

NATURE

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USE OF THE LAND IN BRITAIN

SINCE the appearance in 1944 of the White Paper on the utilization of land issued by the Coalition Government, it has been fairly certain that any proposals for a central planning authority and for dealing with the difficult problems of compensation and betterment advanced by the Government of the day would be controversial. Of the Planning Bill introduced by Mr. Silkin, it must be said that while it goes a long way towards establishing a workable system planning the use of the land and meeting the fundamental requirements, it is not unreasonably controversial. Dispute as to the price the community should pay for extinguishing the development rights of private owners of land does not alter the plain fact that the extinction of those rights removes the largest single impediment to planning of the use of land on national lines. Moreover, the decision not to transfer to national ownership all land about to be developed, as was recommended by the Uthwatt Committee, and to levy a betterment charge only when a change of land use occurs, in place of a levy on all increments of site value, may add indirectly to the cost of good planning but should not seriously hamper it. The planning sections of the Bill appear to concede virtually all that planners and local authorities have demanded for a generation, and the wide extension of Exchequer grants to local authorities should banish the last remaining fear of local authorities that the policy of systematic urban dispersal, extension of open space in central areas, and the conversion of land to more socially valuable uses, although less remunerative financially, will involve them in financial losses and compensation charges which they cannot face.

Amid the mass of detail with which we are not appropriately concerned here, there are at least two points which claim attention. The first of these concerns the basis of planning. Development without prior permission is in future prohibited, even when a local planning authority is to be responsible for development. Every local planning authority must first survey the area and prepare a development plan indicating the manner in which it proposes that land in that area should be used, and the stages by which any such development is to be carried out. The planning process is to be flexible, dynamic and positive, and doubts as to the adequacy of the unified control proposed were largely—but not entirely—resolved by Mr. Silkin's declaration, in moving the second reading of the Bill, of his intention to use fairly freely his power to create joint planning boards from the one hundred and forty-six counties and county boroughs which are to be the main and primary planning instruments.

These authorities are given three years in which to prepare their broad development plans. Such plans are to show which towns and villages are suitable for expansion, and which can best be kept to their present size; the direction in which a city will expand; the area to be preserved as an agricultural green belt and the area to be allotted to industry and

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to housing. In filling in the detail over smaller areas, when development is about to take place, much of the work of enforcement and detailed control will be delegated to the smaller authorities. The central authority will knit development plans into regional and national patterns and will participate in all stages of planning, and local authorities must reconsider their plans at least once in every five years.

While, however, the local authorities are given the legal powers to march with their new responsibilities, as well as the financial resources, there can be no question as to the strain which will be imposed upon many of them, and the first question that arises is the provision of adequate trained staff to discharge the new planning functions and responsibilities. It was stated in the debate that local authorities already need 1,800 more men with technical architectural knowledge than they can get—a figure equal to the total membership of the Town Planning Institute, including students. This is a fresh demand on trained man-power which cannot be ignored, even if in some areas a great deal has already been done to provide the basic surveys required. It will be essential for the local and regional planning authorities to make the fullest possible use of such local surveys by voluntary bodies and to foster further surveys by such bodies as Nuffield College, the West Midland Group on Post-War Reconstruction and Planning, the Northern Industrial Group, and local universities.

The three years in which the local authorities have to prepare development schemes will clearly be too short, even if no difficulty were likely to be experienced in recruiting the additional planning staff and in training that staff in a new tradition which will equip them to understand and to mould the social and economic fabric of the nation, unless the fullest possible help and co-operation is secured from the many who are willing to give it. Mr. Silkin himself recognized the need for associating the universities in particular, not merely with the training of the new type of planner required to carry out this broader conception of planning, but also with research into the economic and social problems of their surrounding areas, as has been done earlier by the Board of Trade. Due regard must, of course, be had to the proper limits of academic studies; but even so, this may be much the most important contribution that the universities can make in the immediate future to the planning of Britain, apart from their continuing function of supplying the nation with men and women trained to take balanced views and imaginatively alive to the human no less than to the technical issues in the problems with which they are called upon to deal.

We can scarcely expect the universities to make an immediate contribution to the supply of the large numbers of new town-planners who will be required, for the University of Durham alone provides a degree course in town and country planning. Indeed, not many of them are likely to be university graduates. Nevertheless, as Mr. Silkin rightly said, the co-operation of economists, geographers, sociologists and others will be required, and the universities can do something more to promote that informed and interested

public opinion which is an essential condition of good planning, as well as the supply of first-rate administrators to give effect to the plans. The Bill might well have contained more evidence of the Minister's desire for such co-operation. The immense amount of material which the Bill contains is a further reason for affording the ordinary citizen ample opportunity to express his views. There could be no greater mistake than to attempt to curtail public discussion and informed criticism of the many complex issues which are raised.

The importance of such public discussion is enhanced by a second feature of the Bill which should be noted by scientific workers because of its implications for them. Comprehensive as are its planning provisions, and thoroughly as they remove the main obstacles to the rational and orderly development of the land of Britain—the compensation bogey, the lack of finance for local authorities, the absence of powers of State planning and development—there is one serious omission. Land held by Government departments, except when leased to private persons, will escape all local planning control, and the Minister himself has no authority over the use of land by other Government departments or by statutory undertakings, and no control over the location of industry. There is no provision for harmonizing the planning activities of the many Government departments which will retain power to acquire land, or to reconcile differences regarding the use of land between the Ministry responsible for planning and such departments; and inasmuch as the control of the location of industry is by the Bill itself to be vested in the Board of Trade, the influence of the Board on the planning and development of the community may be as great as that of the Ministry of Planning itself.

