on quality of production as determined by market value of produce or services rendered. Ordinarily, the development of the main stem provides the principal interest in production, and this is governed by the interaction of crown and root as functioning correlatives. Given adequate climatic adaptation of species of tree, then, within any suitable limited climatic range, the more important basic environmental variations which determine variations in production-rate are to be found in soil conditions as affecting root growth and functioning.

The general tendency in development in forests established as even-aged regenerations is from simplicity towards complexity in canopy structure; the rate of development of this tendency for any given species of tree and assuming relative evenness in climatic conditions is largely a function of the soil conditions which prevail locally. The factors which determine the course of development in canopy structure are partly to be found in sylvicultural treatment, but basically in the developing demand by the forest canopy as crowns increase in size, especially during the first decades after regeneration, with reduction in number of stems per unit area and increase in height of tree; and according as this demand can be satisfied by supply of root growing-space as qualified by available water and nutrients. Potential demand of a canopy of any given specific composition, according to size of tree and as influenced by stand density, may be considered as a genetic characteristic. Since the degree to which this potential demand can be satisfied is determined largely by soil supply conditions it follows that, for any given age and type of even-aged regeneration, variations in canopy development which are natural to the site will occur according to the distribution of variations in the stage of stand development at which volume of canopy demand becomes marginal with site supply and especially with supply from the root growing-space. Examples taken from even-aged Sitka and Norway spruce stands are given which illustrate variations in stand structure determined in this way. Limitations in edaphic supply necessary for root development and action arise from a complex of physical, chemical and biotic factors the action of which is more or less interrelated. Examples based mainly on the physical aspect of clay and sand soils, as observed in the field, are given to illustrate edaphically determined limitation in supply which, through the prevention of growth naturally attempted, acts as a basic cause of disease and in this way influences stand development and, through this, economic production.

Examination of the problem of management of even-aged plantations suggests that if the effects of technical sylvicultural treatments are sufficiently to be appreciated, there must be some adequate understanding of the locally occurring inter-relationships between canopy development and site supply of the needs for this; for this, through basically controlling the type of growth possible, will largely determine the effectiveness of the technical treatments practised.

WHAT ARE OUR SCHOOLS FOR?

SIR JAMES J. ROBERTSON, president of Section *L* (Education), opens his address by pointing out that it was only within a few weeks of each other that a Scottish judge and the Home Secretary spoke last winter about increased crime and irresponsibility. They called for greater help from the schools, only to be rebuked by leading educational journals, which put the blame on bad influences outside. Such criticisms focus widespread confusion about the schools' functions and society's ability to protect itself.

Our educational philosophy is admirable, but our practice belies our professions; and, while within the task allotted to them our teachers merit respect and commendation, no part of our national education, except our enlightened infant departments, justifies complacency in face of the crisis of our time. Admittedly, the ablest pupils in our grammar schools are equal to the demands made on them. But do we allow time for their knowledge to be fully assimilated? To what extent do we quicken sensibility in them, or nourish imagination, or awaken the sense of dependence on others? Moreover, if we segregate the highly gifted in separate schools at eleven, do we not aggravate the risk of producing 'Lucky Jims' or an arrogant self-appointed élite?

The average grammar school entrants, supposedly most fortunate, are educationally the worst used of all. Despite advantages in staffing and provision, they are the victims of an unsuitable curriculum and an external examination too hard for the majority. They suffer from excessive demands on their time, a low level of real attainment, an obsessional concern with examinations, and deplorable neglect of the non-cognitive sides of their natures. The vision of the Norwood Committee and the Scottish Advisory Council quickly died amid post-war careerism and greed.

Equally deplorable is the largely lost opportunity in the secondary modern schools, with the discrediting of interest and experiment and the ever-increasing participation in the chase after certificates, a participation which can, however, be defended if the General Certificate of Education really matters as much as we pretend, and we put into secondary moderns children capable of securing even scrappy certificates.

The bright promise of 1943 for the primary schools also faded swiftly in the universal scramble for status. A secondary education like that in Britain presupposes a primary, geared to '11 +', with tests and streaming all the way and those pressures that make short work of frills and experiments. Add the excessive size of classes and general inadequacy of provision, and you ensure the dominance of class-teaching and the rigid time-table, with disastrous consequences both to secondary schooling and to any further education adequate to our condition.

Further education which is neither vocational training nor purveyed entertainment is at once the most important of all, and in its meagre extent the most disappointing. How can it be otherwise so long as statutory schooling creates distaste and does but scant justice to music, drama and the arts?

Education in Britain accords as ill with recent thinking and discovery as with the sombre realities of our times, taking insufficient account of the rarity of high intelligence, the great range of innate ability and the powerful movements of thought towards an organic and unitary view of man as existent and person. Our great need is to awaken to the costliness, both material and spiritual, of all true education: reform must begin with a national change of heart.