the Government's contribution on the financial side, it will take time to close the gap. The men and women of trained capacity so urgently needed in every branch of the national life cannot be produced to order: three years are required for graduation, and several years more for competence in handling public affairs.

Release for this purpose is clearly a complicated question; only those with very special qualifications as students, such as holders of open scholarships, and men and women who have proved themselves first-class teachers, could be considered for priority release. It is all the more important, therefore, that from the national point of view there should be the minimum interruption of studies consistent with the demands

for the prosecution of the War itself. The longer those students who have been called up before completing their courses remain with the Forces, the more wasteful the interruption is likely to be from an educational point of view. Equally, it is important that there should be no further interruptions unless absolutely essential.

It is at this point that, as indicated in three of the articles contributed to the special number of *The Political Quarterly* dealing with the future of the universities, the report of Lord Hankey's Committee is so important. Any preferential demobilization of teachers or university students in Class B must clearly be based on the quantitative findings of that Committee as to the probable demand for graduates, and must be related also in some measure to the short-term and long-term development of the universities. Moreover, whether or not the pre-war student population represented, as Dr. Cyril Burt's article suggests, the right proportion of our population qualified to profit by a university education, it is certain, as Sir Lawrence Bragg's article indicates, that not all those best qualified have in fact been included. Apart altogether from Sir Ernest Simon's contention that we have as yet no real evidence as to the proper proportion of the population which is worthy of a university education, the demobilization scheme offers an undoubted opportunity, not only of removing an important bottleneck in reconstruction plans, but also of returning to the university, to the national advantage, some of those promising youngsters of outstanding judgment and intelligence as shown in their record of war service, who through economic or similar reasons have fallen off the educational ladder before reaching the university.

Clearly it might be inequitable to exempt all university students as a class, but the liability to military or other form of national service might well be enforced before or on completion of their university training in accordance with a deliberate national policy on the lines suggested in the Norwood Report and the reports of the British Association Committee on University Education and other bodies. This consideration was not very evident in the debate in the House of Commons on November 16, although Mr. Bevin indicated the Government's acceptance of the view that we must get our educational system going again as soon as possible. Nor was there any reference in the debate to the fact that demobilization of teachers must clearly proceed in stages rather than as one group, in order that the schemes for educational training in preparation for demobilization already announced by the Army and the Royal Air Force (see *Nature*, 154, 525; 1944) may not be deprived of the instructors and potential instructors necessary for them to function.

Apart from this, the problem of education and teachers in relation to demobilization was fairly raised in the debate by Prof. Gruffydd, who not only made the point of priority in regard to the national needs—though that might have been more forcibly put—but also rightly directed attention to the age factor: the age-level is rising because we cannot get

new lecturers, and if anything is important for reconstruction and for new ideas in the country, it is that the university teachers should be young men with young ideas. Mr. Bevin's reply was satisfactory so far as it indicated the Government's appreciation of the seriousness of the position. It may be doubted whether as large a number will be due for release for the universities in Class A as he suggested, and few of those thus scheduled will meet Prof. Gruffydd's criterion on the ground of age. Mr. Bevin stated, however, that the Minister of Education and the Secretary of State for Scotland are ascertaining from the local authorities how many teachers they would get back under Class A, and that the Government would then see what number is necessary for the schools and also for the universities.

This is undoubtedly the soundest line on which to proceed to establish the case for release on national grounds; but while that quantitative inquiry is proceeding, every effort should be made, both by the Government and by other authorities, to make sure that public opinion fully understands what is involved and the national reasons for priority. There must be no room for misunderstandings on this matter such as those which led to the breakdown of demobilization in 1918; and the same care must be taken in connexion with any and every class of specialist due for release in Class B. The efforts in regard to training for industry, whether for research or supervision and administration, and the work of Lord Hankey's Committee to which Mr. Bevin paid tribute, may all be frustrated unless this point is amply safeguarded. Every effort must be made to eliminate any suggestion of special pleading and to ensure that the release of teachers and students is in accord with the wise aims of the demobilization scheme and adequate to serve the country's needs, while avoiding any suggestion that professional interests are favoured other than as they first contribute to the national purpose.

## STATISTICAL THERMODYNAMICS

### Statistical Thermodynamics

Course of Seminar Lectures delivered in January-March 1944 at the School of Theoretical Physics. By Erwin Schrödinger. (Hectographed.) Pp. ii+135. (Dublin: Dublin Institute for Advanced Studies, 1944.) 5s. net.

**T**HIS little volume is not an ordinary text-book, dignified, dull and well printed (hence expensive), but an informal communication of ideas, fascinating, amusing and only hectographed (hence cheap). Its origin and background depend on the peculiar character of the Institute where these lectures were given.

The Dublin Institute for Advanced Studies, housed in one of the pleasant Georgian buildings forming Merrion Square, has at present only two departments, the School of Gaelic Language and the School of Theoretical Physics. The staff of the latter consists of the director, Erwin Schrödinger, and one professor, Walter Heitler, both known well enough in the world of mathematics and physics to need no introduction. The building contains a small but well-selected library, a lecture room and very com-