How serious is such a position has been well brought out in the recent inquiry into the proposal to dam Ennerdale Water, and in the current debate regarding the acquisition by the Services of land for training areas. The Standing Committee on National Parks, which represents the Councils for the Preservation of Rural England and Wales and the Friends of the Lake District, in a statement on the order concerning Ennerdale Water, which comes inside the Lake District national park, has indicated the perfunctory treatment which public issues may receive at the hands of a department, and the way in which the technical factors may be disregarded. The fate of Ennerdale at the hands of the Minister of Health indicates how slender are the prospects for national parks anywhere if the Ministry of Town and Country Planning remains merely one among several departments with no overriding powers.

The same point is made in a statement on Services training areas which has since been issued by the Standing Committee on National Parks. While the statement is chiefly concerned to direct attention to the necessity for protecting potential national park areas from any form of development inconsistent with their ultimate use when the necessary legislation is secured, it is of interest here as indicating the limitations of the method of handling the claims of

the Services piecemeal before the Inter-Departmental Committee. That Committee can do no more than consider each case in isolation as it comes before it, and report to a committee of the Cabinet on unresolved claims. There is no provision for the consideration of the claims as a whole, still less of the possibilities of co-ordinating and combining claims of different Services and commands and establishing principles by which individual cases can be decided; nor, more important still, for examining the allocation of the total land resources of the country to agriculture, industry, military training, electric power and water supply and popular enjoyment. If that is too large a question to be entrusted to an individual Ministry such as that of Town and Country Planning, it might well be examined by a Select Committee of both Houses of Parliament, as the National Parks Committee recommends. The imperative need for some such body with powers to enforce decisions even on recalcitrant Government departments could scarcely be better illustrated than by the decision of the War Office to retain 238 acres of London's 'green belt' near Coulsdon and Purley for a bombing range. The most perfunctory study of the Land Utilization Survey's map of Great Britain, or of the admirable population maps published for the Ministry of Town and Country Planning, should convince anyone of the need for reconsideration of such proposals.

One of the biggest questions is, in fact, whether the Bill as at present drafted provides machinery of national planning powerful enough to withstand an interested department. The decision should clearly not rest, for example, on whether the capacity of the War Office for passive resistance is stronger than the political importance of London local authorities; it should depend on an unbiased consideration of the best use of the nation's land, and proper safeguards to that end should be provided. It is disturbing to note that Mr. H. D. Hughes's specific question on this point in the debate in the House of Commons on the second reading of the Bill was unanswered when the Chancellor of the Exchequer wound up for the Government.

The incorporation of such over-riding and co-ordinating powers would, however, enhance the importance of the factor on which the efficacy of the whole Act will finally depend—the wisdom with which the control embodied in the Act is exercised. It was well said in the debate, by Mr. J. H. Hare, that the success or failure of the Bill, as it stands, must depend very largely on the wisdom, the integrity and the intelligence of those who are required to administer it. That is the point of most vital interest to the individual citizen, and the answer depends primarily on the quality of the administrator to whom the exercise of the new powers is entrusted. This is an issue transcending all party divisions. Agreed decisions on the financial provisions and on other procedure will not enable the Act to achieve its purposes unless it is administered with wisdom, dispatch and restraint. Indeed, one important reason for welcoming and fostering co-operation in the preparation of schemes contemplated

in the Bill is that it should also assist in the training of administrators for that work, and in imbuing them with the imaginative insight and understanding of the needs of the public, its comfort and convenience, which it should be the first object of public administration to study and to serve.

MECHANISM OF COLOUR VISION

Retinal Structure and Colour Vision

A Restatement and an Hypothesis. By Dr. E. N. Willmer. Pp. xii + 231 + 4 plates. (Cambridge: At the University Press, 1946.) 21s. net.

THE organ of sight continues to challenge imagination and experimental initiative and so maintains its position as one of the most fascinating living structures in existence, and at the same time the source of so much of our most important knowledge about life and matter. The list of British men of science who have made notable contributions to this field is as impressive as that of any other country. It begins with Newton, whose ideas inspired Thomas Young (according to the latter's own words). Brewster, Maxwell, Dalton, Lord Rayleigh made discoveries which are classical. From our own period one need but mention Adrian's brilliant pioneer work on optic nerve impulses, Lythgoe's discovery of transient orange, Stiles' of the directional sensitivity of the retina, and Wright's analysis of the fundamental trichromatic response curves to realize that the tradition is being maintained.

The latest contribution comes from a Cambridge histologist, Dr. E. N. Willmer. It is right that histologists should add their word to the discussion, since physiology has now reached the point at which further advance in our knowledge about the function of the retina must contain new histological terms. There are the well-known receptors, the rods and the cones, which have long been on the stage, probably too long, when one considers that to the receptors is attached a true nervous centre, exceedingly complex, and certainly of fundamental importance for the interpretation of the world around us in terms of brightness discrimination, general light perception and colour. Nature's idea, to project a piece of the central nervous system on to the periphery and thus make it easily accessible to adequate, localized and controllable stimulation, is a hint meant to be taken.

Dr. Willmer approaches his theme in an unorthodox manner. He does not accept the idea, implicit in so much of modern psychophysical work in this field, that there are three kinds of cones, for the perception of red, green and blue colours. He thinks that the cones only are responsible for the long wave-lengths, whereas the green and the blue regions are transmitted by two kinds of rods. In the human fovea there is only the 'green' kind of rod, a day-rod, to which he attributes a sensitivity curve corresponding to the scotopic luminosity curve. This necessitates the further assumption that the 'green' day-rod contains visual purple in some less-adaptable or less-spurious form, since our scotopic luminosity curve is certainly determined by the photochemical properties of visual purple. The choice of ordinates for the response of the cone (the red receptor) has given him greater difficulties owing to the accumulation of physiological evidence on this point which he has felt bound to